## Statewide Trauma Advisory Council Meeting December 10, 2009, 10 a.m.-12 p.m.

### Alabama Department of Public Health The RSA Tower, Suite 1586 Montgomery, Alabama

Members Present	Dr. Richard Gonzalez, Beth Anderson Chief Billy Pappas, Dr. John Campbell, Dr. Donald E. Williamson
Members By Phone	Mr. Bryan Kindred, Dr. Loring Rue, Mr. John Rainey, Mr. Gary Gore
Members Absent	Dr. Alzo Preyear and Dr. John Mark Vermillion
Staff Present	Dennis Blair, Choona Lang, Verla Thomas, Robin Moore, Brian Hale
Guests	Joe Acker, Denise Louthain, Alex Franklin, Spencer Howard
Guests By Phone	Allan Pace, Bryan Grout, David Garmon

#### Welcome

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

#### Consideration of Minutes of October 27, 2009

Approval was requested for the Minutes of the October 27, 2009, STAC Meeting. A motion was made by Dr. Williamson to amend meeting minutes to reflect Mr. Rainey's attendance by phone, as distributed; the motion carried unanimously.

#### Alabama Trauma System Activation Updates

There are 98 hospitals in Alabama of which 52 are currently activated in the trauma system (4-Level I; 4-Level II; 44-Level III).

The Council recommended approval Southwest Alabama Medical Center in the Gulf Region as a Level III Trauma Center, as distributed; the motion carried unanimously.

The projected date for the Alabama Trauma System to be fully activated is January 2010.

#### West Region Trauma Plan

The Council recommended approval of the West Region Trauma Plan, as distributed; the motion carried unanimously.

#### **Out-of-State Trauma System Designation Process**

Dr. Rue made a motion to table the Out-of-State Trauma System Designation Process; Chief Pappas seconded; the motion carried unanimously.

#### Regional Trauma Plans Revision

The revision to the Regional Trauma Plan was approved by the State Committee of Public Health November 2009.

#### Trauma Funding Update

The physician Trauma Funding workgroup will meet on January 19, 2010 to discuss plans for distribution of any future funds for the Alabama Trauma System.

#### Electronic trauma image sharing process

The consortium of hospitals in BREMSS has obtained the grant to develop a medical imaging sharing process and they are ready to begin testing the process.

#### Alabama Trauma System Operation Report

Joe Acker gave a brief Trauma System Operation Report from October 22, 2009, through December 8, 2009. (See attached)

#### Emergency Medical Treatment and Active Labor Act (EMTALA) Issues Updates

The EMTALA is a statute which governs how a patient presenting to an emergency department must be evaluated and the procedure for transferring an emergency department patient from one hospital to another

Dr. Campbell, Choona Lang, and Joe Acker participated in a teleconference with Dr. Richard Wild, CMO/CMS, regarding concerns on interfacility transfers and making sure hospitals follow the regulatory provisions according to EMTALA.

Dr. Campbell is to revise the Patient Criteria for Hospitals to Enter Patients into the Trauma System DVD redistributed to the regions.

#### **BREMSS Trauma Plan Revisions**

The Council recommended approval of the revisions to the BREMSS Region Trauma Plan, as distributed; the motion carried unanimously.

#### **RTAC Membership Revisions**

The Council recommended approval of the RTAC Membership revisions for the East Region, as distributed; the motion carried unanimously.

The next STAC meeting is scheduled at 10 a.m., January 26, 2010, The RSA Tower, Suite 1586; 201 Monroe Street; Montgomery, Alabama.

The meeting was adjourned at 11:55 a.m.

John E. Campbell, M.D.; Presiding Officer Statewide Trauma Advisory Council

Crystal L. Fountain, Administrative Support Assistant II

Statewide Trauma Advisory Council

Approved January 26, 2010

# STAC ATCC OPERATIONS REPORT

December 10, 2009

# Trauma System --- Volume --- 10/22/2009 ---- 12/08/2009

- Total System Volume 1031
- NATS 238 --HH 129 ,DGH 10,
   Three's 56 , Erlanger 4 , NMMC 1
- BREMSS 486 UAB 351, TCH 39,
   Three's 91
- EAST 60 -- Two 24, Three's 36
- GULF 247, -- USA 181, Three's 66

## TRAUMA SYSTEM VOLUME

- 12/08/2008 to date 12/08/2009
- \*NATS 1818
- BREMSS 3689
- 07/08- patients 3542
- 06/07 patients 3598

# TRAUMA SYSTEM OVERLOAD 10/22/2009 --- 12/08/2009

- \*HH 0 Hours
- \* TCH -- 0
- UAB -- 4.8 HRS. (1)
- **USA** -- 0
- Patients Rerouted 1

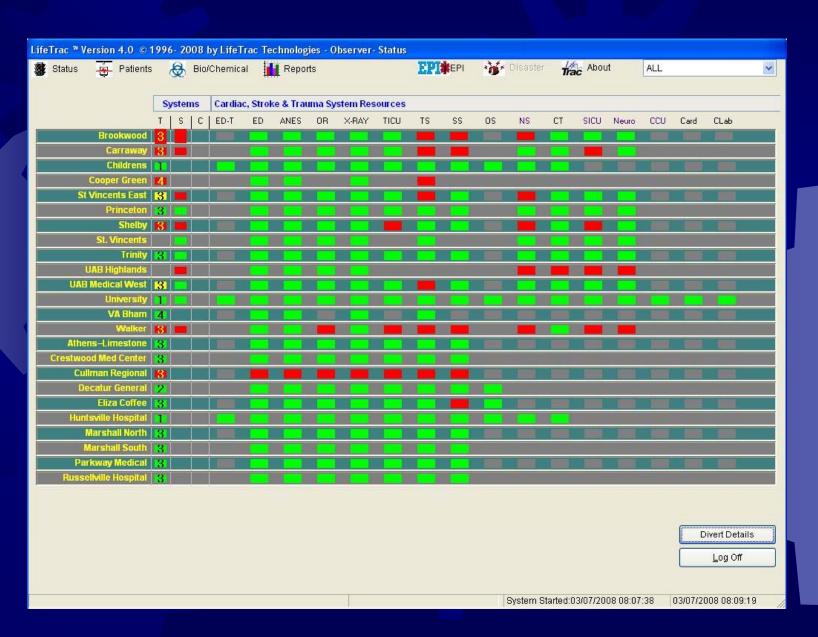
# Trauma System --- Overload TBO 8/06/2009 10/22/2009

- \* HH --- 18 Hours
- \*TCH--- 0 Hours
- UAB --- 223 Hours (1)
- USA --- 0 Hours
- Patients rerouted 1

## TRAUMA SYSTEM ---- RED

- \*HH 0 Hrs
- ★ TCH 0
- **\*** UAB -- 0
- **USA** -- 7.2
- Patients Rerouted 2

## ANY OTHER REPORTS ?



## <u>Revised DRAFT</u> <u>12/01/2009</u>

### WEST ALABAMA EMERGENCY MEDICAL SERVICES REGIONAL TRAUMA SYSTEM PLAN

**DRAFT** 09/28/2009

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#### TRAUMA PLAN

#### **BACKGROUND**

Passage of legislation by the Alabama Legislature in 2007 to create a statewide trauma system necessitates the writing, adoption, implementation of a regional trauma plan for the West Alabama Area 4 Region to encompass the counties of Bibb, Choctaw, Fayette, Greene, Hale, Lamar, Marengo, Marion, Perry, Pickens, Sumter and Tuscaloosa Counties. Compliance with the trauma legislation and subsequent rules developed by the State Trauma Advisory Council (STAC) and the Alabama Department of Public Health – Office of Emergency Medical Services & Trauma (ADPH/OEMS&T) are included in this plan.

#### TRAUMA SYSTEM GOALS

The primary goal of this Regional Trauma System plan is:

Develop a plan which provides a system to decrease trauma mortality and morbidity in the 12 counties of the West Region of Bibb, Choctaw, Fayette, Greene, Hale, Lamar, Marengo, Marion, Perry, Pickens, Sumter, and Tuscaloosa Counties and complies or exceeds all ADPH/OEMS&T requirements.

In order to accomplish this, a number of specific processes are deemed essential. These are:

- 1. The ability to rapidly and accurately identify victims of incidents who have sustained or have a high probability of sustaining serious or life-threatening injuries.
- 2. Patients who have sustained serious or life-threatening injuries or have a high probability of such injuries must receive care in a hospital (trauma center) that has a trauma response program in place which is capable of providing immediate and comprehensive assessment, resuscitation, and definitive care, plus establishing rehabilitation access when needed.
- 3. There must be continuous and effective region-wide coordination of prehospital and trauma center care resources so that trauma victims will most expeditiously get to the closest trauma center with adequate trauma resources so that their care can be provided in a manner that is both appropriate and timely while establishing and maintaining continuity. To accomplish this process there must the ability to track trauma patients.
- 4. The program must allow all hospitals with the necessary resources, the ability to participate in the system (an inclusive system) and receive trauma patients if they

are willing to meet the system Trauma Center and operational criteria as established by the Alabama Board of Health after recommendation by the State Trauma Advisory Council (STAC) and ADPH/OEMS&T.

5. The system must have an ongoing and effective Continuous Quality Improvement (CQI) Program in order to assure continuing appropriate function in providing the highly specialized care necessary in cases of serious and critical injuries. This program will include evaluation of prehospital management, trauma center management, and overall system function. A standard prehospital dataset and trauma center dataset (Trauma Registry) will be required of all system participants, which will allow uniform system evaluation to document the effectiveness of the function of the trauma program. This program must comply with all ADPH/OEMS&T requirements inclusive of data sharing at all levels.

This program involves the care of only a small percentage of the total trauma population as only those patients who have actually sustained or have a high probability of having sustained serious or critical injuries will be entered in the Trauma System. It is estimated that only 10-12 percent or so of the total trauma population would meet these requirements. The remaining + or - 90 percent of the trauma cases are not entered into the system and will continue to be cared for at their local community hospitals. Specific trauma center function obligation of hospitals as part of this system would only relate to those trauma victims entered into the system.

#### REGIONAL TRAUMA SYSTEM BRIEF OVERVIEW

This plan, when approved, will operate in Bibb, Choctaw, Fayette, Greene, Hale, Lamar, Marengo, Marion, Perry, Pickens, Sumter and Tuscaloosa Counties.

Systems require an oversight authority to meet Alabama Board of Health requirements as well as project concept, overall responsibility, developmental aspects, implementation, operation, and evaluation of continuing activities. Such an entity is commonly referred to as a lead agency and in this program the lead agency is the West Alabama Area 4 Emergency Medical Services Region (WEST). The authority of this agency is derived from specific activity goals and plans approved by the ADPH/OEMS&T and thus, the State Board of Health.

The system involves organization of already existing resources into a program providing comprehensive care for trauma patients through all phases of their management from the moment of injury through rehabilitation. Trauma patients may well have injuries that cause vital function instability with an immediate threat to life that may or may not be obvious. Thus the program must provide for rapid movement of patients through all initial phases of management with the provision of optimal care at any time a critical situation is present or any significant changes in the patient status develop. The two basic patient management components to this system are the prehospital providers and individual hospital organizations. The system function involves the compliance with

protocols, which are developed by the STAC and ADPH/OEMS&T and are included in this plan. The entry criteria are intended to identify patients with actual or a high potential for serious or critical injury. It is estimated that only approximately ten to twelve percent of injured patients would fit these criteria. Injured patients that do not meet trauma system entry criteria (approximately 90% of injured patients) do not have actual or significant potential for serious injury and would not need protocol directed specific transport to or treatment by a trauma center. The system protocols for triage and transport with specific hospital destination would not apply to trauma patients who do not meet trauma system entry criteria. Hospitals participating in the Trauma System would not incur any special obligations to patients who do not meet criteria for being entered into the trauma system. Upon determination that a patient is in the small percent of actual or possible major or critical injury victims and would benefit from specialized trauma center management, specific entry into the Trauma System will be accomplished. Entry into the system means that a patient meets specific primary triage criteria indicating an actual or high probability of major or critical injury and the specialized Trauma System resources will be used in their care. The medical care provider reports all trauma system patients to a centralized communication center, the Alabama Trauma Communications Center (ATCC). The ATCC monitors the trauma resources of all trauma centers on a minute-to-minute basis. With this system status knowledge and the application of specific secondary triage protocols based on physiologic status, anatomic injuries, and trauma mechanism severity, a determination can be made as to the relative potential intensity of care needed for that patient. The closest system trauma center with available trauma resources meeting the level of need can then be selected as the appropriate destination for that patient using previously established protocols as part of the Regional Trauma Plan. Trauma centers participating in this system and receiving trauma patients through the ATCC must have organized response systems, including equipment and facilities plus trained and committed personnel using organized management plans such as protocols of the American College of Surgeons Advanced Trauma Life Support course in providing management for major trauma victims entered into the system. A regional trauma database is in operation which allows monitoring of the magnitude and scope of trauma in the West region. This database is used to document appropriateness and quality of care and also in the determination of teaching and training needs in trauma. It will be used in conjunction with other ambulance service and trauma center evaluations in a continuous quality improvement program to provide compliance with all ADPH/OEMS&T rules and requests.

DCH Regional Medical Center will continue to function as the Trauma Center, as outlined by the State Trauma Center designation, for Bibb, Choctaw, Fayette, Greene, Hale, Lamar, Marengo, Marion, Perry, Pickens, Sumter and Tuscaloosa Counties.

DCH Regional Medical Center will only accept trauma patients, as defined by this plan, from other areas within Alabama if such acceptance is directed by the ATCC and in compliance with ADPH/OEMS&T rules and guidelines.

Diversion from DCH Regional Medical Center will be based in the Diversion protocol policy written for the Counties in our Trauma Region. It is understood that

EMTALA guidelines will be followed above all State and County rules, regulations, and policies.

In the following situations the patient should be transported IMMEDIATELY to the closest hospital with full time emergency physician coverage (Trauma Center preferably) as coordinated by the ATCC:

- 1. The EMS provider is unable to effectively manage the airway or ventilate the unstable patient.
- 2. The EMS provider is unable to stop the bleeding of a patient with severe hemorrhage.
- 3. The EMS provider is unable to establish/maintain an IV to provide volume resuscitation in an unstable hypovolemic patient.

Secondary transport to an adult or pediatric specialty center can proceed as soon as the patient is stable enough for transport (not necessarily full and complete resuscitation or evaluation/initial care). This secondary transport is to be coordinated by the ATCC.

Finally, it is important to emphasize that Trauma is a surgical disease. The emergency department plays a critical role in trauma management, but surgery and critical care are pivotal services in determining the survival and recovery of trauma patients. Surgical leadership of hospital trauma programs is therefore, essential in order for hospitals to participate in the Trauma System. This leadership role must be clearly defined within the Hospital Trauma Plan along with specific appropriate authority to carry out that leadership role. Evidence of continuing leadership must be demonstrated through surgeon participation in the Regional Trauma System Activities and through the individual trauma center CQI programs.

#### COMPONENTS AND ORGANIZATION

The Trauma System is comprised of a number of separate components, which are organized and work together as a system. The individual components and elements, which make up the system, will be described in this section.

#### I. <u>PREHOSPITAL COMPONENT</u>

EMS units are an integral part of the Trauma System and their organization is not changed under the trauma system plan. There are, however, two specific issues regarding the prehospital component of the Regional Trauma System.

A. All licensed EMS personnel are required to have a basic knowledge and awareness of the Trauma System elements and system function. This specifically refers to the entry criteria and communications. If they are

unclear about entry criteria or system function this information can be easily obtained on a 24 hour a day basis from the ATCC so that they can then apply the system trauma protocols in field care situations.

#### II. HOSPITAL COMPONENT

Hospitals may participate in this system on a voluntary basis. Standards have been developed by the STAC and ADPH/OEMS&T based on the American College of Surgeons' Resources for Optimal Care of the Injured Patient Document. These are present in Appendix A and have been approved by the State Board of Health. Each hospital is able to determine whether they are on-line (have adequate resources currently available and are able to receive patients based on system operations protocols) or are off-line (do not have adequate resources currently available and do not wish to receive patients per the Trauma System). The trauma centers are able to go on-line and off-line at will. Each trauma center must have a General/Trauma Surgeon primarily responsible for oversight of the Trauma Program. This responsibility includes:

- 1. Working with administration to maintain resources for that level of Trauma Center.
- 2. Assuring that call schedules providing physician availability as per their chosen Trauma Center level are prepared on a monthly basis.
- 3. Establish/maintain basic trauma care protocols for the trauma center.
- 4. Overseeing the trauma center Trauma CQI Program including database collection and reporting to the Regional Trauma Advisory Council (RTAC) and ADPH/OEMS&T, oversight responsibility for the trauma center CQI Program per ADPH/OEMS&T requirements, and participation in Regional Trauma System administrative and CQI activities as per the Regional Trauma Plan.

Participation in the Regional Trauma system is accomplished as follows:

- 1. The decision to participate or to continue to participate must be a joint effort between Hospital Administration and medical staff.
- 2. Hospital Administration and the medical staff carefully re-evaluate the Regional Trauma Program.
- 3. A joint decision is made (hospital administration and medical staff) that the hospital wishes to apply to participate.

- 4. Application is provided by ADPH/OEMS&T and returned, documenting the hospital's desire to participate.
- 5. An on-site evaluation at each facility requesting a trauma center level is to be held to review the system design and function, and to evaluate the hospital based on the criteria for the requested trauma center level.
- 6. The RTAC will review the application and on-site evaluation report to document compliance with requirements and provide a report and recommendation to the ADPH/OEMS&T, who will forward the report to the STAC.
- 7. The STAC will make recommendations to the State Board of health regarding hospital participation as a Trauma Center in the system. If approved, the hospital will become part of the system by executing a contract with ADPH/OEMS&T documenting their willingness to actively participate in the system and maintain Trauma Center resources as per their chosen and evaluated level.

Hospitals, therefore, must decide whether to participate in this system or not based upon ability to meet resource standards for a chosen individual Trauma Center level, medical staff desire to participate and support this program, and hospital administration desire to participate in and support the Regional Trauma Program.

#### III. COMMUNICATIONS COMPONENT

Communications are critical to the function of the Trauma System. Communications provide (1) essential knowledge of the overall status of prehospital trauma activities and trauma center resource availability on a continuous basis, (2) access to system organization and function protocols whenever such information is requested by prehospital personnel or hospital-based personnel, (3) a link between the field and Trauma Centers for the rapid exchange of information resulting in efficient prehospital care provision and trauma centers being able to best prepare for trauma victim arrival, (4) collection of uniform system wide data for both CQI activities and development of a regional trauma database. Providing all of these functions to the entire system on a continuous basis requires a central communications to the entire system on a continuous capabilities to all prehospital units and trauma centers, plus the ability to immediately and directly link the prehospital providers to the Trauma Centers. This entity is the Alabama Trauma Communications Center (ATCC).

The ATCC is staffed 24 hours a day by personnel with specific in-depth knowledge of the Trauma System design, function, and protocols. It is the primary responsibility of the ATCC to coordinate the Trauma System activities by

maintaining and providing information whenever needed on the field status and trauma center status so this data can be used by the prehospital and trauma center personnel in providing care to patients meeting system entry criteria. The ATCC operates through system operations protocols. The ATCC makes no primary decisions, but provide information about patient management and destination as per pre-established protocols for system function. The ATCC serves as a resource for such protocol information to EMS providers that may not be familiar with the protocols or the ATCC simply provides the coordination of prehospital and trauma center resource utilization for trauma management. Therefore, the general functions of the Alabama Trauma Communications Center are:

- 1. Assigns unique system I.D. number for each patient meeting system entry criteria for tracking throughout the system.
- 2. Collects brief prehospital database.
- 3. Provides information on system entry criteria based on OEMS&T protocols as requested by EMS providers when it is not clear if a patient meets entry criteria.
- 4. Maintains knowledge of the functional status of all system trauma centers at all times.
- 5. Maintains knowledge of the activity status in the prehospital setting at all times
- 6. Provides information regarding secondary triage status of the patient based on approved protocols.
- 7. Coordinates patient destination, when patient meets system entry criteria, based on OEMS&T protocols as to the closest currently operational Trauma Center utilizing the secondary triage status of the patient and the system.
- 8. Coordination for optimal resource utilization using pre-established protocols for system function when there are either multiple victims in one event, or there are multiple simultaneous events in the region (which, of course, neither EMS providers nor individual hospitals could know about).
- 9. Establishes automatic communication link between EMS provider and receiving facility if requested or at the discretion of the ATCC operator.
- 10. Records and enters prehospital data for Regional Trauma database and makes data available per the direction of the ADPH/OEMS&T.

11. Arranges inter-facility transfers of trauma system patients who are entered in the system by EMS or hospitals.

In addition to the above functions, in the event of a mass casualty situation the ATCC would serve as an established vital coordination link between on-site control and all Trauma System trauma center resources in the region for the most rapid and efficient patient distribution in such circumstances.

An Emergency Resources Display is also part of the communications component. The Emergency Resources Display provides each participating trauma center and the ATCC with the continuous real-time functional status display of all Trauma Centers. The Emergency Resources Display is a simple computer system with terminals at each trauma center and the ATCC. This system will provide a display grid listing each individual trauma center, their Trauma Center level, and the primary resource components indicating the availability or non-availability of these individual components in each trauma center and therefore, their current trauma activity status. Each system trauma center will maintain the status notation of the primary trauma resources in that trauma center and therefore, their overall trauma activity level. The trauma centers will be able to change their resource availability status and activity level at any time. A record of trauma center activity status for the entire system will be maintained through the Emergency Resources Display at the ATCC. Any change in trauma center status as made by trauma center personnel at its own display terminal will be automatically communicated to the central system monitoring station at the ATCC and also maintained in the trauma center computer. The ATCC maintains a consolidated system wide display status indicating the individual resource availability at the trauma centers and their overall functional status at any given time. This consolidated information table will be transmitted back to trauma centers. The system is maintained automatically by computers with automatic polling and display refresh. Each Regional EMS Agency will be able to access the ERD of its regional Trauma Centers through an internet link. ADPH/OEMS&T will be able to access the ERD of each of the regions through an internet link.

Numbers are color-coded - green for available, yellow for conditionally available, and red for not available.

Trauma center abbreviations are automatically color coded for on-line status (green-active, red-inactive) based on individual resource availability in the trauma center at that time.

The equipment for the Emergency Resources Display will consist of a color video monitor, a computer and a modem connected to a dedicated line, which does not enter the facility through the switchboard. The software will allow simple keystroke change of resource status by the Trauma Center personnel and this change will be transmitted to the

central system monitoring station at the ATCC with this information then being immediately updated on all resource display monitors in the system. The central monitor station automatically polls the individual monitor stations in the system. If a station's computer fails to acknowledge the poll, that trauma center's information will be so noted on all resource display monitors in the system. If there is an isolated failure at a resource display at a trauma center that will not cause a total system fault but that trauma center will be so noted and the ATCC will call requesting the information directly. The system integrity is not dependent upon the operation of any single station. At least one level of redundant communications is available (land phone line, wireless data transmission, or VPN).

#### IV. DATA/CONTINUING QUALITY IMPROVEMENT COMPONENT

This component is absolutely essential for function of the Trauma System. In virtually any serious trauma/injury situation, the patient has a very limited ability to meaningfully select prehospital, trauma center, and physician care. The efficacy of the initial care in these patients may have a pivotal role in determining their outcome. Therefore, there is a system responsibility to evaluate the system function to determine continuing effectiveness in the management of these major trauma victims. The Trauma Plan is designed with this component to be able to generate an overall system wide trauma database which would provide an overall look at trauma incidents, significance, care and outcomes, provide information for use in determining and developing trauma teaching programs, provide information able to be used in potential trauma studies, and utilization in evaluation of system function in the CQI Program. There are three basic elements of this component. The first is a standard trauma dataset that will be used to establish a regional trauma database at ATCC. The second element is the continuous quality improvement program of the trauma system at ATCC. The third element is the trauma registry data at each trauma center. All data from these three data sources is available to ADPH/OEMS&T to use in statewide trauma QI activities and to the Regional EMS Lead Agency per the director of the ADPH/OEMS&T.

The Trauma CQI Dataset for trauma center is that set forth in ADPH/OEMS&T rules requiring each trauma center to collect and report data for the trauma registry.

The second entity in this component is the continuous quality improvement (CQI) program for the Trauma System. This program is necessary to the Trauma System to document continuing function and allows the implementation of improvements in a system where the patients may not have the ability to make their own personal medical care

choices and depend on the system for adequacy and completeness of care. This program will be system wide with the individual agencies basically doing their own CQI evaluations and reporting to a regional CQI workgroup as well as the ADPH/OEMS&T. The appropriateness, quality and quantity of all activities in the system must be continuously monitored in the areas of prehospital care, medical care of the patients in the trauma center and overall system function.

The basic CQI process involves numerous specific steps to be performed by each individual entity their CQI effort. These steps are:

- 1. Assignment of a CQI manager to oversee the process in the organization.
- 2. Develop a written CQI program to evaluate patient care with regard to appropriateness, quality and quantity and as part of that program, patient care standards are established for use in the evaluation process. For prehospital programs, this simply may be the regional prehospital protocol. For trauma centers this may be a combination of ATLS protocols, plus additional standards as deemed necessary or an individual set of patient care standards (protocols) developed by that trauma center. These programs are reviewed and approved by the Regional CQI Workgroup and the ADPH/OEMS&T and as part of becoming a Trauma System participating trauma center under the direction/extension of the CQI activities of ADPH/OEMS&T.
- 3. A method for CQI data collection is established by ADPH/OEMS&T.
- 4. CQI evaluations are undertaken by the individual system participants EMS providers or Trauma Centers. This first involves the determination of specific audit filters. Mandatory Trauma Center audit filters include major and others as may be determined by the ADPH/OEMS&T. Other appropriate audit filters may also be evaluated. For Trauma Centers, external outcome comparisons are part of the evaluation process.
- 5. Determine the presence of CQI issues through the data evaluation process.
- 6. Discussion of CQI issues at the formal CQI Conference of each individual system participant EMS provider or Trauma Center.
- 7. Develop a correction action plan. In general, action activities can be placed under the categories of professional resolution or administrative resolution.
- 8. Re-evaluation must occur to document the results and effectiveness of the corrective action plan. This is commonly called "closing the loop".

Adequate documentation of these activities is essential. In trauma centers a multidisciplinary peer review process must occur. In Trauma Center CQI programs both medical care and trauma center function must be evaluated.

The Regional Trauma Advisory Council (RTAC) CQI Workgroup has the goal of review of the entire Regional Trauma Program activities for appropriateness, quality, and quantity of activities and report such to all participants and ADPH/OEMS&T. That review is to include system administration/organization activities, plus prehospital care and trauma center care review. The Regional Workgroup will document effectiveness of trauma center and EMS CQI evaluations through routine reports of these CQI activities provided by each participating entity to the Regional Workgroup. The Regional Workgroup will perform focused review of specific items as determined appropriate, but these reviews will include evaluation of both prehospital and trauma center activities. Death audit review is mandatory. It is expected that most issues will be resolved by developing an action plan in conjunction with the various Trauma System entities. A re-evaluation for results is to be undertaken. If it is determined that a change in system configuration or standard function should occur, a recommendation will be sent to the Regional Trauma Advisory Council (RTAC) for evaluation and report to the STAC and ADPH/OEMS&T.

#### V. REGIONAL TRAUMA ADVISORY COUNCIL

The RTAC will be established by the STAC for the purpose of operation of the Trauma Plan and to fulfill the legislature and rules requirements of a statewide trauma system. This is done under the authority of the ADPH/OEMS&T with action plans developed and presented as recommendations to the ADPH/OEMS&T.

RTAC appointments will occur in the following manner:

- 1. The RTAC shall have a minimum 11 members. The membership shall be appointed in the same manner as the STAC is appointed and shall be composed of representatives of the same groups. This RTAC will have 35 Members.
- 2. Four representatives of hospitals, who shall be appointed by the Board of Trustees of the Alabama Hospital Association. Two of the appointees shall be from hospitals located in urban areas and two shall be from hospitals located in rural areas of the region. At least two of the appointees shall be from hospitals that are currently trauma centers in the current system. Note: None of these appointees are currently trauma centers. Luke Standeffer (Northport 4 yr); Mike Marshall(Whitfield-Demopolis 3 yr) Kathy Jordan (Hill-Sumter 2yr) Barry Cochran(Fayette 1yr)

- 3. Four representatives shall be licensed physicians appointed by the Medical Association of the State of Alabama. George Nunn, Private 4yr; Rick McKenzie, Neuro 3yr; Bryan Givhan Neuro 2yr; James Corder, Private 1 yr
- 4. One representative of the board who shall be the medical Director of the Region or his/her designee. Elwin Crawford 4 yr
- 5. One member who shall be a licensed emergency technician from the region who shall be appointed by the State Health Officer. Bill McDonald 4 yr
- 6. The State Health Officer or his designee. Dr. Williamson
- 7. Additional members may be appointed pursuant to rules promulgated by the State Board of Health. The additional members to be appointed by the STAC are as follows:
  - A. A representative of each hospital in the region except for the four hospital representatives already appointed in #2 above. This will be a total of 11 additional hospital representatives. Joseph Marchant Bibb 4yr; Bryan Kindred DCH 3 yr, Robert Coker Greene 2yr; Richard McGill Hale 1yr; Donald Jones Marion Regional 4yr; Bill Cassels DCH 3 years; Chuck Spann Northwest Marion 2yr; Wayne McElroy Pickens 1yr; Dona Prophitt DCH 4 yr; Charles Lacy DCH 3 yr; Sharron Allen DCH 2 yr
  - B. 11 representatives who shall be licensed physicians within the region. Robert Brook Pickens 4 yr; Alex Curtis Marengo 3 yr; Andrew Duerr Surgeon Fayette 2 yr; Tim Jordan NW Marion 1 yr; Eugene Marsh Tuscaloosa 4 yr; John Meigs Bibb 3 yr; Jeremy Pepper DCH ED 2 yr; Barry Newsom Vascular Tuscaloosa 1 yr; Brian Claytor Ortho Surgeon Tuscaloosa 4 yr; Lee Thomas Surgeon Tuscaloosa 3 year; William Pridgen Surgeon Tuscaloosa 2 yr
  - C. Two representatives who shall be licensed emergency medical technicians from the region. One shall be from a ground transport service Travis Parker Tuscaloosa Fire Rescue 4 yr and one from a helicopter transport service. Andrew Lee Air Evac Lifeteam 3 yr
    - 1. The chair and vice chair of the RTAC shall be elected by the members to serve for four years.

- 2. All members of the RTAC shall be appointed for a term of four years, except initial members shall be appointed to terms from one to four years and shall serve such staggered terms so that members appointed by the Alabama Hospital Association and Medical Association of the State of Alabama may be appointed subsequently each year. Vacancies shall be filled in the manner provided for the original appointments. Persons appointed to fill vacancies shall serve the un-expired portions of the terms.
- 3. The RTAC shall meet at least twice a year, but may meet more frequently upon the call of the Chair. The RTAC may meet by electronic means and shall establish rules of procedure for its meetings.
- 4. The RTAC may appoint subcommittees and workgroups. Subcommittees shall consist of council members and workgroups may consist of non-council members.
- 5. All other governance requirements of the regional trauma advisory councils shall be established by rule of the board.
- 6. Members shall serve without compensation, but shall be entitled to reimbursement for expenses incurred in the performance of their duties at the same rates as state employees.
- 7. The members shall represent the demographic composition of the state to the extent possible.
- 8. The duties of the RTAC are those assigned by this plan and by ADPH/OEMS&T rules, requests, or contracts.

#### TRAUMA SYSTEM FUNCTION

General function of the system will follow the scenario of:

- 1. Injury occurs
- 2. Field evaluation done by EMS provider who determines if the patient meets the system criteria (if EMS provider is unsure of entry criteria that information may be immediately obtained from the ATCC).

- 3. Communication is established with the ATCC with brief basic information provided to the ATCC about all trauma patients to be transported to a trauma center.
- 4. Secondary triage (categorization of severity status, either physiologic, specific injury or mechanism) is made by the field EMS provider (with ATCC assistance as necessary) on patients entered into the Trauma System.
- 5. The secondary triage status and the current Trauma Center activity status (from the Emergency Resources Display) determine trauma center destination.
- 6. A direct patched communications link to the closest active trauma center is provided by the ATCC to the field EMS provider, **if requested** or at the discretion of the ATCC communicator.
- 7. Medical direction is established with the receiving Trauma Center by the communications link, if needed. Orders are provided as needed.
- 8. Prehospital care is completed and transport to the destination Trauma Center is initiated.
- 9. If a patient who meets criteria established by STAC and ADPH/OEMS&T arrives by EMS or private vehicle at a trauma center or non-trauma center, the hospital agent should notify the ATCC and enroll the patient in the trauma system, even if the hospital does not plan to transfer the patient.
- 10. The ATCC will, if requested, arrange inter-facility transfers of any patient needing services not available at the receiving hospital or trauma center to a higher level trauma center with the needed service line resources currently available.

Specific functions relative to the Trauma System are described in the following sections.

#### I. <u>SYSTEM ENTRY CRITERIA</u>

Patients are to be entered into the Trauma System following a trauma incident based on the following criteria:

#### A. Physiological criteria:

- 1. A systolic BP < 90 mm/Hg in an adult or child 6 years or older or < 80 mm/Hg in a child five or younger.
- 2. Respiratory distress rate < 10 or >29 in adults, or <20 or >60 in newborn, <20 or >40 in child 3 years or younger, or <12 or >29 in a child 4 years or older.
- 3. Head trauma with Glasgow Coma Scale score of 13 or less, or head trauma with any neurological changes in a child 5 years or younger.

#### B. 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. See burn protocol 4.7 for criteria for entering a burn patient into the trauma system.
- 6. The patient has an amputation proximal to the wrist or ankle.
- 7. The patient has one or more limbs which are paralyzed.
- 8. The patient has a pelvic fracture, as evidenced by a positive "pelvic movement" exam.

#### C. Mechanism of the patient injury:

- 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.
Unbroken fall of 10 feet or 3 times the height of the child onto hard surface.

#### D. EMS Provider 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 EMT s suspicion of severity of trauma/injury may be raised by the following factors:
  - a. Age > 55 years of age
  - b. Age < five years of age
  - c. Environment (hot/cold)
  - d. Patient's previous medical history
    - 1. Insulin dependent diabetes or other metabolic disorder.
    - 2. Cardiac condition ( not in 5<sup>th</sup> ed protocol).
    - 3. Immunodeficiency disorder ( not in 5<sup>th</sup> ed protocol).
    - 4. Bleeding disorder or taking anticoagulant medication such as Coumadin or heparin.
    - 5. COPD/Emphysema
    - 6. Renal failure on dialysis.
  - 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.
  - i. Child with congenital disorder.

#### **Entering A Patient Into The Trauma System:**

### A. Call the Alabama Trauma Communications Center (ATCC) to determine patient destination:

ATCC 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 ATCC at the earliest time that is practical, and provide the following: The initial unit onscene should enter the patient into the trauma system but if they do not done so, it becomes the responsibility of the transporting service (ground or air).

#### 1 Procedure

System entry:

Call EARLY

A- Your organization

Location of Trauma

Age and sex of patient(s)

Reason for entry &MOI

- B- Your assessment
  - A- Airway: is it clear, non patent intubated
  - B- Breathing: rate, Pulse ox reading, symmetry
  - C- Peripheral pulses present or not. Rate
  - D- GCSS Area or Areas of injury
  - E- Any environmental issues.
- C- Closest appropriate Trauma Center & request availability Transport type(Air/Ground) Time of transport

You will be given a unique identification number that must be entered into the chart when you generate your e-PCR. The CQI process will use this to identify the charts for quality improvement studies. (Note to the transporting service: if the patient does not has a TCC number, he/she has not been entered into the trauma system)

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

#### II. <u>COMMUNICATIONS</u>

Maintenance of adequate and prompt communications is essential to function of the Trauma System. In many instances trauma survival or maximum outcome potential can only be achieved with efficient and rapid movement of the patient through the system of Prehospital assessment and treatment, transport, and trauma center resuscitation, evaluation and definitive care. Communication throughout the system is vital to this activity occurring in a most efficient and complete manner. Knowledge of the system-wide pre- hospital trauma activities and the current (and possibly changing) status of the functional capabilities of the various trauma centers in the system are important at all times as it is possible multiple trauma activities are occurring simultaneously. This function also is essential for maximum mass casualty incident/disaster response. Communications allow differential system resource utilization when there are multiple trauma activities ongoing simultaneously and also allow maximum response preparation by receiving Trauma Centers. The key to system function is full knowledge of ongoing activities in all parts of the system at all times and centralized coordination of patient destination by the ATCC.

ATCC will note the closest trauma center for the EMS provider and the database.

It is essential to establish radio communications as soon as possible in patients meeting system entry criteria to provide a baseline level of the patient's status. After determination that a patient meets system entry criteria, the highest level EMS provider should contact the ATCC at the earliest practical time to enter the patient into the system. The reporting EMS provider should identify himself/herself and provide the following information:

- 1. Basic patient data number of victims, age, and sex
- 2. Injury mechanism data
- 3. Major anatomic injuries

- 4. Current primary survey status airway, breathing, circulation, level of consciousness, and vital signs
- 5. Incident location
- 6. Estimated scene departure time
- 7. Proposed mode of transport, if ground, state transporting unit number

If radio failure should occur, direct contact between the EMS unit and their dispatch should be established with relay of information to the ATCC by telephone.

#### III. SYSTEM OPERATIONS

System operations refers to the activities that occur once it is determined a patient meets system entry criteria and communications have been established within the system. These activities include performance of secondary triage, trauma center destination determination, continuing communication, provision of field care, patient transport, and Trauma Center management.

1. <u>Secondary Triage</u> (use of system protocols to determine Trauma Center destination).

Secondary triage involves a determination of the severity status once a decision has already been made that a patient is to be entered into the system (primary triage). Secondary triage is used in conjunction with estimated transport time and current trauma center activity status to determine Trauma Center destination. The ATCC coordinates the application of the approved secondary triage protocols utilizing the patient assessment and transport time estimate by the field EMS provider combined with the current Trauma Center activity status as noted on the Emergency Resource Display to determine the trauma center destination. Secondary triage is based on physiologic status, mechanism of injury, and anatomic criteria, plus the potential use of EMS provider discretion and evaluation of co-morbid factors. Secondary triage standards are:

#### A. Physiologic entry criteria

- 1) Physiologic entry criteria take precedence over other criteria, except GCS, even if patients also meet mechanism and/or anatomic criteria.
- 2) Any patient entered into the system meeting physiologic criteria is to be transported to a Level I Trauma Center if the transport time is under 30 minutes. If the Level I

Trauma Center is yellow because of no trauma surgeon (backup surgeon green), the patient should still be taken there unless a closer Level II Trauma Center is within 10 minutes transport time. If the Level I Trauma Center is yellow due to Neurosurgical services or CT is red, then transport the patient to the closest Level II Trauma Center or Level III Trauma Center enrolled in the stroke system with green neurosurgical services and CT.

- Any patient who is entered under the altered CNS status physiologic criteria with a GCS ≤ 9 is to be transported to a Level I trauma center if transport time ≤ 30 minutes. If the patient is GCS >9, then the patient is to be transported to a Level II or III. If transport time is >30 minutes, then to the closest Level II or III.
- 4) In the following situations, the patient should be transported IMMEDIATELY to the closest hospital with full-time emergency physician coverage (Trauma Center preferably) as coordinated by the ATCC:
  - 1. The EMS provider is unable to effectively manage the airway or ventilate the unstable patient.
  - 2. The EMS provider is unable to stop the bleeding of a patient with severe hemorrhage.
  - 3. The EMS provider is unable to establish/maintain an IV to provide volume resuscitation in an unstable hypovolemic patient.
- B. Anatomic Criteria for patients with stable vital signs (for unstable patients see A. Physiologic Entry Criteria above):
  - 1) Flail Chest
    - a. Closest Level I if <30 minutes total transport time
    - b. Closest Level II or III if >30 min total transport time to Level I
  - 2) Long bone fracture
    - a. Closest Level I if <30 minutes total transport time
    - b. Closest Level II or III if 30 min total transport time to Level I

- 3) Penetrating head injury: (Intracranial penetration thought present)
  - a. Level I as long as patient remains stable
- 4) Combination of burn and trauma
  - a. Closest Level I
- 5) Amputation (amputated part recovered and not mangled)
  - a. Closest Level I with Implant Service if <30 minutes transport
  - b. Closest Level II or III if >30 minutes total transport time to Level I
- 6) Amputation (amputated part not recovered or is mangled)
  - a. Closest Level I if < 30 minutes transport
  - b. Closest Level II or III if >30 minutes transport
- 7) Paralyzed limb(s)
  - a. Closest Level I if <30 minutes total transport time
  - b. Closest Level II or III if >30 min total transport time to Level I
- 8) Pelvic fracture
  - a. Closest Level I if <30 minutes total transport time
  - b. Closest Level II or III if >30 min total transport time to Level I
- C. Mechanism of injury criteria for stable patients (for unstable patients see A. Physiologic Entry Criteria above):
  - 1) Death in same passenger area
    - a. Closest Level I if <30 minutes total transport time
    - b. Closest Level II or III if >30 min total transport time to Level I

- 2) Ejection
  - a. Closest Level I if <30 minutes total transport time
  - b. Closest Level II or III if >30 min total transport time to Level I
- 3) Motorcycle/bicycle
  - a. Closest Level I, II, or III if > 30 min total transport
- 4) Auto versus pedestrian
  - a. Closest Level I, II, or III if > 30 min total transport
- 5) Fall
  - a. Closest Level I if <30 minutes total transport time
  - b. Closest Level II or III if >30 min total transport time to Level I

#### D. EMS provider Discretion

If a patient has been entered into the system and does not meet specific secondary triage criteria or the EMS provider has a specific reason to upgrade the triage decision, the EMS provider may do so and transport the patient to the closest Level I, II, or III Trauma Center if there is less than 40 minutes transport time. The EMS provider is to specifically note on the e-PCR the reason for utilization of this discretion process. The EMS provider is to specifically inform the ATCC at the time the decision is made using the EMS provider discretion criteria.

#### E. Co-Morbid Factors

Any patient entered into the Trauma System who is stable but has any of the following factors <u>may</u> have a change in protocol-based destination as listed below. Unstable patients follow the unstable physiologic criteria (see A above). No change indicates no change from standard secondary triage protocol.

- 1. Age greater than 55.....no change
- 2. Age 15 or younger

a. Pediatric Level I Trauma Center if transport <60 minutes</li>
 b. Closest Level I, II, or III Trauma Center if >60

minutes transport time to Pediatric Center

- 3. Environmental extremes......no change
- 4. Previous medical disease history.....no change
- 5. Pregnancy
  - a. Level I Trauma Center if <60 minutes total transport time
  - b. Level II Trauma Center or Level III Trauma Center if >60 minutes total transport time to Level I
- 6. Extrication times >20 minutes.....no change
- 7. Motorcycle crash.....no change

#### NOTES:

- A. Transport time is the time which the field EMS provider estimates considering the mode of transport, weather, traffic, and other variables and incorporates the time from scene departure to trauma center arrival.
- B. Transport mode (ground versus air) will be determined by the field EMS provider. Medical Direction may wish to modify the transport mode.
- C. Based on prehospital trauma activity, transport needs and resource availability, the ATCC will assist in coordination of patient destinations plus ground and air transport between the on site EMS providers, Trauma Centers, and the helicopter service.
- D. Should a trauma center destination be changed from the original destination chosen at the time of ATCC contact, a CQI will be initiated. A quarterly report of all of these issues will be made to the RTAC.

#### 2. Trauma Center Destination

Trauma center destination will be determined by secondary triage evaluation and the current activity status of Trauma Centers in the system at the time the injury occurs. The trauma center status is tracked by the Emergency Resources Display at the ATCC. That equipment is described in the component section and details the status of individual resources in the Trauma Center and therefore, the activity status of the Trauma Center. Trauma Centers will usually be either at a green (available), yellow (conditional), or a red (unavailable) status.

Green status means the trauma center has all service line resources available and may receive trauma victims based on location and secondary triage criteria at that time. Green status requirements involve the following.

1. All levels of trauma centers must have the following resources (which are on the Emergency Resources Display grid) active and available at that time as pertains to their Trauma Center Level:

Emergency department (if Level I ED-T), anesthesia, operating room, X-ray, ICU, and orthopedic surgery (orthopedic surgery not required for Level III).

- 2. For Level I Trauma Centers the neurosurgical services and CT must be actively available.
- 3. The primary call trauma surgeon must be actively available at that time for all levels of trauma center.
- 4. If a trauma center has a secondary surgeon call schedule (backup surgeon), the lack of the primary trauma surgeon will only change the trauma center to "yellow."

Red status indicates at least some primary trauma care service line resources in that Trauma Center are not actively available and the trauma center is not to receive trauma victims at that time. Red status criteria are:

- 1. If any of the following resources are unavailable: emergency department (ED-T if Level I), anesthesia, operating room, X-ray, ICU, and orthopedic Surgery (Level I).
- 2. Trauma surgeon is unavailable and there is no secondary surgeon backup call schedule or secondary surgeon is also unavailable.

3. Patients with neurologic injuries will not be triaged to a Level I center with no neurosurgical services or a CT Scanner actively available at that time (NS or CT red status).

Yellow status can occur under certain circumstances. Yellow status means at that moment some service line resources are not available and patients should be triaged to that trauma center only under certain specific conditions. Criteria for yellow status include:

- 1. A Level I Trauma Center that does not have neurosurgical services or a CT available.
- 2. A trauma center with a secondary surgeon backup call schedule may be at yellow status if the primary trauma surgeon is unavailable, but the secondary backup surgeon backup is available. A trauma center that does not have a secondary backup surgeon call schedule cannot be at a yellow status based on trauma surgeon availability.

The green, yellow, and red status for combinations of Trauma Surgeon and secondary surgeon are summarized in the following table:

<u>Trauma Surgeon</u>	2nd Call Surgeon	Trauma Center Status
G	G	G
G	R	G
R	G	Y
R	R	R

### TRAUMA CENTER DESTINATION NOTES

- A. Trauma Center destination for patients entered into the system will be the closest appropriate trauma center receiving facility based on secondary triage and Trauma Center availability.
- B. When a trauma center is on yellow status for the trauma surgeon/secondary backup surgeon status, trauma patients are directed to that trauma center only when equivalent facilities are unavailable or beyond the routine 30 minute transport time, or there are multiple casualties requiring care at that level.
- C. A yellow status due to the unavailability of a neurosurgical services or a CT scanner at a Level I or II facility means patients with neurologic trauma are to be transported to another facility.

- D. No facility should receive more than one unstable patient at one time if there are other level I trauma center on green status within a reasonable transport time.
- E. In the event a patient or family member requests transport to a specific facility that does not meet system guidelines, efforts will be made to clarify and encourage the advantage of using the Trauma System and a specific request to follow the established Trauma System plan will be made of the family. **The patient's wishes will, however, ultimately prevail.**
- F. If an event occurs where there are multiple patients meeting Trauma System entry criteria, the patient who is most critically injured (yet potentially salvageable) should go to the nearest appropriate green trauma center based on secondary triage criteria. The other patients should go to appropriate green and yellow Trauma Centers as coordinated through the ATCC.
- G. In the following situations the patient should be transported IMMEDIATELY to the closest hospital with full time emergency physician coverage (Trauma Center preferably) as coordinated by the ATCC.
  - 1. The EMS provider is unable to effectively manage the airway or ventilate the unstable patient.
  - 2. The EMS provider is unable to stop the bleeding of a patient with severe hemorrhage.
  - 3. The EMS provider is unable to establish/maintain an IV to provide volume resuscitation in an unstable hypovolemic patient.

Final destination will be coordinated by the ATCC.

- H. In a situation where ATCC notification has occurred and no medical direction is needed, the ATCC will notify the receiving trauma center of the patient transport and provide information of condition, mechanism of injury, estimated arrival time, etc.
- I. If the patient meets physiologic criteria and the appropriate level Trauma Center determined by protocol based destination is not available, the patient should be transported to nearest currently active ("green") Trauma Center.
- J. If the patient is <u>stable</u> and the trauma center per the secondary triage destination protocol is not available, the patient may be taken to the nearest actively available ("green") trauma center.

K. If, in the attending trauma surgeon's judgment, a level I trauma center is nearing capacity, the surgeon may place the level one trauma center on trauma system overload. The level I trauma center will appear yellow on the resource screen. The level I trauma center will remain available for trauma patients entered into the system under physiologic criteria, but patients entered under any other criteria will be routed as if the level one trauma center is unavailable. Patients routed in this manner will be reported to the RTAC and to ADPH/OEMS&T.

### 3. Prehospital System Activities

Prehospital care will be carried out following the guidelines of the Regional Medical Control Plan. The state prehospital care protocols will be used for primary guidance in prehospital trauma management. Patients entered into the Trauma System will receive their medical direction from the receiving Trauma Center, which will be immediately accessible through the communications link between the ATCC and that destination trauma center per regional secondary triage protocols, and the activity status of the trauma center in the system at that time. Any significant patient condition changes are to be communicated directly to ATCC and the receiving Trauma Center as those changes may result in updating the orders and altering the destination trauma center Trauma Team activation. Field time should be kept to a relative minimum as trauma patients may be in a state of temporary compensated physiologic response at which time they appear stable, but may rapidly advance into an uncompensated and unstable status at any time resulting in a significant threat to life. Frequently trauma resuscitation maneuvers can only be carried out in a trauma center Emergency Department or in an operating room. Therefore, "free field time" (time following extrication during which the EMS providers are free to either stay in the field to perform additional evaluations and management procedures or they are free to initiate transport to the destination trauma center) should be kept to a minimum. Initiation of transport should occur within 10 minutes following extrication completion in cases of major trauma.

### 4. Trauma Center System Activities

Trauma center management is an essential part of any Trauma System. This phase of trauma care requires adequate resources (equipment and facilities) and personnel with adequate training and commitment to carry out rapid initial assessment, stabilization, and definitive care including surgery plus critical care and recuperative care as necessary. In addition, rehabilitation services must be initiated as appropriate. Resources necessary to provide care are documented through the Trauma Center standards while patient care management protocols as described in the

American College of Surgeons Advanced Trauma Life Support course are considered the standard of care for emergency department resuscitation.

### IV. SYSTEM COMPLIANCE EVALUATION AND ACTION

This Trauma System is designed to provide specialized care to patients with actual or a significant probability of serious or critical injury. The system is based on hospital requirements to participate as a Trauma Center and follow system function protocols. Compliance with the requirements and protocols is essential for proper trauma victim management. Therefore, a specific program for monitoring compliance with requirements and with function protocols will be a part of the Trauma System. This program will be a function of the RTAC. Reports regarding compliance issues will be made to the ADPH/OEMS&T. Maintenance of compliance with requirements, standards, and system function protocol activities for individual personnel and agencies involved in the Trauma System means:

A. Maintaining component and organization standards as established by the plan.

### 1. Prehospital

Prehospital entities have the responsibility to assure their individual EMS providers have a basic knowledge and awareness of the Trauma System including entry criteria and basic operations.

### 2. Hospital Component

- a) Continue to meet all Trauma Center Resource requirements for their level Trauma Center inclusive of trauma registry requirements.
- b) Maintain a designated general/trauma surgeon as the trauma program leader with written responsibilities as indicated in the Regional Trauma System Plan.
- 3. Communications Component Each entity is responsible for maintaining communications equipment used in the Trauma System in proper working order.

### 4. Data/CQI Component

a) Each entity is responsible for maintaining and providing data to the Trauma System as indicated in the Regional

Trauma System Plan. For prehospital EMS services this means providing data to the ATCC which is then placed in the Alabama Trauma System Database. For trauma centers this means maintaining and providing the trauma center based information in the Alabama Trauma Registry dataset.

- b) Participating entities need to maintain their individual Trauma CQI Programs as specified in the Regional Trauma System Plan. They are to provide reports of these activities to the RTAC on a timely basis as required.
- c) Active continuing participation in the Regional Trauma CQI program is expected (all individual personnel from participating organizations must attend at least 75% of the Regional CQI meetings). Individual entities are to support the regional focused review of individual topics by providing data and participating in the evaluation process. Information (dataset, trauma death audit, etc.) is to be provided as required in a timely manner to ADPH/OEMS&T through the trauma center's trauma registry involvement.
- 5. Personnel from prehospital and hospital organizations are to participate in RTAC activities per membership responsibilities. It is expected there will be 75% attendance of meetings by members.
- B. Maintaining system function as noted in the Regional Trauma System Plan.
  - 1. System entry criteria as specifically defined in the plan and by ADPH/OEMS&T or currently active protocols are to be used by EMS providers to determine patient entry into the Trauma System.
  - 2. Communications as outlined in the plan and currently approved ADPH/OEMS&T protocols are to be initiated and maintained by EMS units. This involves initiating communications, providing information and participating in the use of the system operations protocols along with the ATCC for coordination of prehospital trauma care activities including patient entry into the system, determination of Trauma Center destination, and in conjunction with Medical Direction orders for provision of care using the ADPH/OEMS&T MDAC approved prehospital care protocols.
  - 3. System operations are provided by individual entities as per the Regional Trauma System plan including currently approved

ADPH/OEMS&T protocols. This includes the use of secondary triage protocols to determine trauma center destination, accurate maintenance of trauma care resource status by trauma center participating in the Trauma System, and adherence to other system prehospital and trauma activity protocols.

Failure of compliance with contract performance criteria or requirements, standards, or adherence to system function protocols as stated in the most current version of the written Regional Trauma System Plan will result in specific actions to be taken by the RTAC. Questions of compliance will be generated by system oversight review by the RTAC. Issues regarding a question of compliance when brought to the attention of RTAC may be directed to the ADPH/OEMS&T for evaluation. The RTAC will evaluate questions of compliance and if a compliance infraction has occurred a report will be forwarded to the ADPH/OEMS&T.

- C. The prehospital component requirements, standards, and system function protocols are part of the Regional Medical Control Plan and deviation from that plan may result in the following actions by the ADPH/OEMS&T.
  - 1. First breach of activity standards will result in a call and letter of explanation to the prehospital service indicating there has been a breach of activity standards with an explanation of the situation and an indication of the need for corrective action to be taken. There will be a one month time period for implementation of the corrective action.
  - 2. The second breach of the same activity (or failure to respond to the first breach) will result in another letter to the prehospital service with a copy to ADPH/OEMS&T indicating that a second breach has occurred and again allowing a one month period for corrective action.
  - 3. A third breach of the same activity will result in a letter to the State EMS Office for investigation and action. The office of EMS&T will send a report of findings and action to the RTAC.
- D. Trauma center participation in the system is governed by the contract between ADPH/OEMS&T and each trauma center. Deviations from requirements, standards or system function protocols governed by the contract may result in the following actions by the OEMS&T upon the advice of the RTAC:
  - 1. The first breach of an activity standard will result in a call and/or 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.

- 2. If a second breach of the same activity occurs 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 for 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 RTAC with the suspension time doubled for subsequent deviations of the same standard.

It will be the duty of the ADPH/OEMS&T to carry out these predetermined actions in cases of violation of requirements, standards, or failure of adherence to system function protocols.

### **SUMMARY**

An organized system of care to improve trauma survival and outcome is a vital part of an overall healthcare plan. This Regional Trauma plan, when approved, will bring the West Alabama Medical Direction & Accountability Plan and the West Alabama EMS Regional Trauma plan in compliance with all existing legislative and ADPH/OEMS&T rules and requirements.

### APPENDIX A

### **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	Е	Е	Е
Trauma Service	Е	Е	-
Trauma Team	Е	Е	Е
Trauma Program Medical Director	Е	Е	D
Trauma Multidisciplinary Committee	Е	Е	D
Trauma Coordinator/ TPM	Е	Е	Е
HOSPITAL DEPARTMENTS/ DIVISIONS/ SECTIONS			
Surgery	Е	Е	Е
Neurological Surgery	Е	-	-
Neurological trauma liaison	E	-	-
Orthopedic Surgery	Е	Е	-
Orthopedic trauma liaison	Е	Е	-
Emergency medicine	Е	Е	-
Anesthesia	E	Е	-
CLINICAL CAPABILITIES			
Published on-call schedule	Е	Е	Е
General Surgery (attending surgeon promptly available to maintain green status	Е	Е	Е
Published back-up schedule or written back-up method <sup>2</sup>	Е	D	D
Dedicated to single hospital when on-call	Е	D	D
Anesthesia (promptly available <sup>3</sup> to maintain green status)	Е	Е	Е
Emergency Medicine (Immediately available in-house 24 hours/day)	Е	Е	Е
On-call and promptly available to maintain green status:			
Cardiac surgery	Е	-	-
Hand surgery (does not include micro vascular/re-implantation)	Е	D	-
Micro vascular/replant surgery	D	-	-

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

Peer review committee attendance > 50%	Е	Е	D
Multidisciplinary committee attendance	Е	Е	-
FACILITIES/ RESOURCES/ CAPABILITIES			
Volume Performance			
Trauma admissions 750/ year	Е	-	-
Presence of surgeon at resuscitation	Е	Е	D
Presence of surgeon at operative procedures	Е	Е	Е
Emergency Department (ED)	Г	Г	D
Personnel - designated physician director	Е	Е	D
Equipment for resuscitation for patients of all ages		_	
Airway control and ventilation equipment	E	E	E
Pulse oximetry	Е	Е	Е
Suction devices	Е	Е	Е
Electrocardiograph-oscilloscope-defibrillator	Е	Е	Е
Internal paddles	Е	Е	-
CVP monitoring equipment	Е	Е	D
Standard IV fluids and administration sets	Е	Е	Е
Large-bore intravenous catheters	Е	Е	Е
Sterile surgical sets for:			
Airway control/ cricothyrotomy	Е	Е	Е
Thoracostomy	Е	Е	Е
Venous cutdown	Е	Е	Е
Central line insertion	Е	Е	-
Thoracotomy	Е	Е	-
Peritoneal lavage	Е	Е	Е
Arterial pressure monitors	Е	D	D
Ultrasound	Е	Е	D
Drugs necessary for emergency care	Е	Е	Е
X-ray available to maintain green status	Е	Е	D
Cervical traction devices	Е	Е	D
Broselow tape	Е	Е	Е
Rapid infuser system	Е	Е	D
Qualitative end-tidal CO <sub>2</sub> determination	Е	Е	Е
OPERATING ROOM			

Immediately available to maintain green status <sup>8</sup>	Е	D	D
Operating Room Personnel	Е	D	D
In house to maintain green status <sup>8</sup>	Е	-	-
Available to maintain green status		Е	Е
Age Specific Equipment			
Cardiopulmonary bypass	Е	-	-
Operating microscope	D	D	-
Thermal Control Equipment			
For patient	Е	Е	Е
For fluids and blood	Е	Е	Е
X-ray capability, including c-arm image intensifier	Е	Е	Е
Endoscopes, bronchoscopes	Е	Е	D
Craniotomy instruments	Е	D	-
Equipment for long bone and pelvic fixation	Е	Е	D
Rapid infuser system	Е	Е	D
Post Anesthetic Recovery Room (SICU is acceptable)			
Registered nurses available to maintain green status	Е	Е	-
Equipment for monitoring and resuscitation	Е	Е	Е
Intracranial pressure monitoring equipment	Е	D	-
Pulse oximetry	Е	Е	Е
Thermal control	Е	Е	Е
Intensive or Critical Care Unit for Injured Patients			
Registered nurses with trauma education	Е	Е	-
Designated surgical director or surgical co-director	Е	Е	D
Surgical ICU service physician in-house 24 hours/day Emergency physician will satisfy this requirement	Е	D	-
Equipment for monitoring and resuscitation	Е	Е	-
Intracranial monitoring equipment	Е	-	-
Pulmonary artery monitoring equipment	Е	Е	-
Respiratory Therapy Services			
Available in-house to maintain green status	Е	Е	D
On-call to maintain green status	-	-	D
Radiological services			
In house radiology technologist to maintain green status	Е	Е	D
Angiography	Е	D	-
Sonography	Е	Е	D

Computer Tomography (CT) prom	Е	Е	D
In house CT technician	Е	-	-
Magnetic Resonance Imaging (Technician not required in house)	Е	D	-
Clinical laboratory services (Available to maintain green status)	Е	Е	Е
Standard analyses of blood, urine, and other body fluids, including microsampling when appropriate	Е	Е	Е
Blood typing and cross-matching	E	Е	Е
Coagulation studies	E	Е	Е
Comprehensive blood bank or access to a community central blood bank and adequate storage facilities	E	Е	Е
Blood gasses and pH determinations	Е	Е	Е
Microbiology	E	Е	Е
Acute Hemodialysis	Е	Е	Е
In-house (staff not required in-house for green status)	Е	-	-
Transfer agreement (written document not required)		Е	Е
Burn Care – Organized			
In house	D	-	-
Acute Spinal Cord Management			
In-house	Е	D	-
REHABILITATION SERVICES			
Physical therapy	Е	Е	D
Occupational therapy	Е	D	D
Speech therapy	Е	D	-
Social Service	Е	Е	D
PERFORMANCE IMPROVEMENT			
Performance improvement programs	Е	Е	Е
Trauma registry			
Participate in state registry	Е	Е	Е
Audit of all trauma deaths	Е	Е	Е
Morbidity and mortality review	Е	Е	Е
Trauma conference-multidisciplinary	Е	Е	D
Medical nursing audit	Е	Е	Е
Review of pre-hospital trauma care <sup>9</sup> .	E	Е	Е

Review of times and reasons of trauma status being red	Е	Е	Е
Review of times and reasons for transfer of injured patients	Е	Е	Е
Performance improvement personnel dedicated to care of injured patients	Е	D	D
CONTINUING EDUCATION/OUTREACH			
General Surgery residency program	D	-	-
ATLS provide/ participate	Е	D	D
Programs provided by hospital for:			
Staff/community physicians (CME)	Е	Е	D
Nurses	Е	Е	D
Allied health personnel	Е	Е	-
Feedback provided to Pre-hospital personnel	Е	Е	D
PREVENTION			
Collaboration with other institutions for injury control and prevention	Е	D	D
Designated prevention coordinator-spokesman for injury control	Е	D	-
Outreach activities	Е	D	D
Information resources for public	Е	D	-
Collaboration with existing national, regional and state programs	Е	Е	Е
Coordination and/or participation in community prevention activities	Е	Е	Е
RESEARCH			
Trauma registry performance improvement activities	Е	Е	Е
Research committee	D	-	-
Identifiable IRB process	D	-	-
Extramural educational presentations	D	D	-
Number of scientific publications	D	-	-

<sup>&</sup>lt;sup>1</sup> 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.

- <sup>4</sup> 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.
- <sup>5</sup> An average of 18 hours of trauma CME every three years is acceptable.
- <sup>6</sup> 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.
- <sup>7</sup> 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
- <sup>8</sup>An operating room must be adequately staffed and immediately available in a Level I trauma center to remain available (green) to the trauma system. 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 to remain available (green) to the trauma system. 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, prehospital 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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup>Timeliness of anesthesia response should be monitored by the hospital's quality improvement program.

<sup>&</sup>lt;sup>9</sup>All levels of Trauma Centers should monitor prehospital trauma care. This includes the quality of patient care provided, patients brought by EMS and not entered into the trauma system but had to be entered into the trauma system by the hospital (under triage), and patients entered into the trauma system by EMS that did not meet criteria (over triage).

<sup>&</sup>lt;sup>10</sup>Hospital must complete and return to the RTAC the initial patient findings, treatment provided and outcome at the end of the first 24 hours. This should be noted on the ATCC patient record.

### **APPENDIX B**

### TRAUMA CQI DATA SET

- 1. Identification number provided by the ATCC upon initial contact by prehospital provider. The same number would follow the patient through the system.
- 2. Location of the incident City, County possibly information from a city map grid (needs further investigation).
- 3. Prehospital unit(s) responding
- 4. Times
  - a. Prehospital
    - 1) incident
    - 2) unit dispatch
    - 3) unit scene arrived
    - 4) extrication ended (if applicable)
    - 5) unit scene departure
    - 6) unit hospital arrival
  - b. Communication
    - 1) initial contact with ATCC
    - 2) ATCC contact/link to receiving Trauma Center
    - 3) additional contacts to ATCC by EMS provider s
- 5. Receiving hospital
- 6. System entry data:
  - a. primary entry triage criteria
  - b. secondary entry criteria, if present
  - c. co-morbid criteria

### DRAFT West Alabama Trauma Plan 12/01/2009

patient age

d.

e.

EMS provider discretion - Narrative field for why

	f.	patient	sex
	g.	GCS*	
	h.		vital signs* C will compute Trauma Score from this data)
7.	Prehos	pital ou	tcome:
	a.	loss of	vital signs and time
		1)	lived
		2)	expired (time)
8.	Traum	a center	readiness:
	a.	trauma	score
	b.	physici	ian arrival time in E.D.
		1)	ED attending
		2)	General/trauma surgeon
		3)	Neurosurgeon
		4)	Orthopedist
		5)	Other: state
9.			ne within the first 24 hours (includes all procedures performed by g trauma center or receiving hospital if patient is transferred)
10.	Dispos	sition	
	a.	Emerge	ency Department disposition
		1)	disposition time - patient goes to initial <u>hospital care</u> location (not just leaves ED - i.e. to CT)
		2)	disposition location

### DRAFT West Alabama Trauma Plan 12/01/2009

		a) discharged
		b) admitted - ICU, OR, Ward
		c) transferred - higher level Trauma Center - equal level Trauma Center - lower level Trauma Center - reason
		d) expired
b.	Final	rauma center disposition/date/location
	1)	home
	2)	to rehabilitation center
	3)	to another acute care facility
	4)	to extended care facility
	5)	expired

### APPENDIX C

### **CONTINUOUS QUALITY IMPROVEMENT**

- A. Continuous quality improvement is a vital part of a Trauma System. It is used to document continuing proper function of the system and evaluation of that function to implement improvements in system function and trauma victim management. In a Trauma System patients have virtually no time to make specific choices regarding acute and critical medical care and therefore, the system itself has a moral responsibility to provide evaluation functions to assure that the highest level of care is being provided and that improvements are implemented whenever possible in a timely manner. All CQI activities are to be provided in compliance with and under the auspices of the ADPH/OEMS&T.
- B. Such a program is system wide. There is to be individual agency efforts on the part of all participating agencies. Every participating Trauma Center will be represented on the RTAC QI Workgroup and continuing participation of all the various entities involved in trauma care is mandatory.
- C. The appropriateness, quality, and quantity of all activities of the system must be continuously evaluated.
  - 1. Medical Care
  - 2. Prehospital care
  - 3. System function (dispatch activities, scene time, triage process and destination, response level, etc.)
- D. Prehospital Inter-Hospital Care
  - 1. Items evaluated
    - a. patient assessment
    - b. protocol adherence (when applicable)
    - c. procedures initiated/completed
    - d. on-scene time
    - e. medical control interaction
    - f. transport-mode (ground/air)
    - g. resource availability/needs match

2.

E.

1.

2)

d.

external comparison

Process for medical care QI (performed by each institution)

- h. arrival report i. record/documentation j. inter-facility care/transport Process - primarily performed by EMS organizations Each organization assigns QI person to oversee process a. b. Standards established - regional/authorized Determine audit filters c. d. Collect data Evaluate data e. f. Determine QI issues present Develop corrective action plan g. 1) professional resolution 2) administrative resolution Re-evaluation to document results/effectiveness of corrective h. action plan Trauma Center Care QI inclusive of participation in the statewide trauma registry Medical care Complications a. Deaths b. Outcome Review c. 1) internal review

### DRAFT West Alabama Trauma Plan 12/01/2009

		1)	Establ	ish written care standards
		2)	Collec	et data
			a)	trauma data elements
			b)	complications or events lists
		3)	Data (	QI evaluation
			a)	establish audit filters (indicators)
			b)	determine presence of potential QI issues
			c)	primary review (permissible)
			d)	multi-disciplinary peer review of QI issue
		4)	Correc	ctive action
			a)	professional resolution
			b)	administrative resolution
		5)	Re-ass	sess for effectiveness of corrective action
		6)	Docur	mentation essential utilizing QI tracking flow sheet
2.	Traum	na Cente	er Funct	ion
	a.	Traum	na Cente	er operations via audit filter review
		1)	Contin	nuous
		2)	Interm	nittent
		3)	Focus	ed audit filter review
	b.	-	ic even	nt evaluation when event problem noted by trauma
	c.	Medic	al nursi	ng audit
	d.	Utiliza	ation rev	view

Tissue review

e.

- f. Divert utilization review
- g. Process same as for Medical Care Review with the addition of some form or method for noting events that occur that need evaluation in order to improve Trauma Center functions.

### F. Regional System Function

- 1. Primarily performed by Regional EMS staff QI individual
- 2. Evaluation of overall Regional System function
- 3. Process
  - a. Establish standard
  - b. Collect data
  - c. Evaluate data determine audit filters
  - d. Devise plan of corrective action for QI issues
  - e. Re-evaluate to determine effectiveness of corrective action
  - f. participation on RTAC Trauma QI Workgroup
- G. RTAC QI Workgroups (staffed by West Alabama EMS)
  - 1. Goals review entire Regional Trauma Program
    - a. System administration/organization/activities
    - b. Prehospital care
    - c. Hospital care
  - 2. Members
    - a. ADPH/OEMS&T
    - b. ATCC Director
    - c. Regional EMS Off-Line Medical Director
    - d. Regional EMS Executive Director

- e. Regional EMS Office QI Coordinator
- f. Regional EMS Office Data Coordinator
- g. Prehospital provider representation the designated QI coordinator for each county, (from an EMS organization)
- h. Participating hospital representation
  - 1) Trauma Director
  - 2) QI Coordinator
- i. Coroner

### 3. Process

- a. Brief report of QI activities from each participating county/EMS organization and hospital
- b. General system information
- c. Focused review of items of major concern/impact including selected cases
- d. Develop consensus of issues that represent QI concerns
- e. Develop action plan
- f. Have re-evaluation process to determine effectiveness of action plan results
- g. Complete documentation of all activities including any recommendations for change or action to the RTAC and the ADPH/OEMS&T.
- 4. Trauma Center Medical Care Review Workgroup
  - a. Members
    - 1) Trauma Director from each participating Trauma Center
    - 2) Emergency Department Medical Director from each active Trauma Center

- 3) Regional EMS Medical Director
- 4) Coroner/Medical Examiner
- 5) Trauma Coordinator from a Trauma Center in region as recorder
- 6) The chairman of this workgroup will be the vice chairman of the RTAC.
- b. Activities are to review the trauma medical care issues including specific death audit review and major complications review as determined by the workgroup chairman. Other CQI issues will be reviewed as deemed appropriate.
- c. The process used will be the same process as outlined in the CQI Section of the Regional Trauma System Plan.
- d. Reports of a summary nature will be made to the RTAC QI Workgroup. Individual physician medical care issues will initially only be reported to the trauma director of the facility providing care in that situation and be made by personal communication. In general, discussions at the Trauma Center Medical Care Review Workgroup meeting will fulfill this notification requirement. If a persistent individual problem trend occurs, this situation will be referred to the appropriate trauma center QI Workgroup.
- 5. All members are expected to attend at least 75% of the Regional QI Workgroup meetings and the Trauma Center Medical Care Review Workgroup meetings.

## Statewide Trauma Advisory Council Meeting October 27, 2009, 10 a.m.-12 p.m.

## Alabama Department of Public Health The RSA Tower, Suite 1586 Montgomery, Alabama

Members Present	Dr. Richard Gonzalez, Chief Billy Pappas, Dr. John Campbell Dr. Donald E. Williamson
Members By Phone	Ms. Beth Anderson(Proxy for Mr. Bryan Kindred), Dr. Alzo Preyear, Dr. Loring Rue, Dr. John Mark Vermillion,
Members Absent	Mr. Bryan Kindred (Proxy to Ms. Beth Anderson), Mr. Gary Gore Mr. John Rainey
Staff Present	Dennis Blair, Choona Lang, Verla Thomas, Tammie Yeldell, Robin Moore, Brian Hale
Guests	Danne Howard, Joe Acker, David Garmon, Denise Louthain, Brian Grout-Baptist Hospital, Jeremy White-AGEMSS, Lee Rumbley-Baptist Life Flight
Guests By Phone	Allen Pace, Alex Franklin, Kathy Gillis-Parker, Dr. Sherry Melton, Dr. Rony Najjar

#### Welcome

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

### Consideration of Minutes of August 10, 2009

The Council recommended approval of the Minutes of August 10, 2009, as distributed; the motion carried unanimously.

### Trauma System Activation Updates for Gulf/ East/Southeast Regions

The Gulf Region hospitals were activated on September 14, 2009 with a news conference held at the Magnolia Ballroom in Mobile, Alabama. Southwest Alabama Medical Center was surveyed and will upgrade from a community hospital to a Level Three. The East Region hospitals were also activated on October 6, 2009 with a news conference held at the Anniston Star in Anniston, Alabama. Ten hospitals in the Southeast Region have been

Dr. Campbell will produce a DVD for training and it will be distributed to each region.

### **RTAC Membership Revisions**

The Council recommended approval of the RTAC membership changes for North Region as distributed; the motion carried unanimously.

### Regional Trauma Plans Revision

The Council recommended approval of adding a sentence back into the Regional Trauma Plans Section IV. Data Continuing Quality Improvement Component and Appendix C Continuous Quality Improvement as distributed; the motion carried unanimously. (See Attached)

The next STAC meeting is scheduled at 10 a.m., December 10, 2009, The RSA Tower, Suite 1586; 201 Monroe Street, Montgomery, Alabama.

The meeting was adjourned at 11:40 a.m.

Donald E. Williamson, M.D., Chairman

Statewide Trauma Advisory Council

Crystal L. Fountain, Administrative Support Assistant II

Statewide Trauma Advisory Council

Approved December 10, 2009

# STAC ATCC OPERATIONS REPORT

October 27, 2009

# Trauma System --- Volume --- 08/06/2009 --- 10/22/2009

- Total System Volume –
- \*NATS 482 --HH 303 ,DGH 21, Three's 107 , Erlanger 3 , NMMC 0
- BREMSS 875 UAB 647, TCH 54,
   Three's 153
- EAST 12, -- Two 6, Three's 6
- GULF 188, -- USA 145, Three's 34

## TRAUMA SYSTEM VOLUME

- \* 10/22/2008 to date 10/22/2009
- NATS 1748
- BREMSS 3662
- 07/08- patients 3588
- 06/07 patients 3610

# TRAUMA SYSTEM OVERLOAD 08/06/2009 --- 10/22/2009

- \*HH 0 Hours
- \* TCH -- 0
- UAB -- 6.5 HRS.
- **USA** -- 0

# Trauma System --- Overload TBO 8/06/2009 10/22/2009

- \* HH --- 0 Hours
- TCH--- 0 Hours
- UAB --- 46.4 Hours.
- USA --- 0 Hours
- Patients rerouted 0

## TRAUMA SYSTEM ---- RED

- HH 2.5 Hrs
- **▼ TCH 0**
- UAB -- .2
- **USA** -- 0
- Patients Rerouted 0

## ANY OTHER REPORTS ?



### APPENDIX C

### **CONTINUOUS QUALITY IMPROVEMENT**

- A. Quality improvement is a vital part of a Trauma System. It is used to document continuing proper function of the system and evaluation of that function to implement improvements in system function and trauma victim management. In a Trauma System patients have virtually no time to make specific choices regarding acute and critical medical care and therefore, the system itself has a moral responsibility to evaluation functions to assure that the highest level of care is being provided and that improvements are implemented whenever possible in a timely manner. All CQI activities are to be provided in compliance with and under the auspices of the ADPH/OEMS&T and this plan is automatically revised when any changes in rules, process or contract is provided.
- B. Such a program is system wide. There is to be individual agency efforts on the part of all participating agencies, plus a Regional Oversight Committee is necessary for overall review of system function. Every participating trauma hospital or organization will be represented on the Regional QI Committee and continuing participation of all the various entities involved in trauma care is mandatory.
- C. The appropriateness, quality, and quantity of all activities of the system must be continuously evaluated.
  - 1. Medical Care
  - 2. Prehospital care
  - 3. System function (dispatch activities, scene time, triage process and destination, response level, etc.)
- D. Prehospital Inter-Hospital Care
  - 1. Items evaluated
    - a. patient assessment
    - b. protocol adherence (when applicable)
    - c. procedures initiated/completed
    - d. on-scene time
    - e. medical control interaction
    - f. transport-mode (ground/air)

### Appendix taken from original Trauma Plan

	g.	resource availability/needs match					
	h.	arrival report					
	i.	record/documentation					
	j.	inter-trauma hospital care/transport					
2.	Proces	s - primarily performed by EMS organizations					
	a.	Each organization assigns QI person to oversee process					
	b.	Standards established - regional/authorized					
	c.	Determine audit filters					
	d.	Collect data					
	e.	Evaluate data					
	f.	Determine QI issues present					
	g.	Develop corrective action plan					
		1) professional resolution					
		2) administrative resolution					
	h.	Re-evaluation to document results/effectiveness of corrective action plan					
Hospit	al Care	QI inclusive of participation in the statewide trauma registry					
1.	Medic	cal care					
	a.	Complications					
	b.	Deaths					
	c.	Outcome Review					
		1) internal review					
		2) external comparison					

E.

### Appendix taken from original Trauma Plan

d.	Process for medical care QI (performed by each institution)		
	1)	Establish written care standards	
	2)	Collect data	
		<ul><li>a) trauma data elements</li><li>b) complications or events lists</li></ul>	
	3)	Data QI evaluation	
		a) establish audit filters (indicators)	
		b) determine presence of potential QI issues	
		c) primary review (permissible)	
		d) multi-disciplinary peer review of QI issue	
	4)	Corrective action	
		a) professional resolution	
		b) administrative resolution	
	5)	Re-assess for effectiveness of corrective action	
	6)	Documentation essential utilizing QI tracking flow sheet	
Trauma Hospital Function			
a.	Trauma Hospital operations via audit filter review		
	1)	Continuous	
	2)	Intermittent	
	3)	Focused audit filter review	
b.	Specific event evaluation when event problem noted by trauma team member		
c.	Medical nursing audit		

2.

Utilization review

d.

### **Appendix taken from original Trauma Plan**

- e. Tissue review
- f. Divert utilization review
- g. Process same as for Medical Care Review with the addition of some form or method for noting events that occur that need evaluation to try to improve Trauma Hospital functions.

### F. Regional System Function

- 1. Primarily performed by Regional EMS staff QI individual
- 2. Evaluation of overall Regional System function
- 3. Process
  - a. Establish standard
  - b. Collect data
  - c. Evaluate data determine audit filters
  - d. Devise plan of corrective action for QI issues
  - e. Re-evaluate to determine effectiveness of corrective action
  - f. participation on Regional Trauma QI Committee
- G. Regional QI Committees (staffed by BREMSS)
  - 1. Goals review entire Regional Trauma Program
    - a. System administration/organization/activities
    - b. Prehospital care
    - c. Hospital care
  - 2. Members
    - a. ADPH/OEMS&T
      - 1) Regional EMS Off-Line Medical Director
      - 2) Regional EMS Executive Director

### Appendix taken from original Trauma Plan

- 3) Regional EMS Office QI Coordinator
- 4) Regional EMS Office Data Coordinator
- b. Prehospital provider representation the designated QI coordinator for each county, (from an EMS organization)
- c. Participating hospital representation
  - 1) Trauma Director
  - 2) QI Coordinator
- d. Coroner

### 3. Process

- a. Brief report of QI activities from each participating county/EMS organization and hospital
- b. General system information
- c. Focused review of items of major concern/impact including selected cases
- d. Develop consensus of issues that represent QI concerns
- e. Develop action plan
- f. Have re-evaluation process to determine effectiveness of action plan results
- g. Complete documentation of all activities including any recommendations for change or action to the RTAC and the ADPH/OEMS&T.
- 4. Hospital Medical Care Review Sub-Committee
  - a. Members
    - 1) Trauma Director from each participating Trauma Hospital
    - 2) Emergency Department Medical Director from each active Trauma Hospital
    - 3) Regional EMS Medical Director
    - 4) Coroner/Medical Examiner

### **Appendix taken from original Trauma Plan**

- 5) Trauma Coordinator from Level I Trauma Hospital as recorder
- 6) The chairman of this committee will be the chairman of the RTAC.
- b. Activities are to review the trauma medical care issues including specific death audit review and major complications review as determined by the committee chairman. Other CQI issues will be reviewed as deemed appropriate.
- c. The process used will be the same process as outlined in the CQI Section of the Regional Trauma System Plan.
- d. Reports of a summary nature will be made to the Regional CQI Committee. Individual physician medical care issues will initially only be reported to the trauma director of the trauma hospital providing care in that situation and be made by personal communication. In general, discussions at the sub-committee meeting will fulfill this notification requirement. If a persistent individual problem trend occurs, this situation will be referred to the appropriate hospital CQI Committee.
- 5. All members are expected to attend at least 75% of the Regional CQI Committee meetings and the Hospital Medical Care Review

### IV. DATA/CONTINUING QUALITY IMPROVEMENT COMPONENT

This component is absolutely essential for function of the Trauma System. In virtually any serious trauma/injury situation, the patient has a very limited ability to meaningfully select Prehospital, hospital and physician care. The efficacy of the initial care in these patients may have a pivotal role in determining their outcome. Therefore, there is a system responsibility to evaluate the system function to determine continuing effectiveness in the management of these major trauma victims. The Trauma Plan is designed with this component to be able to generate an overall system-wide trauma database which would provide an overall look at Trauma incidents, significance, care and outcomes, provide information for use in determining and developing trauma teaching programs, provide information able to be used in potential trauma studies, and utilization in evaluation of system function in the CQI Program. This portion of the trauma plan must remain compliant with STAC and State Board of Health directives, thus this portion of the plan accepts any such changes automatically for all aspects of continuous Quality Improvement. There are three basic elements of this component. The first is a standard trauma dataset that will be used to establish a regional trauma database at ATCC. The second element is the continuous quality improvement program of the trauma system at ATCC. The third element is the trauma registry data at each hospital. All data from these three data sources is available to ADPH/OEMS&T to use in statewide trauma OI activities.

The Trauma CQI Dataset for Trauma Hospitals is that set forth in ADPH/OEMS&T rules requiring each Trauma Hospital's collection and reporting of data for the trauma registry.

The second entity in this component is the continuous quality improvement (CQI) program for the Trauma System. This program is necessary to the Trauma System to document continuing function and allows the implementation of improvements in a system where the patients may not have the ability to make their own personal medical care choices and depend on the system for adequacy and completeness of care. This program will be system-wide with the individual agencies basically doing their own CQI evaluations and reporting to a regional oversight committee as well as the ADPH/OEMS&T. The appropriateness, quality and quantity of all activities in the system must be continuously monitored in the areas of Prehospital care, medical care of the patients in the Trauma Hospitals and overall system function.

The basic CQI process involves numerous specific steps to be performed by

each individual trauma hospital their CQI effort. These steps are:

- 1. Assignment of a CQI manager to oversee the process in the organization.
- 2. Develop a written CQI program to evaluate patient care with regard to appropriateness, quality and quantity and as part of that program, patient care

standards are established for use in the evaluation process. For Prehospital programs, this simply may be the regional Prehospital protocol. For Trauma Hospitals this may be a combination of ATLS protocols, plus additional standards as deemed necessary or an individual set of patient care standards (protocols) developed by that hospital. These programs are reviewed and approved by the Regional CQI Committee and the ADPH/OEMS&T and as part of becoming a Trauma System participating Trauma Hospital under the direction/extension of the CQI activities of ADPH/OEMS&T.

- 3. A method for CQI data collection is established by ADPH/OEMS&T.
- 4. CQI evaluations are undertaken by the individual system participants EMS providers or Trauma Hospital hospitals. This first involves the determination of specific audit filters. Mandatory Trauma Hospital audit filters include major and others as may be determined by the ADPH/OEMS&T. Other appropriate audit filters may also be evaluated. For Trauma Hospitals, external outcome comparisons are part of the evaluation process.
- 5. Determine the presence of CQI issues through the data evaluation process.
- 6. Discussion of CQI issues at the formal CQI Conference of each individual system participant EMS provider or Trauma Hospital.
- 7. Develop a correction action plan. In general, action activities can be placed under the categories of professional resolution or administrative resolution.
- 8. Re-evaluation must occur to document the results and effectiveness of the corrective action plan. This is commonly called "closing the loop".

Adequate documentation of these activities is essential. In Trauma Hospitals a multidisciplinary peer review process must occur. In Trauma Hospital CQI programs both medical care and Trauma Hospital function must be evaluated.

The Regional CQI Committee has the goal of review of the entire Regional Trauma Program activities for appropriateness, quality, and quantity of activities and report such to all participants and ADPH/OEMS&T. That review is to include system administration/organization activities, plus Prehospital care and hospital care review. The Regional Committee will document effectiveness of hospital and EMS CQI evaluations through routine reports of these CQI activities provided by each participating trauma hospital to the Regional Committee. The Regional Committee will perform focused review of specific items as determined appropriate, but these reviews will include evaluation of both Prehospital and hospital activities. Death audit review is mandatory. It is expected that most issues will be resolved by developing an action plan in conjunction with the various Trauma System entities. A re-evaluation for results is to be undertaken. If it is determined that a change in system configuration or standard function should occur, a recommendation will be sent to the Regional Trauma Advisory Council (RTAC) for evaluation and report to ADPH/OEMS&T.

### ALABAMA TRAUMA SYSTEM PATIENT ENTRY CRITERIA FOR HOSPITALS

The following are criteria for hospital emergency department medical personnel to enter into the Alabama Trauma System a patient who has been involved in a trauma or burn incident. Any hospital in Alabama may utilize this protocol and is encouraged to use the Alabama Trauma Communications Center (ATCC) to expedite appropriate trauma patient transfer.

NOTE: THIS IS FOR PATIENTS PRESENTING TO ANY EMERGENCY DEPARTMENT, NOT FOR PATIENTS ALREADY ADMITTED TO A HOSPITAL

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

- 1. A systolic BP < 90 mm/Hg in an adult <u>or child 6 years or older</u> < **80 mm/Hg in a child <u>Less than 6 years old.</u>**
- 2. Respiratory distress rate < 10 or >29 in adults, or
  - <20 or >60 in a newborn
  - < 20 or > 40 in a child three years or younger
  - <12 or >29 in a child four years or older.
- 3. Head trauma with Glasgow Coma Scale score of 13 or less <u>or head trauma with</u> <u>any neurologic changes in a child five or younger</u>. 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 and the referring hospital does not have the surgical resources to manage them.

### **Mechanism of Injury Criteria (patient with normal physiologic signs):**

This should not be used as criteria for entering a patient into the trauma system except by hospitals 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. <u>Unbroken fall of 10 feet or 3 times the height of the child onto a hard surface.</u>

### **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.
- 8. 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) 1-800-359-0123. Note: hospitals unable to care for these patients should transfer them immediately.
- 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. Hospitals wishing to enter a patient into the trauma system for Anatomic 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.

### REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC) NORTH REGION (1)

DR. WILLIAMSON

### **AlaHA APPOINTEES**

William Anderson, President/ CEO, Helen Keller Hospital 4 years

Kim Bryant, CEO, Highlands Medical Center 3 years

Christine Stewart, CEO, Russellville Medical Center 2 years

Pam Hudson, CEO, Crestwood Medical Center 1 year

### MASA APPOINTEES

4 years

Dr. Ginger Bryant-Huntsville Hospital Orthopedic Surgery

3 years

Dr. Larry Sullivan-Decatur General Emergency Medicine

2 years

Dr. Bill Vermillion- Eliza Coffee Emergency Medicine

1 year

### DR. WILLIAMSON APPOINTEE

Don Webster EMT-P HEMSI Huntsville 4 years

### REGIONAL MEDICAL DIRECTOR

Sherrie Squyres, M.D. Emergency Medicine

4 years

### RTAC APPOINTEES BY THE STAC HOSPITAL REPRESENTATIVES (14)

Cary Payne, Administrator-Athens Limestone 4 years

James Weidner, CEO-Cullman Regional Medical Center 3 years

Dean Griffin, CEO-Decatur General Hospital 2 years

Carl Bailey, Jody Pigg, Hospital Director-Eliza Coffee 1 year

G.F. Naylor CEO-Hartselle Medical Center 4 years

David Spillers, Administrator - Huntsville Hospital 3 years

Thomas Dunning, Administrator-Lawrence Baptist 2 years

Cheryl Hayes, Administrator-Marshall North 1 year

John Anderson, Administrator-Marshall South 4 years

Tim McGill, CEO-Parkway Medical 3 years

Niles Floyd, Administrator-Red Bay Hospital 2 years

Jody Pigg, Kathy Harrison, Administrator-Shoals Hospital 1 year

James Weidner, CEO Woodland Medical Center 4 years

Jeff Rains, Administrator-DeKalb Regional Medical Center 3 years

### PHYSICIANS (13)

Rhett Murray, M.D.

Huntsville 4 years

Joel Pickett, M.D.

Huntsville 3 years

Neurosurgery

Neurosurgery

Randolph Buckner, M.D.

Decatur General

2 years

General/Vascular Surgery

James Thomas, M.D.

Huntsville 1 year **Emergency Medicine** 

Daniel Spangler, M.D.

Florence 4 years

**Emergency Medicine** 

Stephan Moran, M.D.

Huntsville 3 years

Trauma Surgery

Jeff Johnson, M.D.

Huntsville 2 years

**Emergency Medicine** 

David Garvey, M.D.

Huntsville 1 year **Emergency Medicine** 

Deepak Katyl, M.D.

Huntsville 4 years Trauma Surgery

Robert Echols, M.D.

Cullman 3 years

**Emergency Medicine** 

Michael Samotowka

Huntsville 2 years

Trauma Surgery

Scott Warner, M.D. Critical Care/Pulmonary/Emergency

Cullman

1 year Medicine

John Markushewski, M.D. Emergency Medicine

Huntsville 4 years

James Gilbert, M.D. Pediatric Surgery

Huntsville 3 years

### PREHOSPITAL EMS REPRESENTATIVES (2)

Mike West, EMT-P Athens Limestone EMS 4 years

David Gardner, EMT-P AirEvac LifeTeam 3 years

### Statewide Trauma Advisory Council Meeting October 27, 2009 The RSA Tower, Suite 1586 10 a.m.-12 p.m.

Call in Information# 1-888-776-3766 Enter \*3251726\*

WelcomeDr. Williamson
New member Dr. Richard Gonzalez, USA Medical Center; Mobile, Alabama
Adoption of August Meeting Minutes
<u>Unfinished Business</u>
Trauma System Activation Updates for Gulf/East/Southeast RegionsDr. Campbell
Alabama Trauma System Operation Report
Out of State Trauma System Designation Process
Trauma Imaging Transmission and Receive
New Business
Interfacility Transfer process (Stable Patients)
RTAC Membership Revisions
Regional Trauma Plans Revision
Other Issues
Next Meeting
Meeting Adjourn

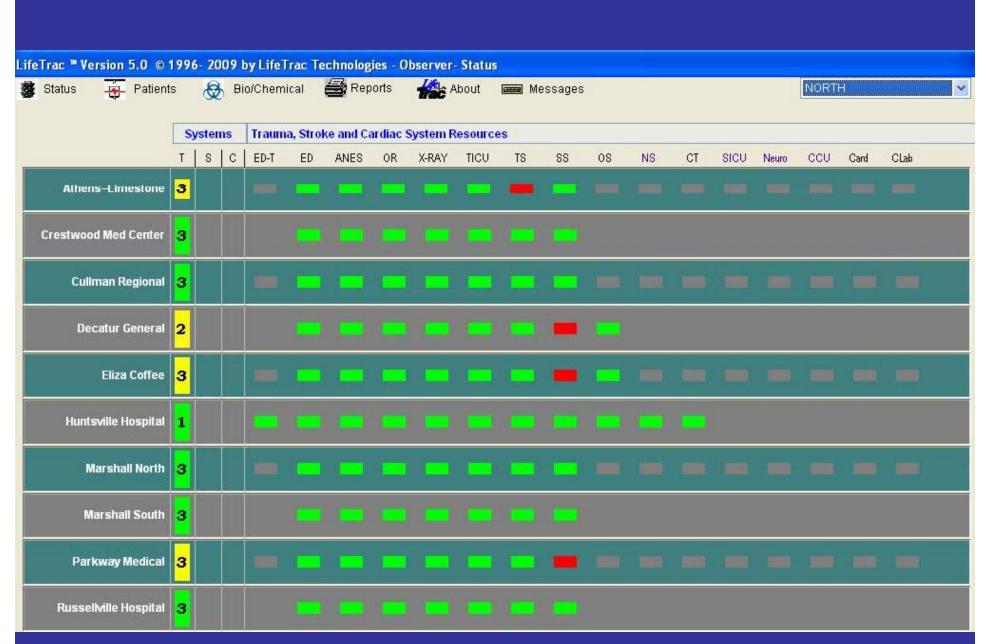
## PATIENT CRITERIA FOR HOSPITALS TO ENTER PATIENTS INTO THE TRAUMA SYSTEM

## THE ALABAMA TRAUMA SYSTEM IS UNIQUE

- NOT ONLY ARE THE TRAUMA HOSPITALS INSPECTED AND CERTIFIED BUT ALSO THEIR CRITICAL RESOURCES ARE CONSTANTLY MONITORED BY COMPUTER AT THE ALABAMA TRAUMA COMMUNICATIONS CENTER (ATCC)
- ONLY PATIENTS WITH LIFE-THREATENING OR POTENTIALLY LIFE-THREATENING INJURIES ARE PUT INTO THE SYSTEM (about 10% of injured patients)
- AMBULANCES ARE DIRECTED TO THE RIGHT TRAUMA CENTER BY A SINGLE COMMUNICATIONS CENTER (ATCC) THAT CAN IMMEDIATELY SEE THE STATUS (RED -UNAVAILABLE OR GREEN - AVAILABLE) OF EVERY TRAUMA CENTER

### HOW DOES THE SYSTEM WORK?

- THE EMTS IN THE FIELD HAVE BEEN TRAINED IN THE INJURY CRITERIA TO PUT PEOPLE INTO THE TRAUMA SYSTEM
- WHEN THEY FIND A PATIENT THAT MEETS ENTRY CRITERIA THEY CALL THE ATCC AND ENTER THE PATIENT INTO THE SYSTEM
  - EACH PATIENT IS GIVEN A UNIQUE IDENTIFIER NUMBER
  - NAMES ARE NEVER USED
- THE ATCC AND THE EMT DECIDE WHICH READY HOSPITAL WOULD BE RIGHT FOR THE PATIENT USING THE SECONDARY CRITERIA IN THE REGIONAL TRAUMA PLAN AND THE SCREEN SHOWING AVAILABLE TRAUMA CENTERS



WHAT IF THE PATIENT COMES BY PRIVATE VEHICLE OR THE PATIENT COMES BY EMS BUT THE EMT DID NOT REALIZE THE PATIENT WAS BAD ENOUGH TO BE PUT INTO THE SYSTEM?

### SCENARIO #1

- You are a community hospital and don't have the resources to care for a trauma patient, or
- You are a trauma center but:
  - You don't have the critical resources needed to take a new patients (are "RED") or
  - The patient needs a higher level of care than you can provide

# IN THIS SITUATION YOU SHOULD RAPIDLY EVALUATE THE PATIENT TO SEE IF HE/SHE MEETS CRITERIA FOR A HOSPITAL TO ENTER HIM/HER INTO THE SYSTEM

# INJURY CRITERIA FOR HOSPITAL EMERGENCY DEPARTMENT PERSONNEL TO ENTER A PATIENT INTO THE TRAUMA SYSTEM

## NOTE: THIS CRITERIA IS FOR PATIENTS PRESENTING TO ANY EMERGENCY DEPARTMENT, NOT FOR PATIENTS ALREADY ADMITTED TO A HOSPITAL

ALL HOSPITALS, NOT JUST TRAUMA CENTERS, CAN ENTER PATIENTS INTO THE TRAUMA SYSTEM

### PHYSIOLOGICAL CRITERIA IS PRESENT ON ARRIVAL OR DEVELOPS DURING EVALUATION

- A systolic BP < 90 mm/Hg in an adult or child 6 years or older
  - < 80 mm/Hg in a child Less than 6 years old.</p>
- Respiratory distress rate < 10 or >29 in adults, or
  - <20 or >60 in a newborn
  - < 20 or > 40 in a child three years or younger
  - <12 or >29 in a child four years or older.
- Head trauma with Glasgow Coma Scale score of 13 or less or head trauma with any neurologic changes in a child five or younger.
  - 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 unless the CT scan reveals intracranial bleeding.

# THESE PATIENTS ARE GENERALLY TRANSFERRED TO A LEVEL ONE TRAUMA CENTER IF THEY ARE STABLE ENOUGH FOR TRANSFER

# IN SOME CASES YOUR SURGEON MAY HAVE TO OPERATE TO CONTROL THE BLEEDING IN ORDER TO STABILIZE A PATIENT FOR TRANSFER

## IF YOU NEED TO TRANSFER THE PATIENT:

- CALL THE ATCC (1-800-359-0123)
- DESCRIBE THE PATIENT'S INJURIES TO THE ATCC (get the ATCC number and place on chart)
- TELL THEM IF YOU DON'T HAVE THE RESOURCES TO CARE FOR THE PATIENT
- THE ATCC WILL TELL YOU THE CLOSEST READY HOSPITAL (GREEN) WITH THE NEEDED RESOURCES
- YOU CAN SEND THEM DIRECTLY THERE
  - YOU DO NOT HAVE TO TALK TO THE RECEIVING SURGEON (THE HOSP HAS SIGNIFIED ACCEPTANCE BY TURNING ITSELF GREEN)
  - THE ATCC CAN HELP ARRANGE TRANSPORT

### ANATOMIC CRITERIA IS PRESENT ON ARRIVAL OR IS FOUND DURING EVALUATION (STABLE VITAL SIGNS)

- The patient has a flail chest.
- The patient has two or more obvious proximal long bone fractures (humerus, femur).
- The patient has a penetrating injury of the head, neck, torso, or groin, associated with an energy transfer.
- The patient has in the same body area a combination of trauma and burns (partial and full thickness) of 15% or greater.
- The patient has an amputation proximal to the wrist or ankle.
- The patient has one or more limbs which are paralyzed.
- The patient has a pelvic fracture demonstrated by x-ray or other imaging technique.
- Significant internal injuries are found during hospital evaluation and the referring hospital does not have the surgical resources to manage them.

THESE PATIENTS ARE GENERALLY TRANSFERRED TO A LEVEL ONE OR LEVEL TWO TRAUMA CENTER UNLESS THE LEVEL THREE TRAUMA CENTER HAS THE RESOURCES TO TREAT THEM

### IF YOU NEED TO TRANSFER THE PATIENT:

- CALL THE ATCC (1-800-359-0123)
- DESCRIBE THE PATIENT'S INJURIES TO THE ATCC (get the ATCC number and place on chart)
- TELL THEM IF YOU DON'T HAVE THE RESOURCES TO CARE FOR THE PATIENT
- THE ATCC WILL TELL YOU THE CLOSEST READY HOSPITAL (GREEN)
  WITH THE NEEDED RESOURCES
- THE ATCC WILL CONNECT YOU WITH A RECEIVING DOCTOR TO DISCUSS THE PATIENT'S TRANSFER
  - SINCE THE PATIENT HAS STABLE VITAL SIGNS THE RECEIVING DOCTOR MUST OK THE TRANSFER
  - IF THE TRAUMA CENTER REFUSES THE TRANSFER YOU WILL HAVE TO GO THROUGH REGULAR EMTALA TRANSFER PROCEDURES AND NOT THE ATCC
  - ALL CONVERSATIONS ARE RECORDED AND ALL TRANSFERS AND REFUSED TRANSFERS ARE REVIEWED BY THE REGIONAL QI COMMITTEE

### 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.
- 8. 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

## IF YOU NEED TO TRANSFER THE BURN PATIENT:

- CALL THE ATCC (1-800-359-0123)
- DESCRIBE THE PATIENT'S INJURIES TO THE ATCC (get the ATCC number and place on chart)
- TELL THEM IF YOU DON'T HAVE THE RESOURCES TO CARE FOR THE PATIENT
- THE ATCC WILL TELL YOU THE CLOSEST GREEN BURN CENTER WITH THE NEEDED RESOURCES
- THE ATCC WILL CONNECT YOU WITH A RECEIVING DOCTOR TO DISCUSS THE PATIENT'S TRANSFER
  - SINCE THE PATIENT HAS STABLE VITAL SIGNS THE RECEIVING DOCTOR MUST OK THE TRANSFER
  - IF THE TRAUMA CENTER REFUSES THE TRANSFER YOU WILL HAVE TO GO
     THROUGH REGULAR EMTALA TRANFER PROCEDURES AND NOT THE ATCC
  - ALL CONVERSATIONS ARE RECORDED AND ALL TRANSFERS AND REFUSED TRANSFERS ARE REVIEWED BY THE REGIONAL QI COMMITTEE

# MECHANISM OF INJURY AND EMERGENCY MEDICINE PHYSICIAN DISCRETION ARE NOT CONSIDERED REASONS FOR TRANSFER OF STABLE PATIENTS

# IF THE PATIENT IS STABLE YOU SHOULD NOT NEED TO TRANSFER HIM/HER UNLESS YOU FIND AN OCCULT LIFETHREATENING INJURY

## SCENARIO #2 YOU ARE A TRAUMA CENTER AND ARE READY FOR A NEW PATIENT (STATUS "GREEN")

# IN THIS SITUATION YOU SHOULD RAPIDLY EVALUATE THE PATIENT TO SEE IF HE/SHE MEETS CRITERIA FOR A HOSPITAL TO ENTER HIM/HER INTO THE SYSTEM

### PHYSIOLOGICAL CRITERIA IS PRESENT ON ARRIVAL OR DEVELOPS DURING EVALUATION

- A systolic BP < 90 mm/Hg in an adult or child 6 years or older
  - < 80 mm/Hg in a child Less than 6 years old.</p>
- Respiratory distress rate < 10 or >29 in adults, or
  - <20 or >60 in a newborn
  - < 20 or > 40 in a child three years or younger
  - <12 or >29 in a child four years or older.
- Head trauma with Glasgow Coma Scale score of 13 or less or head trauma with any neurologic changes in a child five or younger.
  - 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 unless the CT scan reveals intracranial bleeding.

### ANATOMIC CRITERIA IS PRESENT ON ARRIVAL OR IS FOUND DURING EVALUATION (STABLE VITAL SIGNS)

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

### IF YOU DON'T NEED TO TRANSFER THE PATIENT:

- CALL THE ATCC (1-800-359-0123)
- DESCRIBE THE PATIENT'S INJURIES TO THE ATCC (get the ATCC number and place on chart)
- TELL THEM YOU HAVE THE RESOURCES TO CARE FOR THE PATIENT AND WILL ADMIT HIM/HER
- NOTE: IT IS VERY IMPORTANT TO ENTER THE PATIENT INTO THE SYSTEM AND RECORD THE ATCC IDENTIFICATION NUMBER FOR BOTH QI REASONS AND FINANCIAL REASONS

#### 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.
- 8. 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

## IF YOU DON'T NEED TO TRANSFER THE PATIENT:

- THIS IS UNLIKELY UNLESS YOU ARE A BURN CENTER
- CALL THE ATCC (1-800-359-0123)
- DESCRIBE THE PATIENT'S INJURIES TO THE ATCC (get the ATCC number and place on chart)
- TELL THEM YOU HAVE THE RESOURCES TO CARE FOR THE PATIENT AND WILL ADMIT HIM/HER
- NOTE: IT IS VERY IMPORTANT TO ENTER THE PATIENT INTO THE SYSTEM AND RECORD THE ATCC IDENTIFICATION NUMBER FOR BOTH QI REASONS AND FINANCIAL REASONS

## IF THERE ARE QUESTIONS YOU MAY CALL ME OR EMAIL ME

JOHN CAMPBELL, MD MEDICAL DIRECTOR, EMS & TRAUMA

PHONE: 334-206-5383

**EMAIL:** 

john.campbell@adph.state.al.us

#### 420-2-2-.0--- Trauma Center Designation For Out-of-State Hospitals

#### (1) Types of Designation.

(a) Regular Designation For Out-of-State Hospitals That Have Been Inspected and Certified by Their States Using American College of Surgeons (ACS) Level I, II, or III Trauma Center Standards

A regular designation may be issued by the Board after it has determined that an applicant hospital has been certified by ACS standards at a level of I, II, or III trauma center by the state in which the hospital is located and the hospital is otherwise in substantial compliance with these rules. The designation will be at the same level as certified by the state in which the hospital is located. If the Out-of-State hospital wishes to be certified at a higher level than their state has certified them or if their state did not use ACS standards when certifying them, the hospital must follow the same certification procedure as In-State hospitals.

- (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 by Inspection" or "Application for Trauma Center Designation by Previous Certification" 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 by the Department or an MOU if application is by documented previous certification by ACS standards;
- (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 for inspection 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 hospital that applies for designation by inspection by the Department 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 Alabama inspection process or upon application and proper documentation of previous certification by their state using ACS standards. 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 Memorandum of Understanding (MOU).

- (a) A designation MOU will be completed after the hospital has produced documentation that the state in which they are located has certified them as a level I, II, or III trauma center using ACS standards or the hospital has successfully completed the application and Alabama inspection process. The designation MOU 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 MOUs. A separate designation MOU shall be required for each hospital when more than one hospital is operated under the same management.
- (c) The form of the designation MOU 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:



August 5, 2009

TO: Dr. John Campbell

FROM: Loring W. Rue, III, MD, FACS – RTAC Chair

SUBJECT: Trauma Hospitals in BREMSS Region 3

All of the hospitals as listed below have chosen to retain their current trauma level of care as originally recognized by the BREMSS trauma system. As the Chair of Region RTAC it is recommended to the State Trauma Advisory Council (STAC) that the following hospitals and Alabama Trauma System levels be recognized:

Brookwood Medical Center –	ATS Level 3
The Children's Hospital -	ATS Level 1
St. Vincent's East -	ATS Level 3
Princeton Baptist -	ATS Level 3
Shelby Baptist -	ATS Level 3
Trinity Medical Center -	ATS Level 3
UAB Medical West -	ATS Level 3
University of Alabama at Birmingham Hospital -	ATS Level 1
Walker Baptist Medical Center -	ATS Level 3

The Region 3 RTAC looks forward to continued operation of the ATS.

#### **East Region Trauma Center Recommendations**

August 4, 2009

The Alabama Trauma System Survey Team would like to submit the hospitals below to the East Region RTAC for approval to participate in the trauma system at the level listed by each hospital's name. Each hospital, per on-site conducted during the month of May and July, has the essential resources required to operate successfully at the level for which it has applied:

1. Citizens Baptist Medical Center	Level III
2. Coosa Valley Medical Center	Level III
3. Lanier Health Services	Level III
4. Northeast Alabama Regional Medical Cente	r Level II
5. Riverview Medical Center	Level III
6. Gadsden Regional Medical Center	Level III

#### Approve upon condition (Statement of surgeon support)

1.	Russell Medical Center	Level III
2.	Stringfellow Memorial Hospital	Level III

#### Community Hospital

- 1. Clay County Hospital
- 2. Cherokee Medical Center
- 3. Lake Martin Community
- 4. Randolph Medical Center
- 5. Wedowee Hospital
- 6. \*\*\*Jacksonville Medical Center

(Note: We will need a letter requesting a change from Level III to Community Hospital)

#### Gulf Region Trauma Center Recommendations

(See Revision Below) August 5, 2009

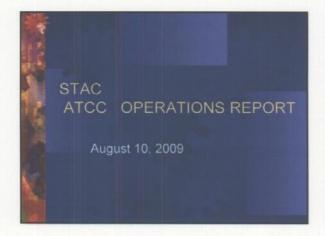
The Alabama Trauma System Survey Team would like to submit the hospitals below to the Gulf Region RTAC for approval to participate in the trauma system at the level listed by each hospital's name. Each hospital, per on-site visits conducted during the month of June, has the essential resources required to operate successfully at the level for which it has applied:

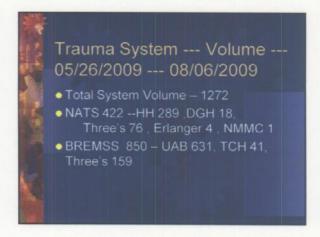
1.	Atmore Community Hospital	Level III
2.	D.W. McMillan Memorial Hospital	Level III
3.	Grove Hill Memorial Hospital	Level III
4.	Infirmary West Hospital	Level III
5.	Monroe County Hospital	Level III
6.	North Baldwin Infirmary	Level III
7.	South Baldwin Regional Medical Center	Level III
8.	Springhill Memorial Hospital	Level II
9.	Thomas Hospital	Level II
10.	Jackson Medical Center	Level III
11.	***Mobile Infirmary Medical Center	Level III

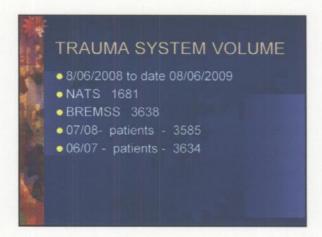
#### **Community Hospital**

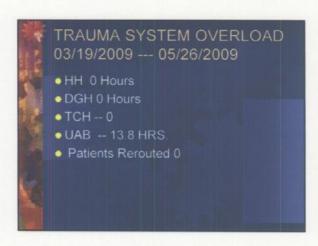
- 1. Southwest Alabama Medical Center
- 2. Washington County Hospital
- 3. Evergreen Medical Center

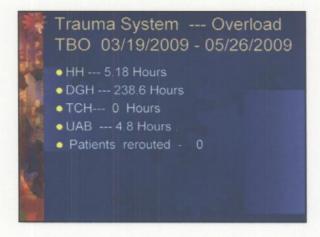
Providence is on hold for now. Their General Surgeon is still concerned about the potential increase in the number of trauma cases.



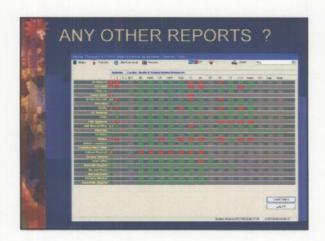












# STAC ATCC OPERATIONS REPORT

August 10, 2009

# Trauma System --- Volume --- 05/26/2009 --- 08/06/2009

- Total System Volume 1272
- NATS 422 --HH 289 ,DGH 18,
   Three's 76 , Erlanger 4 , NMMC 1
- BREMSS 850 UAB 631, TCH 41, Three's 159

### TRAUMA SYSTEM VOLUME

- \* 8/06/2008 to date 08/06/2009
- NATS 1681
- BREMSS 3638
- 07/08- patients 3585
- 06/07 patients 3634

## TRAUMA SYSTEM OVERLOAD 03/19/2009 --- 05/26/2009

- \*HH 0 Hours
- DGH 0 Hours
- \*TCH -- 0
- **\*** UAB -- 13.8 HRS.
- Patients Rerouted 0

## Trauma System --- Overload TBO 03/19/2009 - 05/26/2009

- \* HH --- 5.18 Hours
- DGH --- 238.6 Hours
- \*TCH--- 0 Hours
- \* UAB --- 4.8 Hours.
- Patients rerouted 0

### TRAUMA SYSTEM ---- RED

- **\*** HH 0
- DGH 0
- **★ TCH 0**
- **UAB** -- 0
- Patients Rerouted 0

## ANY OTHER REPORTS ?



#### **East Region Trauma Center Recommendations**

August 4, 2009

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2.	Coosa Valley Medical Center	Level III
3.	Lanier Health Services	Level III
4.	Northeast Alabama Regional Medical Center	Level II
5.	Riverview Medical Center	Level III

#### Approve upon condition (Statement of surgeon support)

1.	Gadsden Regional Medical Center	Level III
2.	Russell Medical Center	Level III
3.	Stringfellow Memorial Hospital	Level III

#### **Community Hospital**

- 1. Clay County Hospital
- 2. Cherokee Medical Center
- 3. Lake Martin Community
- 4. Randolph Medical Center
- 5. Wedowee Hospital
- 6. \*\*\*Jacksonville Medical Center

(Note: We will need a letter requesting a change from Level III to Community Hospital)



August 5, 2009

TO: Dr. John Campbell

FROM: Loring W. Rue, III, MD, FACS – RTAC Chair

SUBJECT: Trauma Hospitals in BREMSS Region 3

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Trinity Medical Center -	ATS Level 3
UAB Medical West -	ATS Level 3
University of Alabama at Birmingham Hospital -	ATS Level 1
Walker Baptist Medical Center -	ATS Level 3

The Region 3 RTAC looks forward to continued operation of the ATS.

#### Gulf Region Trauma Center Recommendations

(See Revision Below) August 5, 2009

The Alabama Trauma System Survey Team would like to submit the hospitals below to the Gulf Region RTAC for approval to participate in the trauma system at the level listed by each hospital's name. Each hospital, per on-site visits conducted during the month of June, has the essential resources required to operate successfully at the level for which it has applied:

1.	Atmore Community Hospital	Level III
2.	D.W. McMillan Memorial Hospital	Level III
3.	Grove Hill Memorial Hospital	Level III
4.	Infirmary West Hospital	Level III
5.	Monroe County Hospital	Level III
6.	North Baldwin Infirmary	Level III
7.	South Baldwin Regional Medical Center	Level III
8.	Springhill Memorial Hospital	Level II
9.	Thomas Hospital	Level II
10.	Jackson Medical Center	Level III
11.	***Mobile Infirmary Medical Center	Level III

#### **Community Hospital**

- 1. Southwest Alabama Medical Center
- 2. Washington County Hospital
- 3. Evergreen Medical Center

Providence is on hold for now. Their General Surgeon is still concerned about the potential increase in the number of trauma cases.

#### REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC) NORTH REGION (1)

DR. WILLIAMSON

#### **AlaHA APPOINTEES**

William Anderson, President/ CEO, Helen Keller Hospital 4 years

Thomas Lackey (Resigned), CEO, Highlands Medical Center 3 years
Replacement Kim Bryant, CEO

Christine Stewart, CEO, Russellville Medical Center 2 years

Pamela Hudson, CEO, Crestwood Medical Center 1 year

#### MASA APPOINTEES

<b>Dr. Rony Najjar-Huntsville Hospital</b> 4 years	Trauma Surgery	Chair
Dr. Ginger Bryant-Huntsville Hospital 3 years	Orthopedic Surgery	
Dr. Larry Sullivan-Decatur General 2 years	Emergency Medicine	
Dr. Bill Vermillion- Eliza Coffee 1 year	Emergency Medicine	

#### DR. WILLIAMSON APPOINTEE

Don Webster EMT-P HEMSI Huntsville 4 years

#### **REGIONAL MEDICAL DIRECTOR**

Sherrie Squyres, M.D. Emergency Medicine 4 years

#### RTAC APPOINTEES BY THE STAC

#### **HOSPITAL REPRESENTATIVES (13)**

Cary Payne, Administrator-Athens Limestone 4 years

James Weidner, CEO-Cullman Regional Medical Center 3 years

Dean Griffin, CEO-Decatur General Hospital 2 years

Carl Bailey, Hospital Director-Eliza Coffee 1 year

Jeff Rains, Administrator-Hartselle Medical Center 4 years
Replacement G.F. Naylor, CEO

David Spillers, Administrator - Huntsville Hospital 3 years

Thomas Dunning, Administrator-Lawrence Baptist 2 years

Cheryl Hayes, Administrator-Marshall North 1 year

John Anderson, Administrator-Marshall South 4 years

Sherry Jones, CEO-Parkway Medical 3 years

Niles Floyd, Administrator-Red Bay Hospital 2 years

Jody Pigg, Administrator-Shoals Hospital 1 year

G.F. Naylor, CEO- Woodland Medical Center 4 year

This hospital was bought by Cullman Regional Medical Center James Weidner, CEO

Peter Selman, CEO-DeKalb Regional Medical Center Replacement Jeff Rains, Administrator

#### PHYSICIANS (13)

Rhett Murray, M.D.

Huntsville 4 years

Joel Pickett, M.D.

Huntsville 3 years

Neurosurgery

Neurosurgery

Randolph Buckner, M.D.

Decatur General

2 years

General/Vascular Surgery

James Thomas, M.D.

Huntsville 1 year **Emergency Medicine** 

Daniel Spangler, M.D.

Florence 4 years

**Emergency Medicine** 

Stephan Moran, M.D.

Huntsville 3 years

Trauma Surgery Vice Chair

Jeff Johnson, M.D.

Huntsville 2 years

**Emergency Medicine** 

David Garvey, M.D.

Huntsville 1 year **Emergency Medicine** 

Deepak Katyl, M.D.

Huntsville 4 years Trauma Surgery

Robert Echols, M.D.

Cullman 3 years

**Emergency Medicine** 

Michael Samotowka

Huntsville 2 years

Trauma Surgery

Scott Warner, M.D.

Cullman 1 year Critical Care/Pulmonary/Emergency

Medicine

John Markushewski, M.D. Emergency Medicine Huntsville

4 years

James Gilbert, M.D. Pediatric Surgery

Huntsville 3 years

#### PREHOSPITAL EMS REPRESENTATIVES (2)

Mike West, EMT-P Athens Limestone EMS 4 years

David Gardner, EMT-P AirEvac LifeTeam 3 years

#### REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC) EAST REGION (2)

DR. WILLIAMSON

#### **Ala HA APPOINTEES**

Peter Selman, Administrator DeKalb Regional Hospital Moved to Region 1
Fort Payne
4 years

Judy Gould, Interim Administrator-Northeast Alabama Regional Anniston 3 years Replacement David McCormack, CEO

Timothy Harlin, CEO- Randolph Medical Center Roanoke

2 years

Steven Gautney, President- Citizens Baptist Talladega 1 year

#### **MASA APPOINTEES**

Orthopedic Surgery

Gordon T. Hardy, M.D. Anniston Orthopedic Associates PC 731 Leighton Avenue Ste 300 Anniston, AL 36207-5762 4 years

Charles L. Newman, M.D. Chair General Surgery

217 Lakewood Drive Gadsden, AL 35901-5341 3 years

Lucian Newman, III, M.D. General Surgery
The Surgery Clinic LLC

The Surgery Clinic LLC

419 S 5th St

Gadsden, AL 35901-5101

2 years

Steven A. Isbell, M.D. General Surgery

Walker & Isbell PA PO Box 680706

Fort Payne, AL 35968-1608

1 year

#### DR. WILLIAMSON APPOINTEE

Johnny Warren EMT-P Anniston EMS 4 years

#### REGIONAL MEDICAL DIRECTOR

Neil L. Christen, M.D. vice chair P O Box 2208 Anniston, AL 36202-2208 4 years **Emergency Medicine** 

#### RTAC APPOINTEES BY THE STAC

#### **HOSPITAL REPRESENTATIVES (11)**

Jeff Noblin, CEO Cherokee Medical Center 4 years

Linda Jordan, Administrator Clay County Hospital 3 years

Glenn Sisk, CEO Coosa Valley Medical Center 2 years

Douglas DeGraaf, CEO Gadsden Regional Medical Center 1 year Replacement Stephen Pennington, CEO

Roger Collins, CEO Jacksonville Medical Center 4 years

Agnes Wages, Administrator Lake Martin Community Hospital 3 years

Kelli Powers, CEO Lanier Health Services 2 years

Matthew Hayes, Executive Director Riverview Regional Medical Center 1 year Jim Peace, Administrator Russell Medical Center 4 years

Linda Burdette, CEO Stringfellow Memorial Hospital 3 years

Richard Daniel, Administrator Wedowee Hospital 2 years

#### PHYSICIANS (11)

James G. White, III, M.D. Northeast AL Neurological Services 100 Medical Center Dr Ste 401 Gadsden, AL 35903-1142 4 years Neurosurgeon

Ron Shiver, M.D. ED Medical Director Lanier Health Services 3 years **Emergency Medicine** 

John Valente, M.D. Regional Medical Center Anniston 2 years General Surgery

Tony White, M.D. ED Medical Director Dekalb Regional Medical Center 1 year **Emergency Medicine** 

Michelle Goldhagen, M.D. Russell Medical Center 4 years **Emergency Medicine** 

Rodney Snead, M.D.

**Emergency Medicine** 

Anniston 3 years

General Surgery

David Roberts, M.D. Citizens Hosp Talladega 2 Years Lewis Sellers, M.D. Regional Medical Center Anniston 1 year General Surgery

Henry Ruiz, M.D. Ruiz Neurosurgery Clinic 300 Medical Center Dr Ste 303 Gadsden, AL 35903-1136 4 years Neurosurgeon

Howard McVeigh M.D. Chair, BOD East Alabama EMS Anniston 3 years **Emergency Medicine** 

Buddy Smith, M.D. Clay County Hosp Regional Medical Center 2 years Family Practice/Emergency Medicine

#### PREHOSPITAL EMS REPRESENTATIVES

Shane Parker, EMT-P LifeSaver/Omniflight Gadsden Base 256-996-7631 Sparker@omniflight.com 4 years

Matt Knight, EMT-P Emergency Medical Transport Roanoke, AL Office (334) 745-6437 Ext 5518 Cell: 256-610-1357 mknight@suscc.edu 3 years

### REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC) BREMSS REGION (3)

DR. WILLIAMSON

#### **AlaHA APPOINTEES**

Michael Waldrum, COO-University of Alabama Birmingham 4 years

William Warren, CEO-Children's Hospital 3 years

Christine Stewart, Administrator -Lakeland Community Hospital 2 years

Terrell Vick-St. Vincent's St. Clair Hospital 1 year

#### MASA APPOINTEES

Sherry M. Melton, M.D. vice chair Trauma Surgery UAB Dept Surgery 701 South 19th Street LHRB 112 Birmingham, AL 35294-0001 4 years

Patrick R. Pritchard, M.D.

UAB Dept Surgery
Div Neurosurgery
510 20th St S FOT 1008
Birmingham, AL 35294-0001
3 years

Steven T. Baldwin, M.D. Pediatric Emergency Medicine UAB Dept Pediatrics

1600 7th Ave South Birmingham, AL 35233-1711 2 years

Christopher J. Rosko, M.D. Emergency Medicine 2252 Old Tyler Rd

Birmingham, AL 35226-1700

1 year

#### DR. WILLIAMSON APPOINTEE

David Waid, EMT-P Regional Paramedical Services 4 years

#### REGIONAL MEDICAL DIRECTOR

Adam Robertson M.D. 2826 Surry Road Birmingham, AL 35223 (205) 871-5912 robad@earthlink.net 4 years **Emergency Medicine** 

#### RTAC APPOINTEES BY STAC

#### **HOSPITAL REPRESENTATIVES (13)**

Keith Parratt, President-Princeton Baptist 4 years

Timothy Thornton, CEO-UAB Medical West 3 years
Replacement Don Lilly, CEO

William Heburn, CEO-Trinity Medical Center 2 years

Garry Gause, CEO-Brookwood Medical Center 1 year

Robert Bernstein, CEO-Carraway Methodist 4 years

Debra Richardson, Interim Administrator-Chilton Medical Center 3 years

Dr. Sandal Hullett, Interim Administrator-Cooper Green 2 years

Dr. Robert Cofield, COO-UAB Highlands 1 year

Sean Tinney, President-St. Vincent's Blount 4 years

Todd Kennedy, President-St. Vincent's East 3 years

David Wilson, President-Shelby Baptist Medical Center 2 years

Curtis James, President-St. Vincent's Hospital 1 year

Joel Tate, President, Walker Baptist 4 years Replacement Bob Phillips, President

#### PHYSICIANS (13)

Loring Rue, M.D. chair

UAB Dept Surgery Birmingham, AL

4 years

Trauma Surgery

**Emergency Medicine** 

Thomas L. Arnold, Jr., M.D.

7061 N Highfield Dr

Birmingham, AL 35242-7241

(205) 969-5598 Work Cell (205) 249-6582

Email taspok@mindspring.com

3 years

Bryan L. Balentine, M.D.

808 Castlemaine Ct

Birmingham, AL 35226-5914

2 years

**Emergency Medicine** 

David C. Elliott, M.D. Lakeland Hospital 42030 Highway 195 Haleyville, AL 35565-7054

1 year

Family Practice

Thomas L. Francavilla, M.D. The Brain and Spine Center PC

224 1st St N Ste 200

Alabaster, AL 35007-8762

4 years

Neurosurgery

Oliver Muensterer M.D. Children's Hospital Birmingham, AL 3 years Pediatric Trauma Surgery

Keith Funderburk Clanton, AL 2 years Family Practice/Emergency Medicine

Rena L. Stewart, M.D. UAB Dept Surgery 1530 3rd Ave S FOT 950 Birmingham, AL 35294-0001 1 year Orthopedics

Jeremy S. Rogers, M.D. 106 Pine Street Trussville, AL 35173-1023 4 years **Emergency Medicine** 

Peter Ray, M.D.
Pediatric Plastic Surgery
Children's Hospital
1600 7th Avenue South, ACC322
3 years

Plastic Surgery

Annalissa Sorrentino, M.D. UAB Dept Pediatrics Ambulatory Care Center 1600 7th Ave. South Birmingham, AL 35233-1711 2 years **Emergency Medicine/Pediatrics** 

Bart Guthrie, M.D. UAB Dept Surgery Birmingham, AL 35233 205-934-8136 bguthrie@uabmc.edu 1 year Neurosurgery

Wm. Kirkland Hawley, M.D. 368 N Lake Rd Birmingham, AL 35242-7014 4 years Emergency Medicine/Internal Medicine

#### PREHOSPITAL EMS REPRESENTATIVES

James Robinson, EMT-P Moody Fire Dept 4 years

Ricky Vest EMT-P LifeSaver/Omniflight Birmingham 3 years

#### REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC) SOUTHEAST REGION (5)

#### DR. WILLIAMSON

#### **AlaHA APPOINTEES**

Russ Tyner, CEO Baptist Health - Montgomery

4 years

Jennie Rhinehart, Administrator Community Hospital

3 years Tallassee

Ron Owen, CEO Southeast Alabama Regional Medical Center

2 years Dothan

Bobby Ginn, Administrator LV Stabler Memorial Hospital

1 year Greenville

#### **MASA APPOINTEES**

**Emergency Medicine** 

**John M. Vermillion, M.D.** chair Gen. Surgery/Trauma Surgery

Montgomery Surgical Associates 2055 E South Blvd Ste 603 Montgomery, AL 36116-2014 4 years

John D. Moorehouse, M.D.

**AERAS** 

4770 Woodmere Blvd Ste B Montgomery, AL 36106-3084

3 years

F. Donovan Kendrick, M.D. Neurosurgery

Neurosurgery Associates of Central Alabama

2065 E South Blvd Ste 204 Montgomery, AL 36116-2460

2 years

Todd Michael Sheils, M.D. Orthopedic Surgery

PO Box 2125

Opelika, AL 36803-2125

1 year

#### DR. WILLIAMSON APPOINTEE

Larry Williams EMT-P

Dothan

4 years

#### REGIONAL MEDICAL DIRECTOR

Rick M. Weber, M.D. vice chair PO Box 6907 Dothan, AL 36302-6907 4 years **Emergency Medicine** 

### RTAC APPOINTEES BY STAC HOSPITAL REPRESENTATIVES (22)

Libby Kennedy, Administrator-John Paul Jones 4 years

Barry Keel, CEO-Vaughn Regional 3 years

Mark Dooley, Administrator-Andalusia Regional 2 years

Lynne Parker, Administrator-Baptist Medical Center South 1 year

Mindy Burdick, Administrator-Baptist Medical Center East 4 years

Replacement Peter Selman, Administrator

Ben Busbee, Administrator-Bullock County Hospital 3 years
Replacement Jacques Jarry, Administrator

Jim McKnight, Administrator-Crenshaw Baptist 2 years

Replacement Brad Eisemann, Administrator

Vernon Johnson, CEO-Dale Medical Center 1 year

Terry Andrus, CEO-East Alabama Medical Center 4 years

Rusty Eldridge, CEO-Troy Regional 3 years Replacement Gil McKenzie, CEO

Ellen Briley, CEO-Elba General 2 years

Gordon Faulk, Administrator-Elmore Community Hosp 1 year

Blair Henson, Administrator-Florala Memorial 4 years

L. Keith Granger, President/CEO-Flowers Hospital 3 years Harry Cole, Jr., Administrator-Georgiana Hospital 2 years

Donald Henderson, CEO-Jackson Hospital 1 year

Allen Foster, Administrator-Mizell Memorial 4 years

Ralph Clark, CEO-Medical Center Barbour 3 years

Jeff Brannon, CEO-Medical Center Enterprise 2 years

James Matney, CEO, Jack Hughston Memorial Hospital Phenix City 1 year Replacement Mark Baker, Interim CEO

Ginger Henry, Administrator-Prattville Baptist 4 years

John Rainey, CEO-Wiregrass Medical Center 3 years

#### PHYSICIANS (22)

Carl W. Barlow, M.D. Emergency Medicine 305 Dunleith Blvd Dothan, AL 36303-2981 4 years

Allen W. Lazenby, M.D. Surgical Clinic PC 121 N 20th St Ste 3 Opelika, AL 36801-5454 3 years General Surgery

Alan L. Moore, M.D. 1866 Hilton Ct Auburn, AL 36830-2692 2 years **Emergency Medicine** 

James K. York, M.D. 126 Wentworth Drive Dothan, AL 36305-6906 1 year Anesthesiology

Wallace Falero, M.D. Baptist Medical Center East Montgomery 4 years

Sam Sawyer, M.D. Medical Center Enterprise

Enterprise 3 years

John Drew, D.O.

Medical Center Enterprise

Enterprise 2 years

Andy Gammill, M.D. Medical Center Enterprise

Enterprise 1 year

Roland Hester, M.D.

**Baptist Medical Center South** 

Montgomery 4 years

Adolfo Robledo

Troy Regional Hospital

Troy
3 years

Jonathan Vukovich, M.D.

Southeast Alabama Medical Center

Dothan 2 years

Alzo Preyear, D.O.

Andalusia Regional Hospital

Andalusia 1 year

Clay Harper, M.D.

East Alabama Medical Center

Opelika 4 years

James Jones, D.O.

Southeast Alabama Medical Center

Dothan 3 years

**Emergency Medicine** 

General Surgery

**Emergency Medicine** 

**Emergency Medicine** 

Orthopedic Surgery

**Emergency Medicine** 

**Urological Surgery** 

**Emergency Medicine** 

General Surgery

**Emergency Medicine** 

Jonathan Skinner, M.D.

Southeast Alabama Medical Center

Dothan

2 years

Mark McDonald, M.D.

Dale Medical Center

Ozark

1 year

Jeffrey Whitehurst, M.D.

Flowers Hospital

Dothan

4 years

Ronald Shaw, M.D.

**Baptist Medical Center South** 

Montgomery

3 years

Fleming Brooks, M.D.

Medical Center Enterprise

2 years

Steven O'Mara, M.D.

Jackson Hospital Montgomery

1 year

Danny Hood, M.D.

L.V. Stabler Memorial Hospital

Greenville

4 years

Allen Hicks, M.D.

Vaughan Regional Medical Center

Selma

3 years

General Surgery

**Emergency Medicine** 

General Surgery

**Emergency Medicine** 

Orthopedic Surgery

**Emergency Medicine** 

**Emergency Medicine** 

**Emergency Medicine** 

#### PREHOSPITAL EMS REPRESENTATIVES

Michael Whaley EMT-P Prattville Fire 4 years

Steve Kennedy, EMT-P AirEvac Lifeteam Wetumpka 3 years

### REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC) GULF REGION (6)

DR. WILLIAMSON

#### **AlaHA APPOINTEES**

Chris Griffin, Administrator - DW McMillan 4 years

Philip Cusa, Administrator - Thomas Hospital 3 years

Becky DeVillier, Administrator - USA Children's & Women's 2 years

Alan Whaley, Executive VP/CEO-Mobile Infirmary

1 year

Replaced by Dr. Kenneth Brewington, who currently is in a physician position on the committee

#### **MASA APPOINTEES**

Trauma Surgeon

Orthopedics/Trauma Surgeon

Richard P. Gonzalez, M.D. Chair

USA Dept Surgery

2451 Fillingim Street Mastin 705 Mobile, AL 36617

4 years

Jorge E. Alonso, M.D.

USA Dept Emergency Medicine

3421 Medical Park Drive Bldg 2 Mobile, AL 36693-3330

3 Years

John M. McMahon, Jr., M.D. vice chair

**Emergency Medicine** 

1419 Sixth Street

Daphne, AL 36526-4465

2 years

Jimmie George Gavras, M.D.

**Surgical Associates** 

767 Middle Avenue

Fairhope, AL 36532-1715

1 year

**General Surgery** 

#### DR. WILLIAMSON APPOINTEE

Chief Billy Pappas, EMT-P 4 years

#### REGIONAL MEDICAL DIRECTOR

Dr. Frank Pettyjohn, Regional Medical Director-USA 4 years

#### RTAC APPOINTEES BY STAC

#### **HOSPITAL REPRESENTATIVES (12)**

In order to balance the hospital representatives with the physicians with 13 each and also because this hospital was left off the list, we should add:

Mr. Ormand Thompson Infirmary West 5600 Girby Road Mobile, AL 36693

Beth Anderson, Administrator-USA Medical Center 4 years

Douglas Tanner, Administrator-Washington County 3 years

Robert Gowing, Administrator-Atmore Community Hospital 2 years
Replacement by Mr. Bill Perkins, Administrator

Robert Humphrey, Administrator-Evergreen Medical 1 year

Hybart Sewell, CEO-Grove Hill Memorial Hospital 4 years

Terese Grimes, CEO-Jackson Medical Center 3 years

Vince DeFranco, CEO-Monroe County 2 years

William McLaughlin, Administrator-North Baldwin 1 year

Clarke Christianson, President-Providence Hospital 4 years

Michael Neunendorf, Interim CEO-South Baldwin Regional Medical Center 3 years

Kevin Bierschenk, Administrator - Southwest Alabama Medical Center 2 years

Replacement by Lisa Sims, Administrator

Bill Mason, President/CEO-Springhill Memorial Hospital

1 year

Replacement by Paul Reed, Vice President

#### PHYSICIANS (12)

Melissa W. Costello, M.D. 2451 Fillingim Street 10<sup>th</sup> Floor, Ste L Mobile, AL 36617-2238 4 years **Emergency Medicine** 

Dr Arnold Luterman, M.D.

Director of Burns USA Medical Center

3 years

Trauma Surgery/Burns

Keith A. Scott, M.D.

IMC - Family Medical of Jackson PC

PO Box 639

Jackson, AL 36545-0639

2 years

Family Practice

Dr. John Meade, M.D.

**Medical Director** 

Multiple Fire & EMS Services

**Baldwin County** 

1 year

**Emergency Medicine** 

Dr. Kenneth Brewington

Mobile Infirmary

4 years

Replacement Dr. William Admire

Gynecological Surgery/Oncology

Dr. Albert G. Simmons

Monroe County

3 years

General Surgery

Dr. Steve Bowden Providence Hospital 2 years **Emergency Medicine** 

Anthony M. Martino, M.D. USA Dept Neurosurgery 3421 Medical Park Dr Two Medical Park Mobile, AL 36693-3330 1 year Neurosurgery

William Farmer, M.D.

Evergreen 4 years

**Emergency Medicine** 

Michael L. Sternberg, M.D. USA Dept Emergency Medicine 2451 Fillingim Street UMC 10K Mobile, AL 36617-2238 3 years **Emergency Medicine** 

Eugene A. Quindlen, M.D. USA Dept Neurosurgery 3421 Medical Park Dr Med 2 Rm 20 Mobile, AL 36693-3330 2 years Neurosurgery

Mark Mitchell M.D.

Daphne 1 year

**Emergency Medicine** 

Celeste Holland, M.D.

#### PREHOSPITAL EMS REPRESENTATIVES

Michael Lambert EMT-P Conecuh County EMS

Lee Rumbley, EMT-P Baptist LifeFlight Mobile

# Statewide Trauma Advisory Council Meeting May 29, 2009, 10 a.m.-12 p.m.

### Alabama Department of Public Health The RSA Tower, Suite 1586 Montgomery, Alabama

Members Present	Ms. Beth Anderson, Mr. John Rainey, Dr. John Campbell, Dr. Donald Williamson
Members By Phone	Dr. Loring Rue, Mr. Gary Gore, Dr. Alzo Preyear
Members Absent	Chief Billy Pappas, Dr. Rony Najjar, Dr. John Mark Vermillion, Mr. Bryan Kindred
Staff Present	Choona Lang, Verla Thomas, Dennis Blair, Tammie Yeldell, Brian Hale
Guest	Joe Acker, E. Allan Pace, Denise Louthain David Garmon (by Phone)

#### Welcome

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

#### Consideration of Minutes of April 24, 2009

The Council recommended approval of the Minutes of April 24, 2009, as distributed; the motion carried unanimously.

#### Trauma System Update

Dr. Campbell gave a brief overview of the Trauma System thus far. The survey team conducted one survey in Region 1 (DeKalb County) and two surveys in Region 2 (Jacksonville and Riverview). We are planning to complete all the hospital surveys for Gulf Region in June and East Region in July. After completing the surveys, all recommendations for each region will be submitted to the RTAC then to the STAC for review. The goal is to have the Gulf Region activated by the end of August and East Region by the end of September. Dr. Campbell also addressed the trouble of getting a surgeon to participate on the site surveys. He suggested having a surgeon available to survey Level I and II hospitals and if no surgeon is available to survey Level III hospitals, then the Medical Director or Assistant Medical Director needs to be present. Dr. Rue recommended including a second ER doctor on site for all Level III Trauma Centers.

#### **Unfinished Business**

#### Trauma Imaging Transmission and Receive

Five hospitals in the Birmingham area have applied for a grant to use the Trauma Imaging Transmission and Receive.

#### Trauma System Designation Criteria Revisions

Dr. Campbell gave a brief overview of changes to the Trauma System Designation criteria. The revised Trauma System Designation criteria will be reviewed by the SCPH in June.

#### **Alabama Trauma System Operations Report**

Joe Acker gave a brief Trauma System Operation Report from March 19, 2009, through May 26, 2009 (see attached).

The next STAC meeting is scheduled at 10 a.m. on August 10, 2009, The RSA Tower, Suite 1586; 201 Monroe Street; Montgomery, Alabama

The meeting was adjourned at 11 a.m.

Donald E. Williamson, M.D., Chairman

Statewide Trauma Advisory Council

Crystal L. Fountain, Administrative Support Assistant II

Statewide Trauma Advisory Council

Approved August 10, 2009

# STAC ATCC OPERATIONS REPORT

MAY,29 2009

# Trauma System --- Volume --- 03/19/2009 ---- 05/26/2009

- Total System Volume 1130
- NATS 353 --HH 221 ,DGH 19,
   Three's 99 , Erlanger 4 , NMMC 1
- \*BREMSS 777 UAB 562, TCH 56, Three's 133

## TRAUMA SYSTEM VOLUME

- 5/26/2008 to date 05/26/2009
- NATS 1722
- BREMSS 3609
- 07/08- patients 3518
- 06/07 patients 3626

# TRAUMA SYSTEM OVERLOAD 03/19/2009 --- 05/26/2009

- \*HH 0 Hours
- DGH 0 Hours
- \*TCH -- 0
- UAB -- 19 HRS. 4 min.
- Patients Rerouted -- 9 –Trinity 6,SBMC 1
- Pts. to Level 1(UAB) 2

# Trauma System --- Overload TBO 03/19/2009 - 05/26/2009

- \*HH --- 0 Hours
- DGH --- 0 Hours
- \*TCH--- 0 Hours
- UAB --- 22 Hours 13 Min.
- Patients rerouted 0, UAB 2

## TRAUMA SYSTEM ---- RED

- **\*** HH 0
- DGH 0
- **★ TCH 0**
- **UAB** -- 0
- Patients Rerouted 0

## ANY OTHER REPORTS ?



#### Statewide Trauma Advisory Council Teleconference March 23, 2009

10:00 a.m. - 12:00 p.m.

#### Alabama Department of Public Health The RSA Tower, Suite 1554 Montgomery, Alabama

Members Present	Dr. Loring Rue, Dr. John Mark Vermillion, Dr. Rony Najjar, Dr. Alzo
	Preyear, Ms. Beth Anderson, Mr. Bryan Kindred, Dr. John Campbell, Dr.
	Donald Williamson
Member Absent	Mr. Gary Gore
Staff Present	Choona Lang, Verla Thomas, Tammie Yeldell, Robin Moore, Brian Hale,
	Dr. William Crawford
Guest	Joe Acker, David Garmon, Danne Howard, Denise Louthain, John Blue, Dr.
	Sherry Melton

#### Welcome

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

#### **Consideration of Minutes of December 3, 2008**

The Council recommended approval of the minutes of December 3, 2008, as distributed; the motion carried unanimously.

#### **New Member**

John Rainey, CEO of Wiregrass Medical Center, will replace Allen Foster CEO of Mizell Memorial Hospital, on the Statewide Trauma Advisory Council (STAC).

#### **Rehab Transfer Procedure**

Hospitals cannot get patients transferred on the weekend to rehab hospitals. The self-pay patients are more difficult to transfer than patients who have insurance coverage. Dr. Campbell and Danne Howard will coordinate an informal workgroup of STAC members and rehab facility personnel to discuss the rehab transfer issues.

#### DeKalb County/Regional Trauma Advisory Council (RTAC) Membership Adjustment

DeKalb County moved from Region 2 to Region 1. Dr. Steve Isbell and Peter Selman, CEO, were changed from Region 2 to Region 1.

#### X-ray Pack Update

Joe Acker reviewed the problems related to hospital transfers of trauma patients (and other patients) and how frequently the CDs containing the imaging studies of the transferred patients cannot be opened by the receiving hospital. This requires the receiving hospital to repeat the procedures which results in delays, increased costs, and more x-ray exposure for the patients. The X-ray Pack is an internet based software solution that translates any form of digitalized image into a form that can be opened by any hospital. The MASA-appointed physicians on the STAC strongly supported the X-ray Pack which they felt would provide an important contribution to improved patient care as well as to enhanced capabilities of a statewide trauma system. The cost of the system would be about \$140,000 initially with any ongoing yearly cost of about \$20,000. Currently, there are no funds to purchase such a system, but Dr. Williamson will look into the possibility of Stimulus Funds for such a project. Joe will request input for several radiologists and will generate a report to share with the STAC before the next meeting.

#### **Trauma System Update**

Dr. Campbell gave a brief update on the Trauma System planning and implementation activities.

#### **New Business**

#### **Gulf Region RTAC Revision**

The Council recommended approval of changes made to the Gulf Region RTAC, as distributed; the motion carried unanimously.

#### **Trauma Center Designation Revision Recommendation**

Dr. Campbell is working on a recommended revision to the hospital criteria for the Trauma System. Currently the criteria does not state that a surgeon is required for the facility to be a Level III in the Trauma System. This issue must be corrected. During Dr. Campbell's review of the hospital criteria, he found several other things that could also be stated more clearly. Dr. Campbell has sent the draft document to the physicians on the STAC for their review and will then send it to the entire advisory council before the next STAC meeting.

#### **University of South Alabama (USA) Evaluation Report**

Dr. Najjar and Dr. Crawford gave a brief summary of the on-site survey visit to USA in Mobile, Alabama. The Gulf RTAC recommended that USA be approved as a Level I Trauma Center, by STAC.

The Council recommended approval of USA as a Level I Trauma Center for the Gulf Region as distributed; the motion carried unanimously.

Office EMS & Trauma and Mrs. Beth Anderson will coordinate a press release pertaining to the designation of USA as a Level I Trauma Center.

#### Alabama Trauma System QI/Status Report

Joe Acker gave a brief update of the Trauma System from December 2, 2008, through March 19, 2009.

#### **Update on Trauma Funding**

The date of the Physician Trauma Funding Workgroup is to be announced.

The next STAC Meeting is scheduled at 10 a.m. on April 24, The RSA Tower, Suite 1586; 201 Monroe Street; Montgomery, Alabama.

The meeting was adjourned at 11:00 a.m.

Donald E. Williamson, M.D. Chairman

Statewide Trauma Advisory Council

Crystal L. Fountain, Administrative Assistant II

Statewide Trauma Advisory Council

Approved April 24, 2009

### REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC) GULF REGION (6)

Dr. Donald Williamson State Health Officer

**AlaHA APPOINTEES** 

Mr. Chris Griffin D.W. McMillan Memorial Hospital

Mr. Phil Cusa Thomas Hospital

Ms. Becky DeVillier USA Children's & Women's Hospital

Mr. Alan Whaley Mobile Infirmary Medical Center

Replaced by Dr. Kenneth Brewington, who currently is in a physician position on the committee.

MASA APPOINTEES

Dr. Richard P. Gonzalez Trauma Surgeon

Dr. Jorge E. Alonso Orthopedics/Trauma Surgeon

Dr. John M. McMahon, Jr. Emergency Medicine

Dr. Jimmie George Gavras General Surgery

DR. WILLIAMSON APPOINTEE

Mr. Billy Pappas, EMT-P Mobile Fire Rescue Department

REGIONAL MEDICAL DIRECTOR

Dr. Frank Pettyjohn USA Medical Center

RTAC APPOINTEES BY STAC

**HOSPITAL REPRESENTATIVES (13)** 

In order to balance the hospital representatives with the physicians with 13 each and also because this hospital was left off the list, we should add:

Mr. Ormand Thompson Infirmary West

5600 Girby Road Mobile, AL 36693

Mrs. Beth Anderson USA Medical Center

Mr. Doug Sewell Grove Hill Memorial Hospital

Mr. Clarke Christianson **Providence Hospital** 

Mr. Douglas Tanner Washington County Hospital

Ms. Terese Grimes Jackson Medical Center

Mr. Michael Neuendorf South Baldwin Regional Medical Center

Mr. Bob Gowing

Replaced by Mr. Bill Perkins

Atmore Community Hospital

Mr. Vince DeFranco Monroe County Hospital

Mr. Kevin Bierschenk
Replaced by Ms. Lisa Sims

Southwest Alabama Medical Center

Mr. Bob Humphrey Evergreen Medical

Mr. William McLaughlin North Baldwin Infirmary Hospital

Mr. Bill Mason Springhill Memorial Hospital

Replaced by Mr. Jeff St. Clair.

Jeff St. Clair wishes for Mr. Paul Read to serve as the RTAC representative (permanent proxy)

for Springhill. Paul is the "Vice President/Chief Nursing Executive" for Springhill.

#### PHYSICIANS (13)

Dr. Melissa W. Costello Emergency Medicine

Dr. William Admire Emergency Medicine

Replaces Dr. Kenneth Brewington who now serves as the administrator of Mobile Infirmary

Dr. William Farmer Emergency Medicine

Dr. Arnold Luterman Trauma Surgery/Burns

Dr. Albert G. Simmons General Surgery

Dr. Michael L. Sternberg Emergency Medicine

Dr. Keith A. Scott Family Practice

Dr. Steve Bowden Emergency Medicine

Dr. Eugene A. Quindlen Neurosurgery

Dr. John Meade Emergency Medicine

Dr. Anthony M. Martino Neurosurgery

Dr. Mark Mitchell Emergency Medicine

Dr. Celeste M. Hollands Pediatric Surgery

#### PREHOSPITAL EMS REPRESENTATIVES

Mr. Michael Lambert EMT-P Conecuh County EMS

Mr. Lee Rumbley, EMT-P Baptist LifeFlight

#### 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:

- 1. A systolic BP < 90 mm/Hg in an adult or child 6 years or older < 80 mm/Hg in a child five or younger.
- 2. Respiratory distress rate < 10 or >29 in adults, or
  - < 20 or >60 in a newborn
  - <20 or >40 in a child three years or younger
  - <12 or >29 in a child four years or older.
- 3. Head trauma with Glasgow Coma Scale score of 13 or less <u>or head trauma with any</u> <u>neurologic changes in a child five or younger.</u>

#### **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. See Burn Protocol 4.7 for criteria to enter burned patient into trauma system
- 6. The patient has an amputation proximal to the wrist or ankle.
- 7. The patient has one or more limbs which are paralyzed.
- 8. The patient has a pelvic fracture, as evidenced by a positive "pelvic movement" exam.

#### Mechanism of the patient injury:

- 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. <u>Unbroken fall or 10 feet or 3</u> <u>times the height of the child onto a hard surface.</u>

#### **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)

#### TRAUMA SYSTEM PROTOCOL (continued)

8.5

- d. Patient's previous medical history
  - i. Insulin dependent diabetes or other metabolic disorder
  - ii. Cardiac condition
  - iii. Immunodeficiency disorder
  - iv. Bleeding disorder
  - v. COPD/Emphysema
  - vi. Renal failure on dialysis
- e. Pregnancy
- f. Child with congenital disorder
- g. Extrication time > 20 minutes with heavy tools utilized
- h. Motorcycle crash
- i. 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.

#### TRAUMA SYSTEM PROTOCOL (continued)

- 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

### **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	Е	Е	Е
Trauma Service	Е	Е	-
Trauma Team	Е	Е	Е
Trauma Program Medical Director	Е	Е	D
Trauma Multidisciplinary Committee	Е	Е	D
Trauma Coordinator/ TPM	Е	Е	Е
HOSPITAL DEPARTMENTS/ DIVISIONS/ SECTIONS			
1 Surgery	Е	Е	-
Neurological Surgery	Е	-	-
Neurological trauma liaison	E	-	-
Orthopedic Surgery	E	Е	-
Orthopedic trauma liaison	E	Е	-
Emergency medicine	E	Е	-
Anesthesia	Е	Е	-
CLINICAL CAPABILITIES			
Published on-call schedule	E	Е	E
2 General Surgery (attending surgeon promptly available <sup>1</sup> 24 hours/day to maintain green status)	Е	Е	E Đ
3 Published back-up schedule or written back-up method <sup>2</sup>	Е	D	D
4 Dedicated to single hospital when on-call	Е	D	D
5 Anesthesia (promptly available <sup>3</sup> 24 hours/day to maintain green status)	Е	Е	E D
Emergency Medicine (Immediately available in-house 24 hours/day)	Е	Е	Е
6 On-call and promptly available 24 hours/ day to maintain green status			
Cardiac surgery	Е	-	-
Hand surgery (does not include micro vascular/re implantation)	Е	D	-
Micro vascular/replant surgery	D	-	-
Neurologic Surgery	Е	D	-
Dedicated to one hospital or back-up call	Е	D	_

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

	Level I	Level II	Level III
FACILITIES/ RESOURCES/ CAPABILITIES			
Volume Performance			
Trauma admissions 750/ year	Е	-	-
Presence of surgeon at resuscitation	Е	Е	D
Presence of surgeon at operative procedures	Е	Е	Е
Emergency Department (ED)			
13 Personnel - designated physician director	Е	Е	ΕĐ
Equipment for resuscitation for patients of all ages			
Airway control and ventilation equipment	Е	Е	Е
Pulse oximetry	Е	Е	Е
Suction devices	Е	Е	Е
Electrocardiograph-oscilloscope-defibrillator	Е	Е	Е
14 Internal paddles	Е	Е	Е
15 CVP monitoring equipment	Е	Е	ЕÐ
Standard IV fluids and administration sets	Е	Е	Е
Large-bore intravenous catheters	Е	Е	Е
Sterile surgical sets for:			
Airway control/ cricothyrotomy	Е	Е	Е
Thoracostomy	Е	Е	Е
Venous cutdown	Е	Е	Е
Central line insertion	Е	Е	-
16 Thoracotomy	Е	Е	Е
17 Peritoneal lavage	Е	Е	ЕÐ
Arterial catheters (should we be more specific?)	Е	D	D
18 Ultrasound	E Đ	E Đ	D
Drugs necessary for emergency care	Е	Е	Е
19 X-ray available 24 hours/ day-to maintain green status	Е	Е	D
Cervical traction devices	Е	Е	D
Broselow tape	Е	Е	Е
20 Thermal control equipment:			
For patient	E	E	E
For fluids and blood	E	E	Đ
Rapid infuser system	Е	Е	D
Qualitative end-tidal CO <sub>2</sub> determination	Е	Е	Е
Communications with EMS vehicles	Е	Е	Е

	Level I	Level II	Level III
OPERATING ROOM			
21 Immediately available 24 hrs/day <sup>7</sup> to maintain green status	Е	D	D
Operating Room Personnel			
22 In house 24 hrs/ day <sup>8</sup> to maintain green status	Е	-	-
23 Available 24 hrs/ day to maintain green status		Е	Е
Age Specific Equipment			
Cardiopulmonary bypass	Е	-	-
Operating microscope	D	D	-
Thermal Control Equipment			
For patient	Е	Е	Е
For fluids and blood	Е	Е	Е
X-ray capability, including c-arm image intensifier	Е	Е	Е
Endoscopes, bronchoscopes	Е	Е	D
Craniotomy instruments	Е	D	-
Equipment for long bone and pelvic fixation	Е	Е	D
Rapid infuser system	Е	Е	D
Post Anesthetic Recovery Room (SICU is acceptable)			
24 Registered nurses available 24 hours/day to maintain green status	Е	Е	-
Equipment for monitoring and resuscitation	Е	Е	Е
Intracranial pressure monitoring equipment	Е	D	-
Pulse oximetry	Е	Е	Е
Thermal control	Е	Е	Е
Intensive or Critical Care Unit for Injured Patients			
Registered nurses with trauma education	Е	Е	-
25 Designated surgical director or surgical co-director	Е	DE	D
Surgical ICU service physician in-house 24 hours/day Emergency physician will satisfy this requirement	Е	D	-
26 Surgically directed and staffed ICU service	E	Đ	-
Equipment for monitoring and resuscitation	Е	Е	-
Intracranial monitoring equipment	Е	-	-
Pulmonary artery monitoring equipment	Е	Е	-
Respiratory Therapy Services			
27 Available in-house 24 hours/day-to maintain green status	Е	Е	D
28 On-call 24hrs/day to maintain green status	-	-	D
29 Radiological services (available 24 hours/day)			

	Level I	Level II	Level III
30 In house radiology technologist to maintain green status	Е	Е	D
Angiography	Е	D	-
Sonography	Е	Е	D
Computer Tomography (CT)	Е	Е	D
In house CT technician	Е	-	-
Magnetic Resonance Imaging (Technician not required in house)	Е	D	-
<b>31Clinical laboratory services</b> (Available <del>24hours/day to maintain green status)</del>	Е	Е	Е
32 Standard analyses of blood, urine, and other body fluids, including micro sampling when appropriate	Е	Е	Е
Blood typing and cross-matching	Е	Е	Е
Coagulation studies (should we be more specific?)	Е	Е	Е
Comprehensive blood bank or access to a community central blood bank and adequate storage facilities	Е	Е	Е
33 Blood gasses and pH determinations	Е	Е	Е
Microbiology	Е	Е	Е
Acute Hemodialysis	Е	Е	Е
34 In-house (staff not required in-house for green status24 hours)	Е	-	-
35 Transfer agreement (written document not required)		Е	Е
Burn Care - Organized			
36 In house or transfer agreement with Burn Center (written document not required) (See above)	Е	Е	Е
Acute Spinal Cord Management			
37 In-house or transfer agreement with Regional Acute Spinal Cord Injury Rehabilitation Center (See above written document not required)  REHABILITATION SERVICES	Е	Е	Е
38 Transfer agreement to an approved rehabilitation facility (See above	Е	Е	E
written document not required)  Physical therapy	E	E	D
Physical therapy Occupational therapy	E	D	D
Speech therapy	E	D	ע
Social Service	E	E	D
PERFORMANCE IMPROVEMENT		E	ט
Performance improvement programs	E	E	E
Trauma registry	L	L	E
Trauma registry			

	Level I	Level II	Level III
39 In house	E	E	D
40 Participate in state, local or regional registry	Е	Е	Е
41 Orthopedic database	D	-	-
42 Audit of all trauma deaths	E	E	E
Morbidity and mortality review	Е	Е	Е
Trauma conference-multidisciplinary	Е	Е	D
Medical nursing audit	Е	Е	Е
43 Review of pre-hospital trauma care <sup>9</sup>	Е	Е	E <del>D</del>
44 Review of times and reasons of trauma-related bypass-for trauma status being red	Е	Е	Е
Review of times and reasons for transfer of injured patients	Е	Е	Е
Performance improvement personnel dedicated to care of injured patients	Е	D	D
CONTINUING EDUCATION/OUTREACH			
General Surgery residency program	D	-	-
ATLS provide/ participate	Е	D	D
Programs provided by hospital for:			
Staff/community physicians (CME)	Е	Е	D
Nurses	Е	Е	D
Allied health personnel	Е	Е	-
45 Pre-hospital personnel provision/ participation 10	Е	Е	D
PREVENTION			
Collaboration with other institutions for injury control and prevention	Е	D	D
Designated prevention coordinator-spokesman for injury control	Е	D	-
Outreach activities	Е	D	D
Information resources for public		D	-
46 Collaboration with existing national, regional and state programs		EÐ	Е
47 Coordination and/or participation in community prevention activities		Е	E <del>D</del>
RESEARCH			
Trauma registry performance improvement activities		Е	Е
Research committee		-	-
Identifiable IRB process	D	-	-
Extramural educational presentations	D	D	-
Number of scientific publications	D	-	-

An operating room must be adequately staffed and available when needed in timely fashion in a Level II trauma center to remain available (green) to the trauma system. The need to have an inhouse OR team will depend on a number of things, including patient population served, ability to

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup>Timeliness of anesthesia response should be monitored by the hospital's quality improvement program.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> An average of 18 hours of trauma CME every three years is acceptable.

<sup>&</sup>lt;sup>6</sup> 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.

<sup>&</sup>lt;sup>7</sup> 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

<sup>&</sup>lt;sup>8</sup>An operating room must be adequately staffed and immediately available in a Level I trauma center to remain available (green) to the trauma system. 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.

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.

<sup>&</sup>lt;sup>9</sup>All levels of Trauma Centers should monitor prehospital trauma care. This includes patient care, patients brought by EMS but entered into the trauma system by the hospital (under triage) and patients entered into the trauma system that did not meet criteria (over triage).

<sup>&</sup>lt;sup>10</sup>Hospital must complete and return to the RTAC the initial patient findings, treatment provided and outcome at the end of the first 24 hours. This should be noted on the ATCC patient record.

#### TRAUMA SYSTEM 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 child 6 years or older < 80 mm/Hg in a child Less than 6 years old.
- 2. Respiratory distress rate < 10 or >29 in adults, or
  - < 20 or >60 in a newborn
  - < 20 or >40 in a child three years or younger
  - < 12 or >29 in a child four years or older.
- 3. Head trauma with Glasgow Coma Scale score of 13 or less **or head trauma with any neurologic changes in a child five or younger.** 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 (patient with normal physiologic signs):**

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. Unbroken fall or 10 feet or 3 times the height of the child 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.
- 8. 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.

