

Regional System Plan



East Texas Gulf Coast Regional Trauma Advisory Council

REGIONAL SYSTEM PLAN

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MISSION

To promote, develop and maintain a comprehensive EMS, trauma and acute care system that will meet the needs of all patients and that will raise the standards for community healthcare by implementing innovative techniques and systems for the delivery of emergency care for our community.

VISION

A unified, comprehensive and effective EMS, trauma and acute care system for a healthy, and safe community.

PHILOSOPHY

Assure the trauma system will attain its goal of decreasing morbidity and mortality of trauma patients by creating a seamless transition as patient's progress through the trauma systems continuum of care.

Belief Statements:

- We believe that all ill and injured patients are entitled to optimal health care.
- We believe that a planned and coordinated system with a public health model approach (assessment, policy development, and a regional performance improvement patient safety program) will result in a reduction of morbidity and mortality.
- We believe that a coordinated and organized approach is best accomplished with the full commitment, engagement and collaboration of the essential disciplines involved in emergency healthcare and injury prevention.
- We believe that resources are limited and that coordinated distribution and utilization of resources will result in safe and effective emergency healthcare.
- We believe that emergency healthcare providers, through organized education and training, can be educated to deliver optimal ~~trauma~~ emergency care based on evidence-based standards.

SCOPE OF RESPONSIBILITY

The Regional Advisory Councils (RAC) were organized under the authority of the Texas Department of State Health Services (DSHS) as instructed by the 1989 Omnibus Rural Health Care Rescue Act. Twenty-two advisory councils were originally charged with the development and implementation of a regional emergency medical services / trauma system plan and to oversee networking, contracts, and to perform other management services, including, but not limited to, emergency preparedness or other services. The RAC has the authority to expand its purpose for other regional healthcare system coordination derived from the authority of the Texas Department of State Health Services.

The East Texas Gulf Coast Regional Trauma Advisory Council, “RAC-R”, is a nonprofit 501 (c)(3), tax-exempt organization governed by a Board of Directors elected by the membership. The Texas Department of Health officially recognized the Regional Trauma Advisory Council for Trauma Service Area (TSA) – R on May 6, 1993, to meet the requirements within Texas Administrative Code (TAC) 157.122 and related to Department of State Health Services (DSHS) documents forming the *Regional Advisory Council (RAC)*. This plan is aligned with the Texas Department of State Health Services *RAC Operation Guidelines Regional Trauma System Plan*; however, it is framed within the Health Services and Resources Administration (HRSA).

This plan has been developed in accordance with generally accepted treatment guidelines and procedures for implementation of a comprehensive emergency response system plan. This plan does not establish a legal standard of care however it serves as a guideline for decision-making in patient care in our region and does not supersede a physician’s orders. This regional system will reviewed annually and approved by RAC-R membership as a resource for providers of emergency care from the First Responders Organization through the rehabilitation facilities, and includes not only care providers, but other keys components of this system including injury prevention, public and professional education, system performance, regional performance improvement, and disaster preparedness.

SYSTEM LEADERSHIP

The board of directors is charged with providing leadership within our region, state, and nation related to care of emergency healthcare patients and to prevent mortality and morbidity. promoting awareness of the trauma system plan as a component of the East Texas Gulf Coast Regional Advisory Council annual report. In addition, the board coordinates an annual review of the plan. The plan will be presented to the general membership and will be posted on the RAC website. RAC-R Board is available to assist in the development, implementation, education, and monitoring of the Regional Trauma System Plan. Current contact information is listed at www.rac-r.com.

REGIONAL DEMOGRAPHICS

The East Texas Gulf Coast Regional Advisory Council (RAC-R), encompasses Brazoria, Chambers, Galveston, Hardin, Jasper, Jefferson, Liberty, Newton and Orange Counties. The region covers 7,574 square miles and is home to 1,395,400 people. The top three (3) counties in population are Jefferson, Galveston, and Brazoria. Four (4) of the nine (9) counties are classified as rural: Jasper, Chambers, Hardin, and Newton.



The table below delineates the population and square miles of each county within TSA –R:

County	Population Estimates 2024	Square Miles	Number of Trauma Centers
Brazoria	413,224	1,387	2
Chambers	56,179	599	0
Galveston	367,407	399	3
Hardin	58,670	894	0
Jasper	32,907	937	1
Jefferson	253,948	904	3

Liberty	115,042	1,160	0
Newton	11,908	938	0
Orange	86,115	356	0
Total	1,395,400	7,574	9

Reference: [U.S. Census Bureau QuickFacts: United States](#)

Our region exhibits unique characteristics. A quick overview of these characteristics includes the following:

- Numerous chemical plants and refineries
- Several international ports along the upper Gulf Coast
- Multiservice regional and smaller airports
- Numerous entertainment venues
- Several amusement and water parks
- Large convention centers hosting business, cultural and political events
- Galveston is the port of entry for multiple cruise ships
- Galveston hosts the annual Lone Star Rally, Mardi Gras and Dickens on the Strand
- National Biocontainment Laboratory and research facility
- Multiple opportunities for higher education including a large medical school along with several nursing and allied health programs

EPIDEMIOLOGY

The East Texas Gulf Coast RAC Board of Directors and membership have made a commitment to acquire meaningful data to provide information for decision making. EMS, Air Medical, and Hospitals are required to submit quarterly data to the Regional ESO Data Repository maintained by the East Texas Gulf Coast Regional Trauma Advisory Council. Analyzing our data will help identify specific healthcare issues within the region. In addition, RAC members may request specific epidemiology reports from the state registry as needed by submitting a request through <http://www.dshs.texas.gov/injury/data/Data-Requests.doc>

COALITION BUILDING

Coalition building is a continuous process of cultivating and maintaining relationships with stakeholders within TSA-R. Constituents include health care professionals, pre-hospital providers, refinery personnel, RAC-Q, insurers, payers, data experts, consumers, advocates, policy makers, trauma center administrators, and media representatives. Coalition priorities are healthcare system development, community education, injury prevention activities, policy making, financing initiatives, disaster preparedness, system integration, and promoting collaboration rather than competition between healthcare centers and pre-hospital providers.

EDUCATION AND COMMUNICATION OF CHANGES TO THE REGIONAL SYSTEM PLAN

To ensure timely and effective communications of changes to the Regional System Plan, training opportunities and meeting notification, the RAC will utilize the following methods:

- This Regional System Plan will be posted on the East Texas Gulf Coast Regional Trauma Advisory Council website at (insert link to the document)
- When needed, emails will be sent to the membership with essential details including a description of changes, timeframes for required changes, and contact information or necessary links.
- Presentation at the general assembly meeting is another avenue in which details of this document can be discussed and will be captured in the minutes.

EMERGENCY MEDICAL SERVICES

DSHS supervises provider licensing of EMS vehicles including Basic Life Support (BLS), Advanced Life Support (ALS), and Mobile Intensive Care Unit (MICU) vehicles in Texas. DSHS provides a designation for First Responder Organizations (FROs), which can range in support capabilities, but does not include the ability to transport. Medical Directors, Providers, and RAC-R work to assist in ensuring that providers have the resources for a well-coordinated transportation system to arrive on scene for prompt and expeditious transport of patients to the correct hospital by the appropriate transportation mode including ground and air medical transport. Part of the DSHS FRO approval process stipulates FROs must have Mutual Aid Agreements with a licensed EMS provider that provides transport. Mutual Aid Agreements and Memorandum of Agreements are also in place when needed.

9-1-1 capabilities for all EMS providers allow for efficient dispatch of response teams/agencies to the scene. RAC-R is supported by EMS systems with two-way communication to dispatch and hospitals. Medical oversight includes online, and offline guidelines written by each medical director. Each Medical Director within RAC-R assumes the responsibility for medical oversight as well as specific performance improvement activities to investigate patient outcomes for his or her EMS personnel. Individual Medical Directors may adopt and supplement RAC-R guidelines and has the legal authority under Texas Medical Association Chapter 197 and the Texas Department of State Health Services (DSHS) Chapter 157 to adopt protocols and guidelines. They may create and implement performance improvement system guidelines to restrict the practice of pre-hospital practitioners to monitor, improve, and increase medical appropriateness of the EMS system.

From time-to-time certain participating / designated facilities may be unable to accommodate certain patients based on the capacity, capability and / or medical resources. RAC-R has adopted EMRESOURCE as the mechanism to be utilized to re-direct those patients to other appropriate participating / designated facilities to assure optimal patient care is maintained in the regional system. The redirection of ill and injured patients for financial reasons is not acceptable and can be reported as a potential EMTALA violation.

REGIONAL MEDICAL CONTROL

The Texas Department of State Health Services under Chapter 773, Emergency Medical Services and the Texas Board of Medical Examiners under Chapter 197, Emergency Medical Service, dictate that a State of Texas Licensed Physician be designated in the role of EMS Medical Director. Each Medical Director can set and authorize EMS practice Guidelines and Protocols specific to the EMS agency or agencies that serve under their license.

As a resource and a recommended standard, RAC-R and its committees can work to set recommended regional standards and best practice to each EMS agency and their designated Medical Director. During times of declared disasters, all agencies are subject to the policies and standards set forth by the State of Texas. These can include the Department of State Health Services, Health and Human Services and the Texas Department of Emergency Management.

EMS MEDICAL OVERSIGHT

All EMS providers must have the benefit of medical oversight. This is true regardless of the level of services provided. Such oversight is necessary to help ensure that EMS is delivering appropriate and quality services that best meet the needs of the patient and community.

The development of a regional system for the care of ill and injured patients encourages the active participation of qualified physician providers. All physicians should be clinically qualified in their area of clinical practice and exhibit expertise and competence in the treatment of patients.

DSHS, along with the EMS Medical Director is responsible for the retrospective medical oversight of the EMS system for trauma triage, communication, treatment, and transportation. This is coordinated through performance improvement of each provider. All counties in the State of Texas have 9-1-1 service. 911 districts may provide their own emergency medical dispatch training.

EMS Medical Directors are responsible for active involvement in the development, implementation, and on-going evaluation of dispatch guidelines for the jurisdictions under their purview. These should include:

- Basic Life Support (BLS)
- Advanced Life Support (ALS)
- Air and ground coordination
- Pre-arrival instructions

REGIONAL TREATMENT GUIDELINES

Emergency Medical Service (EMS) professionals are most often the first healthcare providers to reach a traumatically injured or acutely ill patient, and based on their patient assessment and geographical location, will determine which hospital would provide the most appropriate level of care required by the patient. The triage decisions made by EMS professionals can impact the

ability of the patient to survive, and to what quality of life they will recover to.

Within TSA-R, there are multiple licensed EMS providers. The level of EMS provider and numbers of providers can fluctuate per county. For a current list of EMS services in RAC-R by county refer to the following website: <https://www.dshs.state.tx.us/en/traumasystems/>. This regional plan provides guidelines to assist with transport of traumatically injured or acutely ill individuals to the appropriate level of care.

AIR MEDICAL SERVICES

Air medical transport is an important adjunct to the overall care of the severely ill or injured patient. Guidelines are in place and are intended to provide a standardized method for ground EMS providers to request a scene response by an Air Medical Provider (AMP), to reduce delays in providing optimal care for severely ill or injured patients, and to decrease mortality and morbidity. Contractual relationships with a public service or 911 agency do not reflect implied referrals of AMP service. In all instances the closest available AMP that best meets the needs of the patient will be utilized.

The Association of Air Medical Services (AAMS) defines “early activation” as departing for the requested scene prior to arrival of the first responders, based on a high index of suspicion that specialty services will be necessary. The action is initiated at the request of the first responders. “Standby” is the simultaneous dispatch of air and ground resources through a 9-1-1 request.

AAMS supports both early activation and airborne standby for areas that meet an agencies flight criterion. Patient conditions that meet these criteria may include:

- Prolonged extrication time
- Multiple victim incident
- Ejection from vehicle or patient entrapment
- Pedestrian struck with serious injury
- Death of occupant in same vehicle
- Critical burns >10% TBSA
- Falls with serious injury
- Deep penetrating injury to head, neck, or torso
- Unstable vital signs
- Acute Stroke / STEMI

The use of early activation or standby does not obligate the primary responding agency to send the patient by air if their clinical condition does not require air medical services. Transport should not be delayed based on air medical arrival.

GUIDELINES FOR ACTIVATION OF AIR MEDICAL

The EMS provider should comply with the East Texas Gulf Coast Regional Trauma Advisory Council Pre-Hospital Patient Triage and Facility Bypass Guidelines to activate AMP transport. Factors that should be considered include:

- Location of incident
- Number of patients
- Age of patients
- Clinical needs of the patient
- Response time of AMP that will deliver the patient(s) to the most appropriate facility faster than transport by ground ambulance.

Any AMP(s) licensed or authorized in good standings with all Health and Safety Code, Chapter 773, and/or Title 25 of the Texas Administrative Code (TAC), as well as Federal, State, or local laws, rules, or regulations that best meet the needs of the patient(s) may be utilized. Patients meeting criteria for AMP dispatch should be transported to the nearest appropriate facility.

Safety standards should follow guidelines endorsed by the Federal Aviation Administration, the National EMS Pilots Association, Helicopter Association International, Association of Air Medical Services, Commission on Accreditation of Medical Transport Systems, the Air and Surface Transport Nurses Association, the National Flight Paramedics Association, and Air Medical Physicians Association. Facilities must have landing zone capabilities or a system process to establish a landing zone with appropriate annual staff training. The GETAC Air Medical Committee has developed a Helicopter Safety and Landing Zone Training document that can be found at <https://shorturl.at/gFgwb>.

SATURATION

The East Texas Gulf Coast Region adopted a “No Diversion” policy in 2013. Hospitals that are experiencing high Emergency Department census or decreased inpatient bed capacity can identify these situations in EMResource.

Hospital Status:

- Open: All units/floors/bed types available; normal operating conditions
- Caution: Some areas/units of hospital unable to take patients/high census alert/some ancillary services such as CT or MRI are unavailable (please make note in comments area)
- Internal Disaster: Critical infrastructure failure
- Evacuation: Facility is evacuating
- Closed: Facility has completed evacuation or no longer in service

ED Status:

- Open: All services available and normal operating status of ED
- High Volume: Wait times are getting longer for non-urgent patients, ED census is nearing maximum, admission times increasing
- Saturation: Long wait times for most categories of patients, holding multiple admissions for > 6 hours

Trauma Status:

- No – unable to take additional trauma patients or not a designated trauma facility
- Yes – open for trauma patients and a designated facility

Acknowledgements:

- It is recognized in advance that no capacity strategy can guarantee total compliance with these guidelines, and it is likely that ambulances will deliver patients to hospitals that have identified a state of saturation.
- Each facility is responsible for defining facility-specific policies and procedures for implementation of these guidelines.
- It is understood that the EMS system should not be expected to accurately screen patients transported to a facility based upon the capacity categories identified. When these questions arise, the EMS personnel should contact their on-line medical direction source, if available.

All hospitals in RAC-R have been provided with EMResource, which is an internet program that allows each hospital to update their status without the need to contact a central location. A hospital should be always logged into EMRESOURCE.

Communication of saturation status:

- The individual with proper authority shall log in and update EMResource appropriately.
- A hospital must indicate the applicable saturation category

Time period for diversion status:

- Saturation requests will be for 4 hours. After 4 hours, the system will “auto-open” the facility. A hospital may deactivate a saturation request at any time. |

Authorization for over-ride of saturation request:

- The on-line medical direction source may over-ride a facility saturation request after consideration of the following:
 - Severity of the patient
 - Distance and estimated time to an alternate appropriate facility
 - Patient Request
 - Inclement weather conditions
 - Resource availability and capability of the transporting prehospital provider
 - All potential receiving facilities within a 15-minute radius of the patient location have requested saturation consideration

Communication of Internal Disaster status:

- The individual with proper authority shall log in and update EMResource appropriately.
- A hospital must indicate the condition that requires the declaration of Internal Disaster in Comments.

- The condition that requires the declaration of Internal Disaster must be an environmental or physical plant situation, such as utility outage, unsafe situation in the hospital, etc. Must specify in comments.
- SETRAC On-Call Duty Officer will contact the facility to obtain information regarding the internal disaster and whether the facility needs any regional resources to bring their facility back on-line.

Time period for Internal Disaster status:

- There is no time limit, but the hospital must update its status as soon as the condition that required the declaration of Internal Disaster is no longer in existence.

REGIONAL PREPAREDNESS AND PLANNING

The emergency response system within TSA-R incorporates emergency response functions outlined in the National Response Framework, and as incorporated within state and local emergency plans. All emergencies are considered a local responsibility, and legal responsibility for provision of support is placed with the senior elected official within the affected jurisdiction. Response entities such as hospitals and EMS agencies must work through these officials when resource needs cannot be met with local assets alone. Health and Medical (ESF-8) response to localized incidents and emergencies is typically managed by individual hospitals, EMS agencies and with minimal involvement of supporting agencies. Should the event exceed local and regional capabilities, the State and possibly Federal assets will be requested.

Many resources, including equipment, supplies and training are typically available to healthcare coalition partners across TSA-R through various ESF-8 partners. Specific areas of focus have included communications, surge capacity, mass fatality management and PPE.

Multiple communication sources will be utilized in disaster situations. EMResource, WebEOC, and Pulsara should be used in all disaster situations. Each entity and agency should ensure that you have access to these systems. All entities must utilize the Texas wristbands for patient tracking.

The National Incident Management System (NIMS) is the standardized approach to incident management and response utilized by TSA-R. The Incident Command System (ICS), a subcomponent of NIMS, is the standard method used for field command when multiple providers respond. A regional protocol is not established due to the number of EMS providers in the region, but experience is obtained through interagency training established by individual EMS providers. Supervising agency at the scene is established by the determination of lead agency for location.

Hospitals participating in the Texas Hospital Preparedness Program, and those pursuing accreditation under Joint Commission standards, have developed all-hazard response plans and protocols, including methods by which they respond to mass casualty events. Some of the response systems developed include plans for sheltering in place, medical evacuation, mass fatality management, and resource sharing. These plans and resultant Hospital Incident

Command Systems incorporate the National Incident Management System, and are based on hospital, city, county, and regional hazard vulnerability assessments (HVA). Hospital integration to local emergency management systems is emphasized.

The Catastrophic Medical Operations Center (CMOC) will be activated when a significant event with regional healthcare implications is imminent or is occurring. CMOC will provide centralized coordination of regional healthcare assets to support affected jurisdictions and healthcare entities. This includes but not limited to transportation resources, medical surge capacity, notifications and updates, patient tracking and fulfilling resource requests for agencies. Implementation of procedures will begin as soon as practical after the event is anticipated or is occurring. Mitigation efforts will be practiced on an on-going basis with emphasis on awareness, preparedness, response and recovery. Healthcare coalition involvement in planning, training and participation in exercises is essential and encouraged.

RAC-R borders the Gulf of America (formerly known as the Gulf of Mexico) and is at risk for coastal incidents which may generate mass casualty incidents. Hospitals should prepare for water-related trauma, contamination, and injuries from debris created from the aftereffects of a hurricane or tropical storm. CMOC coordinates with Coast Guard, maritime EMS and port authorities. In the event a hospital requires evacuation, CMOC can assist in arranging transport services to assist with safe patient evacuation. Tracking systems must integrate maritime responders. Recovery will include extended environmental monitoring.

In conjunction with TSA-Q, TSA-R utilizes the Homeland Security Exercise Evaluation Program exercises that integrate participating hospitals, supporting jurisdictions, and regional and state partners into discussion based and operations-based exercises. Regional communication drills testing both internet-based communications and radio systems are held regularly. Participating agencies produce after action reports and corrective action plans for internal use and provide input for regional development of these documents. To effectively manage assets and to enhance mutual aid among hospitals, EMS agencies, and supporting jurisdictions, RAC-R utilizes the Emergency support functions of RAC-Q.

- The CMOC functions as a Regional EMS Coordination Center and provides for deployment coordination of regional EMS support personnel and equipment into Ambulance Strike Teams with Strike Team leaders, and Medical Incident Support Teams. These teams are capable of forward deployment into other regions of the state and may be called upon to support local disaster response, including receipt or transfer of patients through the National Disaster Medical System (NDMS); state-based emergency air lift, and mass shelter events.

The Emergency Medical Task Force (EMTF) Project was developed by the Texas Department of State Health Services (DSHS) to create a network of regionally based medical teams. The goal of the EMTF program is to provide a well-coordinated response, offering rapid professional medical assistance to emergency operation systems during large scale incidents. The EMTFs are multi-RAC regions designed to leverage the capabilities of several trauma systems. The state is geographically divided into EMTF regions. RAC-R is in EMTF6 region which is composed of SETRAC (RAC – Q) and Deep East Texas RAC (RAC-H). Further information about EMTF-6

can be found on their website at <https://www.setrac.org/emtf6/>.

RAC-R was the first in the state to create an MMU following Hurricanes Katrina and Rita in 2005. RAC-R is very active in EMTF6 with staff able to be deployed for the MMU and the Ambulance strike team.

Announcements for trauma system planning / drills are sent electronically to all RAC-R membership to allow participation from interested members and to include a broad range such as physicians, nurses, pre-hospital providers, refineries, and staff. Members have the capability to call in during the drills. Participation rosters are kept by RAC-Q but are available upon request to RAC-R members.

REGIONAL HEALTHCARE PREPAREDNESS COALITION (RHPC)

The SouthEast Texas Regional Advisory Council is a leader in healthcare emergency preparedness and response. Contracted under the Texas Department of State Health Services, SETRAC serves as the Hospital Preparedness Program (HPP) Contractor for TSA-Q, as well as TSA-R and H. Additionally, SETRAC is the Lead RAC for the Region 6 EMTF program.

Through our standing Board Committee, the Regional Healthcare Preparedness Coalition (RHPC) provides coordinated planning, education, training, essential equipment and supplies, and a regional approach to healthcare response in a disaster.

This regional response is coordinated through the Catastrophic Medical Operations Center (CMOC). The CMOC serves the 25 county HPP region and provides a coordinating entity to ensure sustainment and recovery of healthcare infrastructure, staging oversight of EMS and transport assets, as well as situational awareness logistical support, and movement / tracking of medical populations, both from the community as well as from the hospitals and long-term facilities in our response region.

Technological adjuncts to facilitate our planning and response efforts include: WebEOC, EmResource, and Pulsara. WebEOC is an integrated web-based tool that allows for information sharing, resource requests, and cross-jurisdictional awareness. EmResource is the primary tool utilized across the State of Texas for rapid incident notification, bed reporting capability, and resource/recovery need queries. Pulsara is a regional patient tracking application that integrates across the State of Texas via an interface, with the Texas Emergency Tracking Network.

For further information, the complete CMOC Plan, including Annexes and Appendices, contact SETRAC via email at info@setrac.org.

PEDIATRIC READINESS

As healthcare providers, we recognize the unique characteristics when caring for pediatric patients. A keen self-awareness of your facilities capabilities is needed to ensure all Emergency Department's possess the capabilities to care for this patient population. Per the National Pediatric Readiness Project (NPR), "80% of children receive emergency care in general ED's". (<https://EMSCimprovement.center>) who see relatively few children. The exposure and

experience to this population for clinicians is limited.

The East Texas Gulf Coast Regional Trauma Advisory Council supports the efforts of the Health Resources and Services Administration EMSC Program to decrease mortality in the pediatric population, and improvement of the care of the pediatric injured or ill patient receives when presenting to the Emergency Department.

Preparedness begins with completion of the National Pediatric Readiness Assessment. At a minimum, this assessment must be completed annually and can be accessed utilizing the following link: <https://www.pedsready.org>. Based on your responses to the questions, you will receive a summary identifying the gaps in pediatric readiness in your facility. With thorough evaluation of the gaps, the Emergency Departments can begin to develop an action plan to address areas identified as opportunities for improvement. Many resources are available at <https://emscimprovement.center/domains/pediatric-readiness-project/readiness-toolkit-checklist/> to assist facilities to address their needs.

SYSTEM WIDE HEALTHCARE EDUCATION

RAC-R supports ongoing education to our members. Annually, the RAC Board allocates grant funds toward education. Members are encouraged to submit requests for tuition reimbursement for courses and conferences. Any other expenses incurred by the member are the responsibility of the member or their respective employer. Pre-approved courses are listed on the application for tuition reimbursement. In the event a course is not listed, a member may submit their request for review by the board. Members who submit a request will be notified by email of the approval or denial of the board.

Education is also provided in committee meetings and with guest speakers during General Assembly.

FINANCIAL MANAGEMENT

RAC-R operates using funding sources from local, state and federal resources. The RAC Board assists in the development of an annual operating budget drafted for each funding source allotted to the organization. Final approval and / or adjustment of the budget is the responsibility of the RAC Board. The use of survey monkey and the annual needs assessment serve to provide the information required for the specific needs of the membership. Based on the results of the above, funds are allocated toward educational, and equipment needs.

RESEARCH

Data is submitted by EMS, Air Medical, and Hospitals to our Regional ESO Data Repository which is maintained by RAC-R. Regional research will be conducted on an ad hoc basis. The Board of Directors is responsible for governance and release of the data. Additional epidemiology data is available upon request from the state registry as needed by submitting a request through <http://www.dshs.texas.gov/injury/data/Data-Requests.doc>

RAC-R Regional Trauma Plan

PURPOSE

The Trauma Committee collaborates with the RAC board for the oversight of the trauma system in Trauma Service Area R (East Texas Gulf Coast Regional Trauma Advisory Council RAC-R) including the Regional Trauma System Plan. This Plan includes strategies to focus diverse resources in a collective strategy to reduce morbidity and mortality due to trauma. The committee will provide guidance in the development and review of hospital and pre-hospital guidelines and protocols, regional plans, compilation of regional data, and injury prevention for the population in RAC-R.

GOALS

- A. Goals for each year are established at the beginning of the fiscal year.
- B. Collaborate and provide mentorship with entities that provide trauma care within the RAC and bordering regions.
- C. Provide injury prevention initiatives to the community as needed per our RAC data.
- D. Statewide collaborative projects will be incorporated into the committee's goals as they arise.

OBJECTIVES

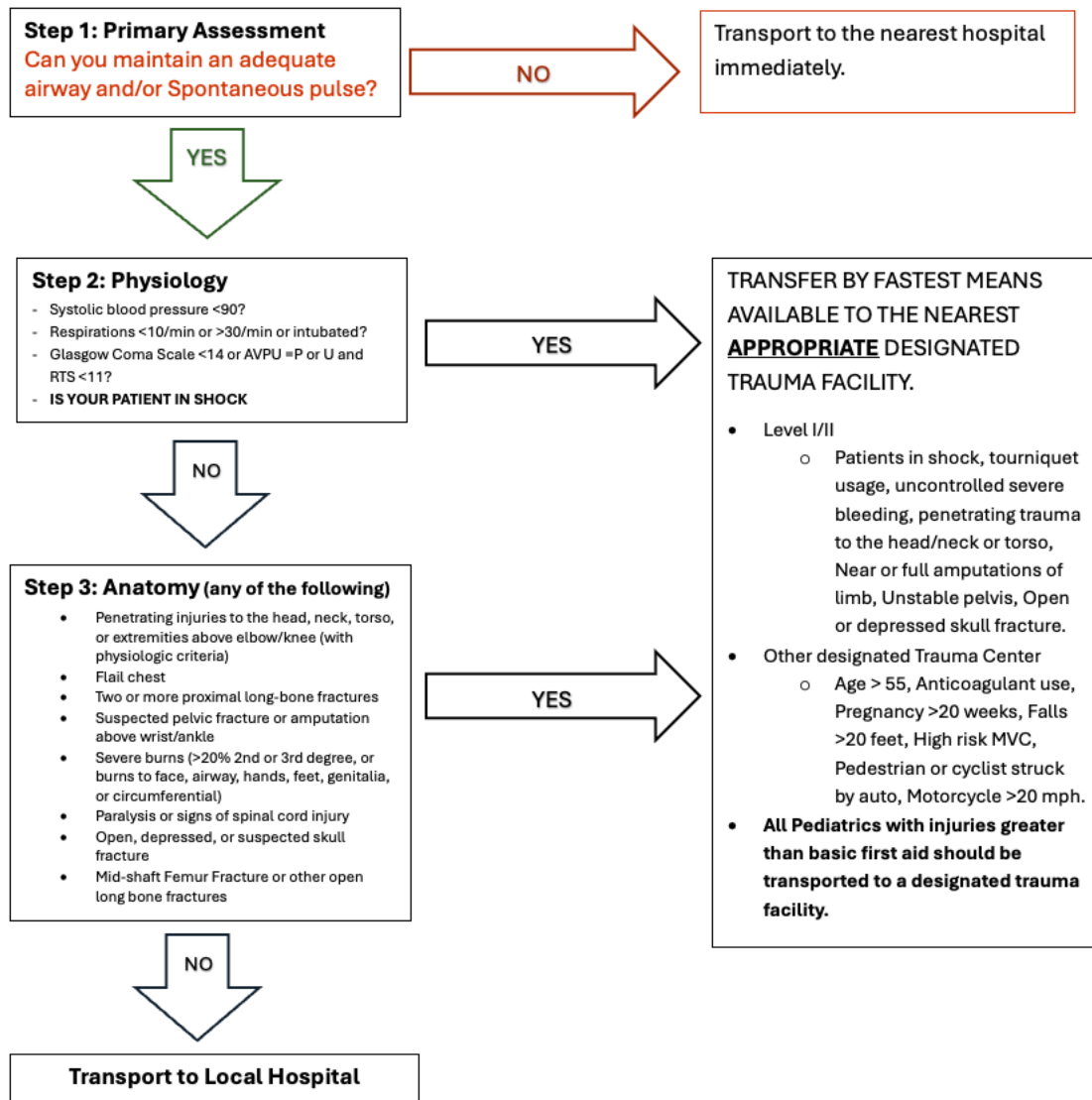
The Trauma Committee's mission is to provide the best care to traumatically injured patients as well as promoting responsible behaviors within the community. The committee will promote safe and effective care practices through constant attention to quality assurance and performance improvement. The committee will foster collaborative relationships with healthcare stakeholders in our region to provide evidence-based education, training, resources, and injury prevention measures.

DEFINITION

Trauma is a physical, cognitive, and emotional response caused by a traumatic event, series of events, or set of circumstances that is experienced as harmful or life-threatening.

PRE-HOSPITAL REGIONAL TRIAGE GUIDELINES

Ensuring trauma patients are transported to the most appropriate trauma facility is guided by the assessment of the patient. RAC-R has developed regional Pre-hospital Triage and Transport Guidelines.



AIR MEDICAL ACTIVATION

Consider air medical activation based on previously defined criteria.

TRAUMA TREATMENT GUIDELINES

Healthcare providers should use the following guidelines in conjunction with their professional knowledge and expertise during the hospital care and interfacility transfer of the major or severe trauma patient.

Minimum regional trauma activation criteria are listed below.

- Confirmed BP <90 at any time in adults and age-specific hypotension in children
- Penetrating Injuries to neck, chest or abdomen or extremities proximal to the elbow/knee
- GCS <10 with mechanism attributed to trauma
- Transfer patients from other hospitals receiving blood to maintain VS
- Intubated patients transferred from scene
- Patients who have respiratory compromise or need an emergent airway (Includes intubated patients who are transferred from another facility with ongoing respiratory compromise)
- Suspected spinal cord injury with neuro deficits and or paralysis
- Emergency Physician's discretion

BURNS

Burn care is limited throughout the state of Texas with only six burn centers to provide burn care to over 27 million people. The University of Texas Medical Branch Blocker Burn Center (Adult Burn Center) and the Shriners Hospitals for Children- Galveston (Pediatric Burn Center) are verified Burn Centers as accredited by the American Burn Association. As a verified Burn Center, they meet the highest current standards of care for the burn-injured patient and have the resources to ensure the provision of optimal care from the time of injury through rehabilitation to re-integration back into the community.

The American Burn Association provides specific guidelines when considering transport or referral to a burn center, further information can be found at www.ameriburn.org.

Criteria to transport or transfer to a burn center include:

- ☐ Partial thickness >10% of the body surface area
- ☐ Full thickness burns
- ☐ Burns to face, hands, feet, genitalia, perineum and over any joints
- ☐ All high voltage ($\geq 1000V$) electrical injuries
- ☐ Lightning injury
- ☐ Chemical burns
- ☐ Suspected inhalation injury
- ☐ Burn injury in patients with preexisting medical disorders that could complicate management, prolong recover, or affect mortality.
- ☐ Any patient with burns and concomitant trauma
- ☐ All pediatric burns may benefit from burn referral (≤ 14 years, or <30kg)
- ☐ Poorly controlled pain

When treating a victim with burns, it is important to expeditiously stop the burning process,

remove clothing, jewelry, and contacts. Avoid hypothermia by keeping the patient warm, do not apply ice to wounds. Do not apply wet dressings or ointments to the wound. Wounds should be covered with clean, dry dressings or sheets which will also minimize exposure to air currents and reduce pain. Management of pain is also key in the treatment of the patient. The following are the fluid replacement guidelines recommended by UTMB Blocker Burn Center:

Pre-Hospital: Initial Fluid Rates

- ☐ 5 years old and younger: 125 ml Lactated Ringers (LR) per hour.
- ☐ 6-13 years old: 250ml LR per hour.
- ☐ 14 years and older: 500 ml LR per hour

Hospital: Adjusted Fluid Rates

Step 1: Calculate the total body surface area burn (% TBSA) and obtain patient's pre-burn injury weight in kilograms (kg).

Step 2: Calculate fluid resuscitation utilizing the modified Parkland Formula:

- 2ml x weight in kg x %TBSA (adults)
- 3ml x weight in kg x %TBSA (pediatrics)
- 4ml x weight in kg x %TBSA (electrical burns)
- Patients should be assessed and managed according to provider protocols and/or orders from Medical Control if needed.
- Patients should be initially evaluated and managed according to ATLS, ATCN, TNCC, ITLS/PHTLS, ACLS, PALS, ENPC and/or PEEP guidelines.

REIMPLANTATION

Replantation is a highly specialized field, and few facilities are available to provide this time sensitive resource to injured patients. When a patient in the region needs replantation, emergent transport should be initiated immediately. The following facilities offer replantation services in our RAC and surrounding regions to ensure that patients receive timely and specialized care for these complex procedures.

- University of Texas Medical Branch at Galveston (RAC-R)
- Memorial Hermann Texas Medical Center (SETRAC)
- Texas Children's Hospital (SETRAC)
- Ben Taub General Hospital (SETRAC)

DESIGNATED TRAUMA FACILITIES (link to DSHS for designated sites)

With the vast geographic area of the TSA, one of the leading trauma care concerns is the amount of time it can take to reach the patient and the amount of time it can take to reach a trauma center. Within the rural counties of Newton, Jasper, Hardin, and Chambers, ambulances are generally

based in the largest towns within the counties. To reach some areas in the county, it may take an ambulance 30 minutes to a maximum of one hour. By the time the patient reaches a trauma center, the golden hour has expired. Access to air ambulance services within the region is available.

Within TSA-R, there are multiple designated trauma centers to serve approximately 1.4 million people. The highest-Level trauma center, the Level I, is located in the southern area of the TSA and two Level III facilities are located centrally within the TSA. For a list of the current trauma facilities with their designation status refer to the following website:

<https://www.dshs.state.tx.us/emstraumasystems/>. EMS providers are often faced with the decision to transport to the closest facility. This ultimately necessitates hospital to hospital transfer to meet the needs of the patient. At times, hospitals will transfer out of RAC-R to adjacent RAC's which is acceptable. Fixed wing services are available for those patients that require long transport times.

Access to the Level I facility in the region from the eastern area of the TSA is challenging. Transport by an ambulance entails the use of a ferry to cross the ship channel. Depending on the time of year, an ambulance may wait as long as 45 minutes for the ferry to arrive. All these issues must be addressed when formulating a regional trauma plan.

TRAUMA PATIENT REHABILITATION

Rehabilitation is the process of helping a patient adapt to a disease or disability by teaching them to focus on their existing abilities. Within a rehabilitation center, physical therapy, occupational therapy, cognitive therapy, and speech therapy along with other specialty modalities can be implemented in a combined effort to increase a person's ability to function optimally within the limitations placed upon them by disease or disability. To uphold the continuum of care from illness to health and offer a high-level of service, rehabilitation is a critical service offered within TSA-R through hospital-based programs and private organizations.

PREVENTION EDUCATION

Unintentional and intentional injuries are a significant public health concern within the State of Texas. Trauma systems must develop prevention strategies that help limit injury as part of an integrated, coordinated and inclusive trauma system.

Working with stakeholders and community partners, prevention and intervention programs and strategies are defined by reviewing the data collected by trauma centers and pre-hospital partners. Intervention programs seek to create a measurable reduction in injury or increase in prevention strategies (such as use of car seats for pediatrics), that are attainable and have a defined timeline.

The mission of injury prevention within RAC-R is to effect change in decreasing injuries through education and to promote prevention efforts in injuries through committee initiatives. Since 2016, the RAC has embraced the Stop the Bleed program and collaborates with public and private entities to offer training for the staff. Through grant funds, the RAC distributes Stop the Bleed Training Kits to our hospital and EMS partners in the region that provide this valuable training to the community. Training is presented to businesses, schools, community members and churches to name a few. Additionally, each trauma designated facility in the region has their own specialized injury prevention programs targeted to meet the needs of their specific communities.

TRAUMA QUALITY IMPROVEMENT

Participating organizations in RAC-R concur that ongoing monitoring and evaluation of the Trauma Care System through a well-defined System Performance Improvement (PI) Program is the primary way to improve trauma care thus, ultimately improving survival and reducing morbidity from injury. This is especially important in the predominately rural and frontier areas of TSA-R. Clear communications and rapid transport are crucial in a region with such a large land mass area. It is important that providers participate in the PI process with facilities within their catchment area. All member organizations agree that both organization-based and system-based PI are essential. Neither an individual entities nor provider's information will be collected for any internal PI actions including disciplinary actions. Sentinel Events as defined by a certifying/accrediting body will be addressed by the individual entities. While organization-based PI focuses primarily on the care rendered to individual patients, system-based PI focuses on the overall functioning of the system components and their interactions from pre-hospital care through rehabilitation.

By participating in RAC-R, all organizations accept the guiding principles for System PI as outlined by the Texas Department of State Health Services. EMS, Hospital, and System PI programs will be developed in close cooperation to monitor and improve trauma care in TSA-R. Regional data obtained from the Texas Department of State Health Services Trauma Registry will be reviewed for trends and identified issues and reported to the Executive Committee and Board of Directors. The identification of major injury types will be utilized in the development of appropriate Injury Prevention Programs for the region.

It is important to establish a PI plan to systematically monitor and evaluate trauma care from a system perspective. Participation in the PI process by all participating organizations, both EMS and hospital is encouraged. The Performance Improvement process will follow the guidelines as detailed in Section 161.031 – 161.032 and Section 773.092(e) of the Texas Health and Safety Code, which detail the confidentiality afforded activities of this type. Each document submitted for RAC-R Performance Improvement will be stamped CONFIDENTIAL and blinded, with all specific patient identifiers removed.

RAC-R Regional Acute Care Plan

PURPOSE

The mission of the East Texas Gulf Coast Regional Trauma Advisory Council Acute Care Committee is to facilitate coordination among stroke, sepsis, and chest pain care providers to ensure the most efficient, consistent, expeditious, effective, and innovative care for every individual experiencing acute stroke, sepsis, or chest pain. This is achieved by developing, implementing, and maintaining integrated quality processes in prevention, early recognition, rapid assessment, comprehensive management, and seamless hospital-to-hospital transfers for these critical conditions.

The regional plan and guidelines are meant to provide guidance to healthcare providers and facilities within the RAC-R region.

GOALS

- Identify and integrate our resources to obtain commitment and cooperation.
- Collaborate and identify tactics/strategies to increase EMS engagement in stroke, sepsis, and cardiac care.
- Establish system coordination relating to access, protocols/procedures and referrals. These structures will establish continuity and uniformity of care among the providers of stroke, sepsis, and cardiac care.
- Promote internal communication as the mechanism for system coordination which will include the EMS providers, hospitals, and members of the RAC-R.
- Set goals to share QI Projects between members of the RAC-R.
- Institute an understanding of the guidelines for stroke center designation, sepsis care, and cardiac center designation as dictated by the Texas Department of State Health Services.

OBJECTIVES

RAC-R will develop and support leadership and innovation within our region, state, and nation regarding the care of patients with stroke, sepsis, and chest pain, striving for solutions to preventable mortality and morbidity. Through collaboration, education, and continuous quality improvement, RAC-R aims to set the standard for excellence in critical care and to reduce the impact of these life-threatening conditions across our communities.

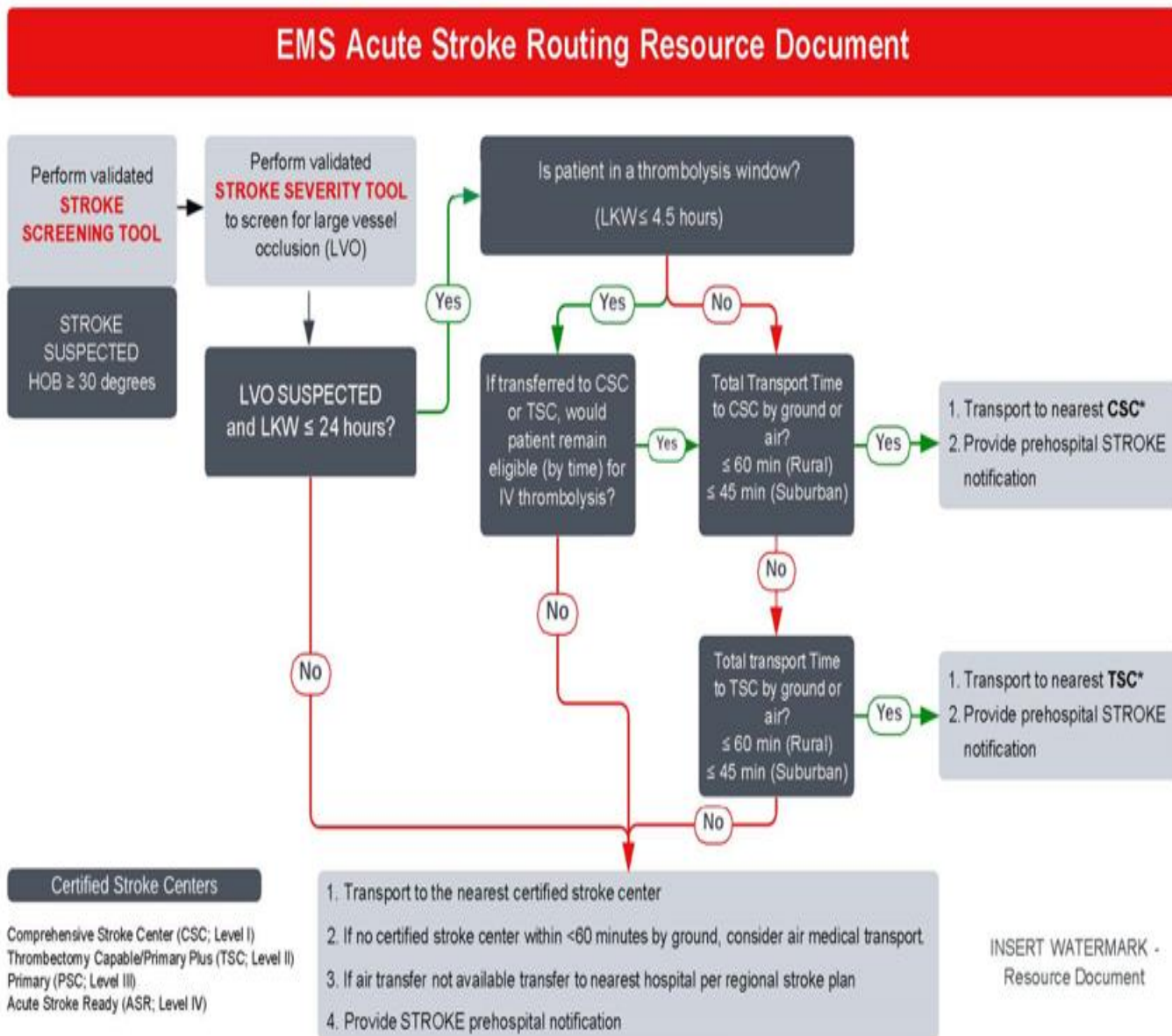
SPECIAL CONSIDERATIONS FOR FACILITY BYPASS

All RAC-R centers must utilize communication methods such as EMResource to notify pre-hospital providers when there are changes in their capabilities requiring bypass.

The RAC-R Acute Care Committee has developed and adopted transfer protocols/algorithms (see Exhibit 1 and Exhibit 2) for pre-hospital providers as guides. Any pre-hospital provider may use

these algorithms for reference, but their medical directors have ultimate authority over their transfer protocols.

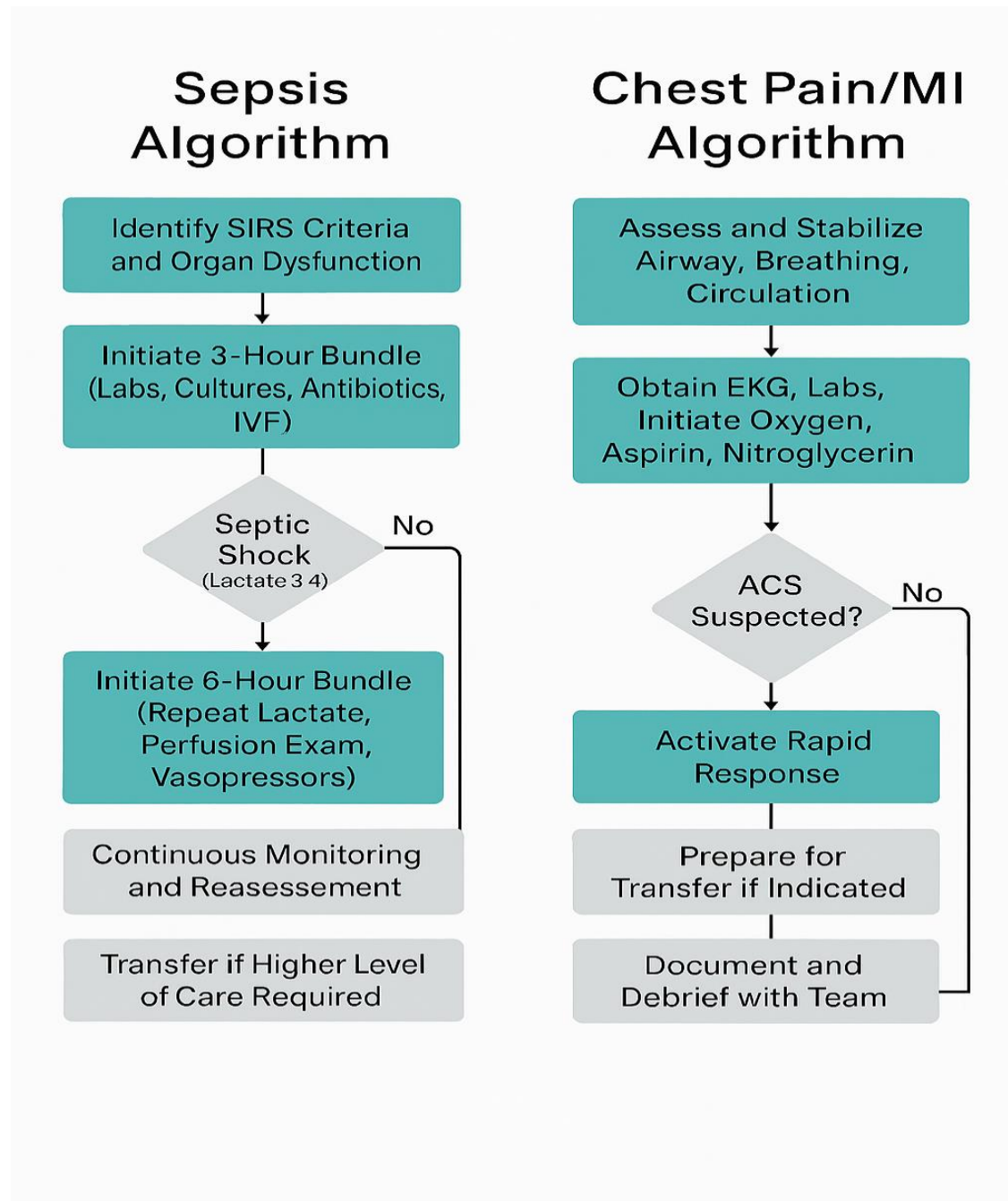
Exhibit 1: Stroke Transfer Algorithm



LKW - Last known well; LVO - Large Vessel Occlusion; * If LVO suspected, consider air transport from scene response to CSC/TSC.

Disclaimer: Regional stroke protocols are developed and implemented based on local guidelines, medical directors' recommendations, and Regional Advisory Councils (RACs). Variations in protocols may exist between different regions. For the most accurate and applicable guidelines, please consult the specific protocols established by your local health authorities and medical professionals.

Exhibit 2: Sepsis and Chest Pain Algorithm



AIR MEDICAL ACTIVATION

Consider air medical activation based on previously defined criteria.

STROKE FACILITY DEFINITION/DESIGNATION

DSHS maintains a list on its website of hospitals or centers meeting state approved criteria and their Stroke Center designation. For more information visit Texas Health and Human Services:
<https://www.dshs.texas.gov/dshs-ems-trauma-systems/stroke-system-development>

The Department of State Health Services (DSHS) Stroke Committee recognizes stroke centers/facilities as follows:

Level I – Comprehensive Stroke Centers (CSC)

Comprehensive Stroke Centers deliver the highest level of care to the most complex stroke cases. With 24/7 neurology, neurosurgery, IR, and OR availability, these facilities can diagnose and treat a wide range of neurovascular diseases from TIA to ischemic and hemorrhagic strokes.

Intervention key words: thrombolytics, TNK, TPA, ventriculostomy, endovascular thrombectomy, large vessel occlusion (LVO), craniotomy, aneurysm clipping/coiling

Level II – Advanced Stroke Center or Thrombectomy Stroke Center (TSC) or Primary Stroke Center Plus (PSC+)

Thrombectomy Stroke Centers have personnel and infrastructure to treat and diagnose high acuity ischemic stroke and hemorrhagic stroke patients. These facilities will have 24/7 neurology and IR availability. TSCs may facilitate transfer to a higher level of care for patients who may need interventions not provided by the TSC, when indicated.

Intervention key words: thrombolytics, TNK, TPA, endovascular thrombectomy, large vessel occlusion (LVO)

Level III – Primary Stroke Center (PSC)

Primary Stroke Centers have personnel and infrastructure to treat and diagnose acuity ischemic stroke patients. These facilities will have 24/7 neurology and critical care availability. PSCs may facilitate transfer to a higher level of care for patients who may need interventions not provided by the PSC, when indicated.

Intervention key words: thrombolytics, TNK, TPA

Level IV – Acute Stroke Ready (ASR)

Acute Stroke Ready Centers have protocols and infrastructure to evaluate, stabilize, and treat ischemic stroke patients with IV thrombolytics. ASRs will stabilize and facilitate transfer to a higher level of care for patients who may need interventions not provided by the ASR, when indicated.

Intervention key words: thrombolytics, TNK, TPA, “Drip and Ship”, Acute Stroke-Ready Center

PREVENTION EDUCATION AND QUALITY IMPROVEMENT

Stroke remains a leading cause of serious, long-term disability in the United States, where someone suffers a stroke every 40 seconds, on average, and dies every 4 minutes (Benjamin et al., 2018). It is one of the primary conditions contributing to functional disabilities, which involve difficulties performing daily activities that require vision, hearing, and speech—impacting work, business, and everyday chores. Stroke is the fifth most common cause of death nationally, responsible for nearly 130,000 deaths each year (Benjamin et al., 2018). By 2030, an estimated 3.4 million U.S. adults will have experienced a stroke, representing a 20.5% increase from 2012 (Benjamin et al., 2018). In Texas, stroke ranked as the third leading cause of death in 2015 (Kus, Bhakta, Bullis, Baudoin, & Auzenne, 2017).

Recognizing the complexity and urgency of stroke care, the RAC-R region has developed comprehensive plans to address stroke, sepsis, and chest pain—three critical conditions requiring rapid, coordinated response. Central to this approach is a hospital-to-hospital transfer system that ensures patients needing specialized or advanced care are identified and transferred to appropriate facilities as quickly as possible. Standardized triage criteria, clear stabilization guidelines, and efficient communication between hospitals help minimize delays and optimize patient outcomes.

The Sepsis Plan emphasizes early recognition, rapid intervention, and seamless coordination among EMS and hospital providers. Protocols include prompt identification of sepsis symptoms, initiation of evidence-based treatment bundles—such as IV fluids, antibiotics, and lactate checks—and escalation to higher levels of care when necessary. Continuous quality improvement and adherence to state and national guidelines are foundational to this effort.

Similarly, the Chest Pain Plan aims to reduce morbidity and mortality from acute cardiac events through rapid assessment, diagnosis, and treatment. EMS and hospital teams collaborate to ensure early recognition, immediate intervention—including oxygen, aspirin, and nitroglycerin—and activation of rapid response protocols for high-risk patients. Transfers to specialized cardiac centers are expedited when advanced care is required.

Together, these integrated plans reflect the RAC-R region’s commitment to delivering efficient, consistent, and innovative care for stroke, sepsis, and chest pain. By fostering collaboration among EMS, hospitals, and advisory council members, and by sharing best practices and quality improvement initiatives, the region strives to improve outcomes and reduce preventable mortality and morbidity for all patients.

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RAC-R Regional Perinatal Plan

PURPOSE

The Perinatal Committee collaborates with the RAC Board of Directors for the oversight of the perinatal care system in RAC-R (East Texas Gulf Coast Regional Trauma Advisory Council) including the Regional Perinatal System Plan. This plan includes strategies to collaborate with hospital and pre-hospital providers to reduce morbidity and mortality for mothers and infants. The committee will provide guidance in the development and review of assessment tools, regional plans, compilation of regional data and health education for the perinatal population in RAC-R.

GOALS

- A. Goals for each year are established at the beginning of the fiscal year.
- B. Collaborate with and provide mentorship for entities that provide perinatal care within RAC R and bordering regions.
- C. Provide health education and wellness promotion initiatives to the community we serve.
- D. Statewide collaborative projects will be incorporated into the committee's goals as they arise.

OBJECTIVES

The mission of the RAC-R Perinatal Committee is to promote healthy mothers and babies throughout the communities we serve. We will promote safe and effective care practices through constant attention to quality assurance and performance improvement processes, and by fostering collaborative relationships among healthcare stakeholders of our region to provide evidence-based education, training, and resources.

DESIGNATED PERINATAL FACILITIES

Maternal Levels of Care:

- Level I (Basic Care): Care for pregnant and postpartum patients who are generally healthy and do not have medical, surgical or obstetrical complications.
- Level II (Specialty Care): Care for pregnant and postpartum patients with conditions that present a low to moderate risk of maternal morbidity or mortality.
- Level III (Subspecialty Care): Care for pregnant and postpartum patients with low-risk conditions to significant medical, surgical or obstetrical conditions that present a high risk of maternal morbidity or mortality.
- Level IV (Comprehensive Care): Care for pregnant and postpartum patients with low risk to the most complex medical, surgical or obstetrical conditions including specialized services and subspecialists

Neonatal Levels of Care:

- Level I (Well Care): Basic neonatal care for healthy newborns, generally more than or equal to 35 weeks gestational age.
- Level II (Special Care): Care for moderately ill newborns who require special attention, generally more than or equal to 32 weeks gestational age and weight more than or equal to 1500 grams.
- Level III (Neonatal Intensive Care): Comprehensive care for newborns of all gestational ages with mild to critical illnesses or requiring sustained life support.
- Level IV (Advanced Neonatal Intensive Care): Facilities equipped to provide the highest level of neonatal care for newborns of all gestational ages including those with the most complex and critical medical and surgical conditions or requiring sustained life support.

HEALTH EDUCATION

The mission of the RAC-R Perinatal Committee is to promote health education for both our patient population as well as our hospital and pre-hospital providers. Patient and family education includes, but is not limited to, programs such as Safe Sleep, parental CPR courses and Pack and Play Programs. Additionally, perinatal care education and training is provided to our EMS partners throughout the region.

PERINATAL QUALITY IMPROVEMENT

Ongoing monitoring and evaluation of the perinatal care system through a well-defined PI program is the primary way to improve perinatal care thus ultimately reducing the risk of morbidity and mortality. All organizations participating in the RAC-R Perinatal Committee accept the guiding principles for system PI as outlined by the Texas Department of State Health Services.

RAC-R Regional Performance Improvement Plan

DESCRIPTION

The Regional Performance Improvement (RPI) committee is committed to improving patient outcomes in the region. In addition, TAC 157.123 requires the East Texas Gulf Coast Regional Trauma Advisory Council to have a performance improvement plan.

The RPI is a function of RAC members appointed by the RAC Chair and is the review group for regional system performance improvement covering review of all disciplines and services included in the RAC.

The purpose of a performance improvement plan is to provide assessment and improvement activities designed to monitor and evaluate the quality of patient care through system analysis, to identify and pursue opportunities to improve patient care, and to sustain improvement over time.

GUIDING PRINCIPLES

- A. Establishment of a Regional Performance Improvement (RPI) plan to systematically monitor and evaluate prehospital / trauma / acute / critical care / neonatal and maternal care from a system perspective.
- B. Mandatory participation in the RPI process by all participating organizations, both EMS and hospitals (designated and non-designated facilities.)
- C. The RPI process will follow the guidelines as detailed in Section 161.031 – 161.032 and Section 773.092(e) of the Texas Health and Safety Code, which detail the confidentiality afforded activities of this type.

Confidential: This report is prepared pursuant to but not limited to Section 160-007 of the Occupations Code; 161.031 of the Health and Safety Code and Texas Medical Practice Act, Article 447d and Article 4459b SS 5.06 et sq., 1987, all proceedings and records of medical peer review are privileged and confidential. This report is a review function and as such is confidential and shall be used only for the purpose provided by law and shall not be public record and shall not be available for court subpoena.

Prior to submission all documents utilized for Regional Performance Improvement will be stamped **CONFIDENTIAL** and blinded, with all specific patient identifiers removed.

GOALS/OBJECTIVES

- A. The primary objective of the RPI Committee is to provide the Regional Healthcare System with a continuous effort to measure, evaluate, and improve both the processes and the outcome of the system.
- B. The RPI Committee is comprised of hospital and prehospital representatives within the RAC.
- C. Data shall be collected and organized for review under the direction of the RPI chair. Participation in RPI by supplying data is a requirement for RAC participation.
- D. The RPI Committee will analyze data and determine if there are opportunities for improvement. When opportunities for improvement are identified through analysis of trends and patterns, the committee will outline causes and provide recommendations to achieve the desired outcome.
- E. When opportunities for improvement are identified, actions shall be directed toward the root cause with the overall goal of improving the quality of care. This may be accomplished through education, system analysis or recommendations from other committees. Statistical analysis will be utilized to determine whether actions taken are successful in improving care.
- F. Results of monitoring and evaluation will be reported to the General Assembly.

This process is not subject to discovery pursuant to Texas Health and Safety Code Chapter 9, Section 773.095 and Section 773.096. No process improvement documents will be removed from the meeting. Participants will be required to sign a confidentiality statement.

REGIONAL PERFORMANCE IMPROVEMENT (RPI) COMMITTEE DESCRIPTION

- A. RPI Committee will be composed of participants from all disciplines (i.e. EMS/air medical providers; hospital representatives; nurses; and physicians.) within RAC-R.
- B. RPI committee members are responsible for
 - 1. maintaining professionalism and confidentiality
 - 2. defining areas where there is a potential for “conflict of interest”.
- C. Members may attend the committee meetings in person or via video conference call. A quorum is established when at least one member is in attendance from each invited discipline with expertise in the issue to be addressed, i.e. Pre-hospital and Hospital: Trauma/Stroke/STEMI/Perinatal. Members will:

1. Objectively review issues submitted to the committee from agencies within or outside of TSA-R.
 2. Assist in the development of appropriate topics for ongoing study within TSA-R.
 3. Perform an annual review of the RPI Plan and forms and make revisions as needed.
 4. Develop, revise and update goals.
 5. Provide regional statistical data during General Assembly meetings.
- D. RPI Committee will be chaired by a physician who actively participates in the care of trauma and acute care patients within RAC-R. The physician chair must complete the Society of Trauma Nurses Trauma Performance Improvement Course (TOPIC).
1. As issues are brought to the committee chair, he/she will set meeting dates and times and notify committee members.
 2. The chair or designee will provide written feedback to the entity/person submitting the concern.
 3. Provide feedback to the RAC board when opportunities are identified to improve the system within the region.
- E. The RPI committee may conduct both open and closed meetings based on information being presented which is outlined in the RPI Committee SOP.

FUNCTIONAL RESPONSIBILITY

The ultimate responsibility for a flexible and integrated regional performance improvement plan shall rest with the East Texas Gulf Coast Regional Trauma Advisory Council.

PROCESS

A. Ongoing Performance Review:

The East Texas Gulf Coast Regional Trauma Advisory Council and our stakeholders shall conduct ongoing performance evaluation through quality indicators developed by each Committee Chair, to ensure continued compliance with regional guidelines. When an entity identifies a system issue, all efforts must be taken to address the issue within their own internal review process. In the event the issue remains unresolved, the provider can request further review through the RAC PI process.

QI indicators from the following Emergency Healthcare System Committees may include but are not limited to:

1. Prehospital care and transport
2. Trauma facility alerts and destination
3. Stroke alerts and destination
4. STEMI alerts and destination
5. Out of region transfers or double transfers

6. Patient care based on injury / illness and demographics
7. Patient mortality
8. Maternal death
9. Mortality with Regional Opportunity for Improvement

Results of the Emergency Healthcare System evaluation shall be made available to system participants.

B. Case Review:

Any member of RAC-R in good standing, in accordance with the definition described in RAC-R Bylaws, may file a written request for a case review of regional guideline compliance at any time. The review may include chart audit, patient data review, and reviews of other records and documents. Case review meetings and records are confidential and protected and are not subject to disclosure pursuant to Texas Occ. Code §161.031 / 161.032 and the Texas Health and Safety Code §773.091. Completion of a Conflict of Interest and Confidentiality document is mandatory for each committee member every fiscal year. In addition, these forms will be completed at the start of every meeting in which a case is being reviewed.

Case review may be requested for any of the following reasons:

1. Provide advisory information to the EMS agencies and hospital systems related to issues and policies that could alter regional guidelines.
2. Monitor processes and outcomes of patient care related to current regional guidelines.
3. Present opportunities for analysis of data and information of scientific value for studies and strategic planning of the emergency healthcare system.
4. Provide educational forums for improved patient care.
5. Periodic morbidity and mortality case reviews.
6. Other cases may be reviewed that may have exceptional educational or scientific benefit.

All requests for case review will be submitted in writing to the RAC-R to the Administrative Assistant and presented to the Performance Improvement Committee for consideration.

C. Regional Performance Improvement (RPI) Committee:

1. The primary objective of the RPI Committee is to provide the Regional Healthcare System with a continuous effort to measure, evaluate, and improve both the processes and the outcome of the system.
2. The RPI Committee is comprised of hospital and prehospital representatives within the RAC.
3. Data shall be collected and organized for review under the direction of the RPI chair. Participation in RPI by supplying data is a requirement for RAC participation.
4. The RPI Committee will analyze data and determine if there are opportunities for improvement. When opportunities for improvement are identified through analysis of trends and patterns, the committee will outline causes and provide recommendations to achieve the desired outcome.

5. When opportunities for improvement are identified, actions shall be directed toward the root cause with the overall goal of improving the quality of care. This may be accomplished through education, system analysis or recommendations from other committees. Statistical analysis will be utilized to determine whether actions taken are successful in improving care.
6. Results of monitoring and evaluation will be reported to the General Assembly.

D. Referral to the RPI Committee:

1. The *Regional Performance Improvement Request for Case Review* form, found on the RAC website, will be completed by the EMS provider/agency or Hospital that has identified a **system problem they wish to report to the RPI Committee that they have been unable to resolve through their internal PI process**. The Referring Agency / Facility will complete the Regional Performance Improvement Case Review Request form through a HIPAA compliant web-based platform called Jotform, providing enough information for the Committee Chair to decide next steps. The referring requestor will provide primary contact information and an alternate contact, who is familiar with the case, in the event the Committee Chair requires additional information or needs clarification. You can access the form to request a case review by visiting the RAC website at <https://www.rac-r.com/systems-performance-improvement>. The link to submit your request can be found at the bottom of the page or by clicking the following link: <https://form.jotform.com/260905771135053>. All fields are required and any incomplete fields will prohibit submission of the request.
2. Once request has been submitted through the secure HIPAA compliant format, an email will automatically be sent to the RAC Administrative Assistant and the Regional PI Committee Chair.
3. The RPI Committee Chair will have five (5) business days to decide to move the case forward, require additional information or deny the request. The decision of the committee chair will be documented on the Regional PI Medical Director Response page and will be returned to the RAC Administrative Assistant.
4. Upon receipt of the Regional PI Medical Director Response form, the RAC Administrative Assistant will have five (5) business days to send the decision of the committee chair approval/denial to the facility / entity.
5. Once the facility / entity receives the approval, pending approval or denial, they will have ten (10) business days to provide additional information to the committee.
6. Once a request has been approved, the RPI Committee will meet the first Wednesday of the following month. If the request is approved to move forward for review, the Medical Director associated with the concern (ie: trauma, stroke, EMS, air medical) will:
 - a. lead the review and
 - b. with the other pertinent Medical Directors,
 - c. identify 3 members of their respective committees to serve on the Case Review panel.
7. Following committee review, a final decision by the committee will be provided to the facility / entity within five (5) business days. The Lead Medical Director of the Case Review panel will formulate a response to the requestor based on the findings of the RPI Case Review panel.
8. The committee findings report will be forward to the facility / entity in five (5) business days by the RAC Administrative Assistant.

9. If the facility / entity wishes to discuss the decision of the committee, they will have ten (10) business days to request a virtual meeting to discuss findings.
 10. The timeframe for case closure may vary from the timeline described above based on the complexity of the case. The committee must ensure they have all appropriate documentation to thoroughly review the case and provide their response.
 11. The facility / entity may request to speak with the RPI Committee Chair at any time during this process. Upon request, a virtual meeting or phone call will be scheduled.
 12. It is important to include representation from individuals of the Acute Care and Perinatal Committees. These individuals have the knowledge and expertise to provide ongoing evaluation and quality improvement to these patient populations. These committees will nominate a member to serve as an ad hoc member of the RPI committee. The Perinatal Committee will nominate two representatives: one for Maternal and one for Neonatal.
- E. The *Regional Performance Improvement Request for Case Review* document outlines the steps to be followed to submit requests for review.
1. The person completing the form must sign the confidentiality agreement at the end of the submission form.
 2. Once your request has been received, you will receive confirmation within five (5) business days from the RAC Administrative Assistant.
 3. The Jotform platform will assign a RAC Unique Case ID number.
 4. The RPI Chair will make the determination if the case warrants presentation at the RPI Committee. The RPI Chair may decide the issue is not appropriate for system discussion and recommend that the issue be managed internally.
 5. Once the request is approved, the RPI Committee will review the case at the next monthly meeting.
 6. Physicians, EMS providers, Air Medical Providers, Nursing Program Managers with specific expertise will be accessed as needed for the review of individual cases.
 7. All parties involved will be notified when the case is up for review and invited to the meeting.
 8. The PI Chair or his/her designee will provide a summary of the outcome of each case reviewed utilizing the HIPAA compliant Jotform platform.
 9. A written summary of the findings and recommendations will be sent back to the submitting entity for their internal PI loop closure file.

A flow diagram below outlining the process in which the case review is followed is found at the end of this document.

DATA COLLECTION AND EVALUATION

The RPI Committee, with the support of the Trauma, Pre-Hospital, Acute Care, and Perinatal Committees, will review data and cases for the region and highlight opportunities for education and prevention. This will ensure education and prevention efforts by the RAC are data driven.

CONFIDENTIALITY

All proceedings and records of the East Texas Gulf Coast Regional Trauma Advisory Council Regional Performance Improvement Committee are confidential. All professional review actions and communications made to or from the East Texas Gulf Coast Regional Trauma Advisory Council Regional Performance Improvement Committee are privileged communications under Texas and federal law. TEX. OCC. CODE ANN. Chps. 151 and 160; Tex. Health and Safety Code § 161.032; and 42 USC § 11101.

All members serving on the Regional Performance Improvement Committee must sign the RAC-R Confidentiality Agreement prior to the beginning of each review. Signed Confidentiality Agreements will be returned to the RAC Administrative Assistance and retained in accordance with this policy. Any records or PHI received by the Case Review panel will be returned to the originator at the conclusion of the review.

CONFLICT OF INTEREST

No practitioner or other individual involved in the case shall be required to review any case in which they are professionally involved but shall be given the opportunity to participate in the review.

FLOW DIAGRAM

