

Advantages and Assets of the Texas Trauma System

- Enabling legislation
- Longstanding RAC structure
- Trauma center verification criteria and process
- Multiple funding sources, including red light camera, tobacco endowment, 911 surcharge, Driving Under the Influence/Driving While Intoxicated convictions, state traffic fines, driver responsibility
- Support by lead level III trauma centers
- Trauma centers with national and international reputations
- Medical care provider expertise
- Liability protection for all health care personnel
- Strong confidentiality statute
- Early consideration of an integrated emergency care system
- Outstanding disaster planning and response capability
- EMS and trauma advisory council is governor appointed
- Dedicated injury epidemiologist
- Recognized need for a trauma data system
- Renowned academic centers
- Capable and invested State personnel and staff in the trauma service Areas

Challenges and Vulnerabilities of the Texas Trauma System

- Exclusive trauma system design
- No statewide trauma registry or EMS data
- No trauma system performance improvement
- Uncertainty regarding continuation of current funding sources
- Poor communication about patient flow and care between RACs
- Inadequate system research
- Rising proportion of uninsured and undocumented persons
- EMS is not defined as a state essential service, and some counties have no EMS service

Opportunities for Change

- Timing is right for system change and to develop and implement a more inclusive and integrated trauma system throughout the state
- The concept of an inclusive and integrated trauma system could be embraced
- The legislature required a report to answer the question of adequacy in number of Level I and Level II trauma centers in Texas. GETAC and the department have asked for a report regarding the status of trauma care in Texas, and this provides an opportunity to educate the legislature and the public about trauma as a public health problem
- Health care reform may offer opportunities
- Extremely committed stakeholders at all levels

Injury Epidemiology

**DSHS Lead: Environmental Epidemiology & Disease Registry Section,
Dr. Suarez and Dr. Villanacci.**

RECOMMENDATIONS

- **Coordinate meetings between the state Office of EMS and Trauma Systems (OEMS/TS), the Regional Advisory Councils and the state Division of Prevention and Preparedness injury epidemiologists to evaluate and explore existing datasets to generate trauma data to describe the patterns of injury in the state.**

Trauma systems Committee: Jane will coordinate a meeting as outlined above—probably at Feb GETAC. This initial meeting needs to consider these recommendations in their entirety with the questions and comments outlined below.

Houston report as an example

Should Ryan Beal attend?? Jane will try to arrange for him to attend.

**? Mandate to participate in the National HRQ State Emergency
Department Database**

**What other databases should we be contributing to or accessing
routinely?**

**What could be done on a regional basis and a regional basis
routinely?**

**Continue to seek authorization to link hospital discharge data with
other data sets**

What can be done to collaborate with Schools of Public Health?

Subcommittee of Trauma Systems—Separate GETAC Committee??

DSHS Comment: Can do.

- Prepare a comprehensive biennial state report of the epidemiology of injuries (age, sex, race, regional patterns, severity, comparison within the state and with national data, etc.) using all available population-based data resources.

Needs to be discussed at the above meeting

Start slowly and build complexity

Partnership with Schools of Public Health

? Mandate to participate in the National HRQ State Emergency
Department Database

A very high priority for routine reports

DSHS comments: Maybe, the department has concerns about the ability to produce such a report with the existing resources, both human and financial. A possible solution might be to utilize/contract with Schools of Public Health as a master's or doctoral student project with participation from Center Health Statistics, Vital Statistics, and State Epidemiology.

- Collaborate with the Governor's Emergency Medical Services and Trauma Advisory Council (GETAC) injury prevention committee to develop a template for a standard regional injury report and provide it to each region on a biennial basis.

RAC Chairs produce a list of minimum data elements that could be collected

Send to Injury Prevention to come up with a template

Then, each RAC produces yearly report???

This needs to be tracked over time

DSHS comments: Discuss as part of the new trauma registry roll out and address this with the vendor during that phase. The Registry Solutions Workgroup, made up of stakeholders, will continue as an advisory group to the registry and part of the discussions.

- Create partnerships with Texas schools of public health to obtain data consultation and practicum students to assist with data queries.

DSHS comments: The agency already has such relationships. Encourage regional relationships at RAC Chairs meetings. If stakeholders see a need for these relationships, then they should pursue them.

- Consider the establishment of an emergency department discharge database.

DSHS comments: Cannot at this time, currently there is no law giving the department the ability to do so. (Jane- At the TS Committee meeting discussion, there was a suggestion that some RACs with regional registries are collecting this data and could report it as a subset. You and I discussed this as something for legal consideration. We would not be requiring it, but they could report it to us if they wanted to?)

- Continue to seek authorization to link hospital discharge data with other data sets.

DSHS comment: There is already a legislative initiative by the department Center for Health Statistics, but no guarantees this will happen.

- Identify all injury data resources prepared by state programs (e.g. Child Fatality Review Team annual reports) or state data available from national data sets (e.g. FARS) and create a linkage to the datasets or injury reports on the state's injury website home page.

DSHS comment: We can do and will continue as additional reports are identified.

Indicators as a Tool for System Assessment:

RECOMMENDATIONS

- Select a reasonable number of indicators from the *Model Trauma Systems Planning and Evaluation* document from each of the three core public health functions (assessment, policy development, assurance) to develop a measurement tool that can be used consistently by all the regional advisory councils (RACs).

Ask the RACs to incorporate these elements into their plans.
Assist RACs to incorporate and identify the important elements that become standardized measures for RAC performance that are based on the Model Trauma System Plan
Needs further discussion at multiple levels inside GETAC structure
Trauma Systems, Trauma Systems PI, RAC Chairs, Pedi, etc.
Rule revision – better Level IV rules that would increase the amount of data available for reports
Consider routine Trauma System Evaluation if not cost prohibitive
Consider in state alternatives based on Model Trauma System Plan

- Use this tool to assist individual RACs, the State Office of EMS and Trauma, and the Governor's EMS and Trauma Advisory Council (GETAC) to establish baseline performance measures and to evaluate changes in RAC maturation over time.

DSHS Comment: Work through Trauma Systems Committee and RAC Chairs to identify.

- Provide training to Texas EMS Trauma and Acute Care Foundation (TETAF) representatives and/or other interested parties related to the facilitation of the BIS process.

DSHS Comment: Should be RACs to be trained; not TETAF. OEMS/TS staff can provide training to RACs, but may want to use TETAF as a resource for things the agency can't cover.

- **Require all Regional Advisory Councils to complete a regional assessment with a facilitator using the same set of indicators selected by the State from the Health Resources and Services Administration's *Model Trauma System Planning and Evaluation* document.**

DSHS Comment: OEMS/TS staff will work with Trauma Systems Committee and RAC Chairs to identify. Can be placed in contracts as a requirement. Encourage use of the ACS PRQ document by RACs and use academic linkages for assistance.

- Compile data from RAC assessments and require repeated facilitated assessments at specific intervals, e.g., every 3 years.

DSHS Comment: Maybe. Evaluate the first facilitated sessions results. Use team of RAC members to pull together

Statutory Authority and Administrative Rules

RECOMMENDATIONS

- Define in code the role of the state trauma registrar and how the position functions within the current organization structure of the lead agency.

DSHS Comment: Cannot do. Resource and state budget issue. (Statute change required ?.)

- **Comply with the Texas Code 773.113 for the development of a statewide trauma reporting and analysis system.**

This is underway with the new Texas Trauma System

DSHS Comment: We are in compliance. We currently have a statewide trauma reporting and analysis system. We are in-process with improvements.

- Add additional trauma-focused representatives to the GETAC to better reflect trauma system development, e.g. injury prevention, rehabilitation, trauma program managers.

No action necessary at this time.

DSHS Comment: We have past the initiative timeframe and current state political budget situation would not allow. Stakeholders could try to go to legislature.

System Leadership

RECOMMENDATIONS

- **Re-establish the position and hire a full-time trauma system program manager.**

From State point of view cannot be done in the current state budget. Add to Coalition Agenda

°The successful candidate will have both clinical and programmatic Experience

DSHS Comment: (Take portion of 3588 to fund?)

- Expand trauma representation on the GETAC.

No action necessary

- Provide system-performance data to GETAC.

DSHS Comment: Maybe. Trauma Systems Committee is working on establishing a PI. Some of it is RAC-driven and some is state-driven. Propose PI activity be included in Trauma Systems Committee.

- Lead RACs through trauma system needs assessment, development, and quality improvement activities.

DSHS Comment: OEMS/TS staff are providing on-going training and will continue, through RAC Chairs meetings, site visits and inclusion in contracts for monitoring.

Break

Coalition Building

RECOMMENDATIONS

- Create a rural standing committee of the Governor's EMS and Trauma Advisory Council and engage the Office of Rural Health to explore issues that cause barriers to trauma care access in rural areas.

No action necessary – Question of rural reporting or representation to GETAC Committees. Strategic Planning discussion.

DSHS Comment: Maybe. Talk to GETAC. Ask Texas Department of Rural Health to attend GETAC meetings and offer input? Continue working relationship and make it stronger relationship.

- Enlist the Texas EMS Trauma and Acute Care Foundation to develop and provide an educational program aimed at policy makers and regulators of the Texas health insurance industry regarding the scope and financial impact of providing trauma care

Dinah Welsh will work to incorporate insurance representation to the Coalition to Protect Trauma

DSHS Comment: Can request, not require.

Lead Agency

RECOMMENDATIONS

- Analyze the current position functions within the lead agency to identify staffing resources needed to more effectively and efficiently manage the development and implementation of the statewide trauma system.

Coalition agenda especially aiming for 2013

Determine if any existing positions should be realigned to needed Functions

Currently using cross functional teams.

Place on coalition radar screen

Determine if any additional positions are needed.

Gap Analysis—What's not being done that was being done.

Consider a State Verification Review Committee

DSHS Comment: This is an ongoing process. We are constantly reassessing these questions and adding positions: for example, 3 Designation Coordinators.

• **Re-establish the position and hire a full-time trauma system program manager.**

From State point of view cannot be done in the current state budget.

Add to Coalition Agenda

DSHS Comment: Cannot do. See answers to previous questions.

• **Establish a state trauma medical director position or consultant and clearly define this individual's role.**

From State point of view, cannot be done due to funding

Possibility of doing an unfunded position related to the VRC concept described above

Possibility of funding the position from DRP dollars

Very important to fund this position – Place on Coalition Agenda

• **Redefine the organizational structure of the trauma system program to be programmatic in nature. All components of the EMS and Trauma System should report to the director of the lead agency.**

Need to take to policy makers

DSHS Comment: Not in alignment with HHSC Enterprise priorities.

• In the interim, establish an internal agency system integration group to coordinate all trauma system administrative and operational components across divisions.

There are cross-functional workgroups currently organized.

Trauma System Plan

RECOMMENDATIONS

• **Update the *Strategic Plan for the Texas EMS/Trauma System* and formally revisit it on a scheduled basis, e.g. every 3 years.**

Strategic Planning Retreat will be scheduled.

°Provide for separate sections or separate documents that focus on the specific needs of both the EMS and trauma system.

°Integrate public health principles contained in the 2006 *Model Trauma System Planning and Evaluation* document published by the federal Health Resources and Services Administration.

°Assign accountability for the monitoring and completion of the plan to a single agency or entity--GETAC

°Align existing resources (fiscal and human) with the priority tasks.

°Develop all objectives, strategies, and tasks in a measurable and time referenced framework with specific agencies, entities, or individuals assigned to each process.

DSHS Comment: GETAC is actively organizing a Strategic Planning Retreat that will seek to integrate the HRSA 2006 *Model Trauma System Planning and Evaluation* document.

System Integration

RECOMMENDATIONS

- Encourage Regional Advisory Councils to establish more formal linkages with schools of public health for collaborative efforts in injury prevention and research.

Currently underway—Proposed projects—try to funnel to individual RACs where appropriate

DSHS Comment: Will continue to encourage through RAC Chair meetings and wording of contracts to include regional academic representatives at the table.

- Recognize and continue support for the excellent collaboration - at all levels - between the trauma and emergency preparedness communities.

No action necessary

DSHS Comment: Already in process.

- Increase opportunities for Regional Advisory Councils to share best practices.
RAC Executive Directors should be encouraged to expand this
RAC Chairs meeting should continue to expand this at the meeting
RAC Websites—should develop best practices on their web sites

DSHS Comment: One of the purposes of the RAC Chairs meeting. Continue to encourage sharing of RAC best practices.

Break

Financing

RECOMMENDATIONS

- **Develop a vision and strategy to identify and capitalize on all available revenue resources to support, enhance, and sustain the trauma system.**

Coalition currently working on this.

Continue to work on all funding sources, not solely TDRP

- Conduct an assessment of the total costs associated with the operation of the trauma and emergency care system, including the infrastructure management.

Critical to be done in the next months

THA – Hospitals including physician coverage costs

EMS – TAA

Physician – TMA/TCEP/ACS

DSHS Comments: Will be dependent on resources available and an ongoing assessment of what we need to do our job. This recommendation will be included as part of an overall assessment using model costs obviously part of a comprehensive assessment. A proposed rider to get the funding appropriated was not successful. This is an on-going process.

- Combine additional revenue sources where possible that support the trauma program to include the Assistant Secretary for Preparedness and Response Hospital Preparedness funding, Department of Transportation Highway Safety funding, and others identified in the assessment.

?

DSHS Comments: Funding and statutory limitations prohibit state funding and federal funding coming from one office. From the state perspective, we are already combining a variety of sources to get what we need.

- Continue to collaborate with other agencies and private foundations to identify additional funding sources, e.g., the Rural Hospital Flexibility Grant for critical access hospitals and rural EMS agencies.

Underway—the Texas Department of Rural Affairs representative, Linda Jones, is planning on attending GETAC meetings

DSHS Comment: Ongoing

Break

Prevention and Outreach

RECOMMENDATIONS

- Identify a representative from the Office of EMS and Trauma Systems to actively participate and assume a leadership role on the Department of State Health Services Tier 1 priority injury and violence initiative.

[Refer to GETAC Injury Prevention Committee for Recommendations](#)

DSHS Comments: [Can do. We are currently exploring possibilities.](#)

- Revise the Governor's EMS and Trauma Advisory Council's injury prevention plan to identify Texas-specific injury mechanism priorities and evidence based intervention strategies that should be the future focus for Regional Advisory Council injury prevention program implementation.

[Injury Prevention Committee](#)

[See above plan for GETAC Committee re Data](#)

- Encourage the Regional Advisory Councils to select from the priority injury mechanisms and recommended interventions for their annual injury prevention programs.

[See above](#)

- Encourage Regional Advisory Councils to integrate a plan for evaluation into their annual injury prevention program and to report outcomes based on that evaluation plan.

[Currently being done throughout the State](#)

[Disseminate to RACs](#)

[See above for use of other data sources under epidemiology](#)

DSHS Comments: [Can be addressed through contract language as part of a regional trauma needs assessment and annual report.](#)

- Widely disseminate information to the Regional Advisory Committees and injury prevention stakeholders about the ten evidence-based injury prevention strategies compiled by the Texas EMS Trauma and Acute Care Foundation injury prevention committee.

DSHS Comments: [We can get from TETAF and widely disseminate through Center of Health Statistics and through OEMS/TS websites and email blasts to stakeholders.](#)

- Continue the implementation of the State and Territorial Injury Prevention Directors Association assessment recommendations.

[Share with GETAC Committees – Jane to facilitate](#)

[Consider involvement of Prevention Chair into this process](#)

DSHS Comments: [Maybe, resource constraints.](#)

EMS

RECOMMENDATIONS

- **Commit the necessary resources to ensure development and maintenance of a reliable statewide EMS information system.**

- Evaluate strategies to assist EMS in moving forward with electronic run reporting

- Monitor new registry system to insure that it functions to incorporate EMS data into the registry

- Encourage integration of prehospital and hospital EMR

- Evaluate best practices and strategies for getting the electronic record to the state registry and the local trauma center

Ensure that the information system provides meaningful information back to users and facilitates system-wide evaluations.

State Registry/Information Committee as described in Epi section

DSHS Comment: These recommendations are currently in progress to be worked on through the TRISA project.

- **Designate a state EMS medical director through an appointment or contractual relationship.**

- Review with EMS Medical Director's Committee and EMS Committees

- See comments above concerning trauma medical director

- Stakeholders feel this is an important role

- Possibility of an EMS oversight committee

- **The state EMS medical director role should be to advise DSHS staff, provide strategic direction, and serve as a resource for regional and local EMS medical directors and system administrators in the state.**

- Important to support this role description

DSHS Comments: Resource constraints prohibit at this time.

- Require each regional advisory council to designate a regional EMS medical director to provide coordination, serve as a resource, support regional performance improvement, and maintain an accurate roster of all local EMS medical directors in the trauma service area.

- Review of EMS Medical Director and EMS Committee

- Review of best practices at neighboring states

DSHS Comments: Not currently a RAC responsibility. RACs have a medical forum for input. Contract monitoring findings may strengthen the need for medical input from the RACs.

- Establish the minimum standard for EMS service that shall be available for each resident throughout all areas of Texas.

Review of the state 911 ambulance availability
Support EMS as an essential service
Define what the minimum standards in Texas are
Standardized dispatch

DSHS Comments: Minimum standards are in place everywhere there is EMS coverage. In counties without coverage, requirement of EMS as an essential service would require statutory change.

- Conduct community assessments to identify gaps in access to EMS and implement plans to close gaps.

DSHS Comments: This issue should be addressed by the RACs as one of several areas to be assessed. Contract language can specify.

- Conduct a workforce assessment to determine the geographic distribution of EMS personnel, identify opportunities for human resource development, and facilitate implementation of plans to expand the availability of EMS.

TETAF, RACs, DSHS –TETAF should initiate the investigation

DSHS Comment: State does not have resources. RACs can possibly identify answers through their needs assessments.

- Commit to a National Highway Traffic Safety Administration led EMS reassessment within the next 24 months.

EMS Committee to investigate and report to GETAC

DSHS Comments: Resource constraints. This recommendation could possibly be addressed in the future.

Definitive Care Facilities

RECOMMENDATIONS

- Identify a strategy for development of an inclusive and integrated trauma system involving all acute care facilities and begin its implementation.

No

DSHS Comments: Maybe. Requirement to participate in RAC through licensing rules would require a regulation change. Table for anticipated HCF changes.

- Collaborate with Office of Rural Health, as well as other sources of funding, to support trauma center designation of Critical Access Hospitals (CAH).

Yes

DSHS Comments: TDRH is working to assist this effort to get CAHs to designate as Level IVs.

- Consider seeking legislation to authorize the introduction of level V trauma center status for emergency care free-standing facilities.

No

DSHS Comment: We have already passed the window of opportunity to address for this session. Stakeholders can pursue.

Develop a plan to match trauma center availability with patient needs in both underserved and potentially oversaturated areas.

Yes

DSHS Comment: This is market-driven and outside the purview of state government.

(Jane- DSHS Comment: Shouldn't this already be addressed in the TSPs and transportation protocols of each RAC? If there are gaps or over-saturation in availability, they should be identified through RAC needs assessments. The notes in Emily's Internal Review document only refer to inability to designate all hospitals, and no resources and no mechanism to require every hospital to designate)

- Encourage designated trauma centers to participate in the trauma system at the highest level commensurate with their resources and local trauma patient needs.

Yes within the current system

- Develop a process to evaluate the pediatric capabilities of level III and level IV trauma centers that provide care for children.

Yes, within the current system

DSHS Comment: Trauma System Committee can look at this need for potential survey review process.

- Establish additional trauma center resources in the Houston-Galveston area ensuring adequate patient volume to maintain quality of trauma care and financial viability of each designated trauma center.

Yes, using the current system.

DSHS Comment: This is market-driven and outside the purview of state government.

System Coordination and Patient Flow

RECOMMENDATIONS

- Collate Regional Advisory Council information to identify instances of failed or delayed interfacility transfer for all trauma patients with an emphasis on special populations (pediatric, spinal cord injury, and traumatic brain injury).

Should be a part of normal RAC PI including outside or RAC transfers as well

DSHS Comments: It appears from current registry data, that RAC scrutiny of interfacility transfers appears to be inconsistent. Refer this issue to RSWG to evaluate as an Essential Criteria Reporting Element to assure RACs are looking at this data. This recommendation could also be added to annual reporting through contracts.

- Conduct a survey utilizing the Regional Advisory Councils to determine if trauma bed availability is adequate to meet system needs with emphasis on pediatric and special populations.

Already being done inside the RACs

DSHS Comment: Trauma bed availability is currently conducted during disasters. State needs to explore what benefit routine assessment would accomplish.

- Consider changing state regulations to ensure that ALL hospitals participate at some level within the Texas trauma system.

Not at the present time.

- This may involve designation at an appropriate level or participating by providing initial resuscitation and stabilization to moderately and severely injured patients followed by transfer, as well as submitting a minimal set of data to the state trauma registry.

DSHS Comment: Maybe. State might consider through hospital licensing rules.

- Conduct discussion among appropriate stakeholders in each RAC to determine the appropriate destination for the injured adolescent.

This should be emphasized at the RAC level

Consider addressing this when rules are revised

DSHS Comment: Can be required through RAC contracts.

- Develop an appropriate forum for discussion and management of issues related to trauma patients that are transferred across state lines, including monitoring quality of care, reimbursement, and repatriation.

RACs

Region VI ACS Meeting (TX, OK, LA, AR, NM)

DSHS Comment: Maybe. Initiate discussion with RACs that border contiguous states.

Rehabilitation

RECOMMENDATIONS

- Develop a rehabilitation committee of Governor's EMS and Trauma Advisory Council.

Integration with Rehab and separate GETAC Committees—
Part of strategic planning retreat.

DSHS Comment: Needs to be decided by GETAC at the retreat, possibly include in discussion with PI workgroup.

- Determine if a significant delay in transfer of patients to rehabilitation facilities exists and if this contributes to trauma center diversion statewide.

Develop a tracking system at regional trauma centers within a given RAC

DSHS Comment: Maybe. This is data hospitals track. Reporting could be a requirement of RACs contract.

- Determine if the number of rehabilitation beds available is sufficient to meet needs of the trauma patients with special attention given to pediatric, spinal cord injury, traumatic brain injury, and ventilator-dependent patients.

Consider a meeting with rehab hospitals and providers facilitated by the Department of State Health Services

DSHS Comment: Refer to Trauma Systems Committee PI workgroup.

- Consider the inclusion of designated rehabilitation centers for uncompensated care reimbursement eligibility under the trauma fund if delay in appropriate transfer to rehabilitation is confirmed for uninsured trauma patients.

Consider this option

DSHS Comment: Not possible at this time. Requires statute change and funding.

Disaster Management

RECOMMENDATIONS

- Ensure that Regional Advisory Councils integrate a mass casualty incident disaster plan within their regional trauma plans through the state contracts and desktop audit tool.

When rules are opened (133 and 157), this needs to be addressed with the hospitals—must include RAC participating centers and all others too

RACs and their member hospital and EMS agencies shall participate in the development and implementation of their regional medical operation centers.

Facilitate and encourage standard RMOC operating procedures

DSHS Comment: Contract requirement for HPP. Recommendation could be addressed when TAC 133 and 157 open for revision.

- Continue efforts to provide training for full utilization of the WebEOC capabilities.

Currently ongoing—should be fostered and encouraged

DSHS Comment: Regional training is on-going.

- Seek opportunities to utilize incident management software on a daily basis to increase personnel familiarization with system capabilities.

DSHS Comment: Needs more research. EMS systems to be open at all times. This recommendation could require quarterly testing and set-up exercises. State will seek opportunities to implement this recommendation.

- With Regional Advisory Council input, establish a statewide guideline for mass casualty disaster triage, and provide education and materials to support implementation.

DSHS Comment: Maybe. This recommendation needs research and discussion with Disaster Committee through GETAC.

- Complete the development of a statewide inventory of medical assets.

DSHS Comment: Ongoing

- Continue to implement a consistent and statewide system to track patients (e.g., radio-frequency identification bands for inter-facility transfers).

DSHS Comment: Ongoing

- Further integrate and clarify roles within Emergency Support Function (ESF) 8 for health service districts and Regional Advisory Councils.

DSHS Comment: Clarify rules

- Assess the timeliness and accuracy of the data entered in to the EMS systems.

DSHS Comment: This recommendation can be accomplished through exercises or real-time events and evaluated during a “hot wash”.

Systemwide Evaluation and Quality Assurance

RECOMMENDATIONS

Develop a statewide trauma system performance improvement plan and implement it.

Continue to develop this process:

Operational issues

Best practices

Benchmarking – Trauma Centers

Opportune time to move forward – Need to make certain these discussions are integrated with the development of the new registry

Engage as many stakeholders as possible in the development and implementation of the performance improvement plan.

DSHS Comment: Currently being addressed by the PI workgroup within the Trauma Systems Committee. Advise narrowing focus. Start simply and build complexity over time. State will continue to work with stakeholders to accomplish this goal.

• Establish minimum state performance improvement audit filters to adequately evaluate the trauma process and outcomes statewide, including filters for special populations (pediatric, spinal cord injury, traumatic brain injury).

Look at this with rule revisions 157.xxx

Consider “TOPIC” Course for RACs

Comprehensive across levels and RACs

What PI elements should be mandatory for regional/state PI?

Transfer denials/delays/problems

Preventable death registry?

Focus on system issues

Issues that cross multiple organizations

Clarify statutory protection from discovery at the State level—

Jane to do.

DSHS Comment: Maybe. (Refer to RSWG for consideration.) State will continue to work with stakeholders to accomplish this recommendation.

• Identify staffing and funding resources at the state level to provide leadership and sustainability for the implementation of the state trauma system evaluation and performance improvement process.

Identify what resources are required

Trauma Medical Director at state level

Identify the costs, opportunities and barriers

DSHS Comment: Cannot be done at this time due to budget restrictions.

- Establish a performance improvement committee of the Governor’s EMS and Trauma Advisory Council.

Done as a subcommittee of trauma systems—need to insure EMS participation in the process.

Strategic Planning Retreat discussion and agenda item.

- Identify staffing and funding resources at the state level to provide leadership and sustainability for the implementation of the trauma performance improvement process.

DSHS Comment: Cannot be done at this time due to budget restrictions.

- Ensure that the state trauma system performance improvement process, as well as the performance measures, are inclusive of the continuum of care provided by dispatch, emergency medical services, acute care facilities, trauma centers, and specialty care facilities including rehabilitation.

Yes, this needs to be underlying principles for the process

DSHS Comment:

- Encourage Regional Advisory Councils (RACs) to collaborate with other RACs based upon referral patterns to support state trauma performance improvement implementation.

Develop a scorecard for InterRAC transfers

Reporting to the state

Benchmark – transfer process measures

Funding mix report for interRAC transfers

DSHS Comment: Place in contracts.

Trauma Management Information Systems

RECOMMENDATIONS

- **Continue to actively pursue the purchase, installation, and roll-out of a trauma registry (National Trauma Data Standard compliant) and an EMS information system (National EMS Information System compliant).**

In process, underway, full speed ahead

- Convene a work group to develop a plan for the management and maintenance of new software solutions that focus on long-term stability of the new system.

See previous discussions in Epi section

- Field test and roll-out the software solutions as soon as possible.

DSHS Comment: Ongoing

- Concurrent with data submission, create a structured and standardized reporting schedule, recognizing that there may be an early period of questionable data validity as the new data system is implemented.

Routine reports from registry are essential

Routine regional reports essential

Define the data dictionary/required data elements

NTDB data element—essential for all hospitals

NEMESIS Gold

Need GETAC/State mandated unique identifier from initial encounter through rehab – consideration in rule revision (25 TAC §157.125)

Could trauma become a reportable disease?

DSHS Comment: This recommendation has already been built into the implementation process.

Research

RECOMMENDATIONS

- Develop a trauma systems research collaborative, including the state’s academic institutions and trauma system stakeholders.

Good idea

Timeline – 3 year plan

Consideration of a poster session at EMS Conference—approach the South Texas and North Texas Chapter COT, EMS C, and Texas Pediatric Society, ACEP, TCEP, Schools of Public Health—Consider changing the name to Texas EMS and Trauma Systems Conference

DSHS Comment: Maybe. The state will have discussions with stakeholders.

- Develop and pursue a trauma systems research agenda.

Good plan

3 year plan

DSHS Comment: Maybe. The state will have discussions with stakeholders.

- Support, on a continual basis, at least one large-scale trauma systems research initiative.

Good idea

DSHS Comment: Maybe. The state will have discussions with stakeholders

Focus Question Houston Galveston Area

RECOMMENDATIONS

- The State Office of EMS and Trauma Services, in conjunction with the appropriate regional advisory committees, should conduct a needs

analysis in the Houston metropolitan area and the Houston/Galveston corridor, taking into account anticipated population growth, shifts in population distribution, and utilization of current resources. Using this data, the lead agency should:

- Identify one or more hospitals with appropriate resources and geographic location as candidates for designation as level 1 or level 2 trauma centers.
- Encourage and assist the candidate hospital or hospitals to become designated trauma centers at the level appropriate to their resources and commitment.

The population data support that Houston needs at least one or two additional Level I or II trauma centers

The SETRAC (TSA Q) and East Texas Gulf Coast RAC (TSA R) should complete a performance analysis of trauma care and use this to assist in current and future trauma system planning for Southeast Texas.

The Texas Trauma System strongly supports and encourages release of all of the funds currently in the Driver Responsibility Fund (HB 3588) and into the future as statutorily directed. These funds should be distributed pursuant to the existing statute and rules for the Texas Trauma System. The Texas Trauma System does not support the preferential diversion of any trauma funds (driver responsibility program, etc) for any region in Texas, outside of the existing statutory authority

UTMB is on track to reverify as a Level I Trauma Center. The state should continue to support UTMB in its mission to rebuild its trauma program.

The DSHS using the existing process and rules should encourage the development of at least one Level II or Level I trauma center in the SETRAC.

Lead Level III

RECOMMENDATIONS

- The Governor's EMS and Trauma Advisory Council and the State Office of EMS and Trauma Services should evaluate processes and care at the "super level III trauma centers" in all trauma service areas that do not have level I or level II trauma centers.
- Determine if a need for a "level III plus" exists with designation criteria that falls between level II and level III trauma center criteria. If such a designation is needed, develop criteria and a designation process for implementation.

- Hold each of these lead level III trauma centers accountable to the same uniform standards and a baseline level of response care 24 hours a day, 365 days a year

These should be addressed in the rules revisions (25 TAC §157.125).

Focus Question 2 a) What strategy could the trauma system use to strengthen the system in relation to trauma care for special populations (i.e., children and the elderly)?

RECOMMENDATIONS

- Ensure that the biennial injury report contains the detailed pattern of injuries for children and the elderly. These special populations have different injury risk factors and mechanisms of injury.

Agree with this recommendation

- Ensure that when the injury prevention plan is revised it integrates priorities for children and the elderly. Identify evidence-based injury prevention strategies to recommend for RAC implementation.

Refer to Injury Prevention and Pediatric Committee

- Determine if the needs of the elderly for trauma care are adequately addressed within the current GETAC standing committee structure.

Yes—should be addressed by each committee areas

- Identify opportunities to focus on priorities for the pediatric and geriatric populations during the revision of the state’s strategic EMS and trauma plan.

Needs to be a special focus of the strategic planning retreat (child and elder abuse). Involve DADS and Child Fatality Review Teams, Department of Family and Protective Services, CHAT

Need to launch a special workgroup on child and elder abuse

Encourage EMR integration in communities that allow tracking across health systems

- Review RAC programs and accomplishments, looking for strategies that have benefitted the pediatric and geriatric populations. Ensure that these best practices are shared with all RACs.

Agree with this recommendation

Trauma System/GETAC should facilitate

- Explore opportunities to enhance the recognition of the special needs of children and the elderly within disaster preparedness programs.

Currently being done—committees need to be integrated into GETAC structure

- Once the new EMS and trauma information systems are operational, develop templates of special reports focused on care to children and the elderly. Run these reports on a regular basis to identify trauma system issues for each population and to monitor progress in system change.

Agree

- Provide an opportunity for the GETAC Pediatric Committee to review RAC performance improvement reports to gain a sense of statewide pediatric issues, become aware of sentinel events, and identify emerging themes or trend areas.

Pediatric committee should assume a leadership role with developing pediatric specific PI

- Collate RAC information to identify instances of failed or delayed interfacility transfer for injured children and the elderly.

Should be for all patients

- Continue the development of model pediatric triage and destination guidelines. Ensure that they are disseminated to the RACs and to local medical directors.

Currently ongoing—needs to be facilitated particularly between RACs

- Offer a session at the Texas EMS conference targeted to local medical directors to encourage discussion of the model pediatric triage and destination guidelines and challenges with their implementation in the RACs.

This session is happening at this year's meeting

- Conduct discussion among appropriate stakeholders to determine the appropriate destinations for the injured adolescent and develop a standardized age-based protocol.

GETAC to facilitate a state wide discussion about this issue

- Determine if adequate rehabilitation beds exist for injured children.

Not adequate in multiple areas of the State. Need to define which areas

- Establish minimum state pediatric and geriatric PI audit filters to adequately evaluate process and outcomes statewide for children and the elderly. Identify specific audit filters for use by each of the RACs.

See above—using the ACS standard definition for pediatric patients

Focus Question 2b: What strategies could the trauma system use to

strengthen incorporation of rehabilitation entities/principles into the system?

RECOMMENDATIONS

- Conduct a study to determine if the number of rehabilitation beds available is sufficient to meet the rehabilitation needs of trauma patients in Texas, with special attention to the needs of pediatric, spinal cord injury, and traumatic brain injury patients.

This is a problem throughout the State

- Conduct a survey targeting all of the trauma centers to determine if a significant delay in the transfer of injured patients to rehabilitation facilities exists and if this contributes to trauma center diversion statewide.

Exists—recommended PI assessment

- If a delay in appropriate transfer of injured patients to rehabilitation centers is confirmed for uninsured patients, investigate the possibility of designating selected rehabilitation centers for cost reimbursement eligibility under the trauma fund.

Not feasible at current time

- Develop an action plan to improve rehabilitation services to trauma patients. The action plan should encourage and support the following:

- Early notification to the rehabilitation team of its need to engage each trauma patient's care.
- Expedient and qualified response of the rehabilitation team.
- Quality rehabilitation interventions during acute hospitalization.

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- Early identification of patients for whom rehabilitation will be appropriate beyond their acute hospitalizations.
- Mechanisms to match patient needs with available post-acute hospitalization rehabilitation resources.
- Adequacy (types and numbers) of rehabilitation services in the communities where they are needed.
- Monitoring and reporting of long-term outcomes.
- Consideration of adding rehabilitation data to the trauma registry, e.g., cost and outcome data. Subsequent data analysis should indicate a measure of the cost effectiveness of rehabilitation services for trauma patients.

The first sentence of the last bullet: Great long-term goal—might be achievable with major changes in rule and statute

Focus question 2c: What strategies could the trauma system use to assure appropriate, data driven injury prevention activities are integrated into the system.

RECOMMENDATIONS

- Revise the GETAC injury prevention plan to identify injury mechanism priorities and recommended evidence-based prevention programs.
- Encourage the RACs to select among the priority injury mechanisms and recommended interventions for their annual injury prevention programs.
- Widely disseminate information about the 10 evidence-based injury prevention strategies developed by the TETAF injury prevention committee to the RACs and injury prevention stakeholders.
- Monitor the data submitted by the RACs regarding the effectiveness or evidence of impact of the selected injury prevention programs. Encourage RACs to share best practices regarding injury prevention program evaluation

[See above—refer this section to IP Committee](#)

Focus Question 2d: What strategies should the trauma system use to further evaluate ourselves, including recommendations as to how we best proceed (i.e., individual RAC evaluations or groups of RAC evaluations) in the future?

RECOMMENDATIONS

- Select a reasonable number of indicators from the *Model Trauma Systems Planning and Evaluation* document from each of the three core public health functions (assessment, policy development, assurance) to develop a measurement tool that can be used consistently by all the regional advisory councils (RACs).
 - Use this tool to assist individual RACs, the State Office of EMS and Trauma, and the Governor’s EMS and Trauma Advisory Council (GETAC) to establish baseline performance measures and to evaluate changes in RAC maturation over time.
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- Provide training to Texas EMS Trauma and Acute Care Foundation (TETAF) representatives and/or other interested parties related to the facilitation of a BIS process.
- Require all RACs to complete a regional assessment with a facilitator using the same set of indicators selected by the state from the HRSA *Model Trauma System Planning and Evaluation* document.
- Collate findings from all RAC assessments to identify priorities for enhancement of the statewide trauma system.

[See above—addressed in previous sections](#)

Focus Question 3:

How can we strengthen our regional and statewide performance improvement activities?

RECOMMENDATIONS

- Encourage Regional Advisory Councils (RACs) to collaborate with other RACs based upon referral patterns to support state performance improvement implementation.
- Develop a trauma system performance improvement plan and implement it.
- Establish minimum state performance improvement audit filters to adequately evaluate the trauma process and outcomes statewide, including filters for special populations (pediatrics, spinal cord injury, traumatic brain injury).
- Establish a performance improvement committee of the Governor's EMS and Trauma Advisory Council
- Identify staffing and funding resources at the state level to provide leadership and sustainability for the implementation of the trauma performance improvement process.
- Ensure the state performance improvement process, as well as the performance measures, are inclusive of the continuum of care provided by dispatch, emergency medical services, acute care facilities, trauma centers, and specialty care facilities including rehabilitation.

[Addressed in previous sections](#)

Focus Question 4:

Our state trauma registry has been problematic and we are currently working to replace it. Given the diversity and size of the State, we are interested in your assessment of how we could:

- **proceed with the rebuilding of the registry that the stakeholders can support.**
- **utilize our trauma registry and other databases more effectively, with an emphasis on obtaining outcome data.**

RECOMMENDATIONS

- Reconvene the Registry Solutions Work Group (RSWG), ensuring broad participation of stakeholders, and charge them with making a recommendation to the Department of State Health Services (DSHS) regarding a singular home for the statewide trauma and EMS registries.

[The registry solutions workgroup is ongoing](#)

[Need to insure process meeting targets identified in previous sections](#)

- Once DSHS has made the decision, have the RSWG continue to meet in an effort to promote buy-in among all stakeholders.

[Agree—discussed above](#)

- The RSWG, along with responsible staff from the data repository and reporting entity, must work aggressively to troubleshoot and correct all deficiencies or challenges in the software, reporting, or other use issues as they arise.

Agree

- The primary goal for the first two years of the new system should be to rebuild trust among stakeholders so that they will agree to participate with the new system.

Agree