



Texas Trauma Coordinators Forum

Texas Trauma Coordinators Forum Trauma Program Manager Orientation Manual

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Introduction

Welcome to the trauma and emergency healthcare system in Texas and thank you for your interest in learning more about trauma programs. You will find this manual beneficial as you embark upon this role and we encourage you to retain a copy of this text as it may serve as reference material later in your career.

TRAUMA CARE HISTORY IN TEXAS

Trauma care has evolved into a specialty of many local and regional hospitals over recent decades. Trauma centers have established high quality, comprehensive medical services for those injured. The public relies on trauma centers to provide emergency services in settings ranging from high-density urban areas to distant rural critical access facilities. Regardless of where your program is located, it provides critical services in a timely manner to patients who often need lifesaving measures. As a Trauma Program Manager or Coordinator (TPM/C), it is your primary responsibility to ensure patients are receiving the best care possible. Often this is accomplished by compilation and analysis of data, policy review, and continuous performance improvement patient safety initiatives. The following chapters will provide an overview of many aspects of trauma care and acts as a guide to help you succeed in your new role as a TPM/C.

REGIONAL ADVISORY COUNCIL (RAC) AND TRAUMA SERVICE AREA HISTORY

Regional Advisory Councils (RACs) are designated by the Texas Department of State Health Services as the administrative bodies to develop, implement and maintain the regional trauma and emergency healthcare system for the counties within their designated Trauma Service Areas (A-V). There are 22 RACs in Texas. RACs work closely with their area Hospitals, EMS Agencies, and other organizations for improvement in healthcare and emergency preparedness.

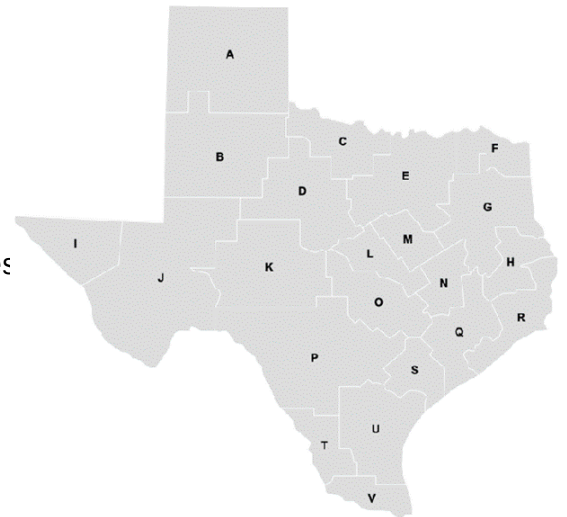
SEE INSET MAP AND APPENDIX A.

TRAUMA SYSTEM LEGISLATION Omnibus Rural Healthcare Rescue Act May 1989 –

- Texas Trauma System enables legislation to:
 - Develop Statewide Trauma System
 - Designate Trauma Facilities
 - Implement Trauma Registry
 - Ensure Patient Care

Texas Board of Health Major Provisions January 1992 –

- Divided State into 22 Trauma Service Areas (TSA)
- Each TSA required to encompass a minimum of 3 counties
- Each TSA must establish a lead trauma facility
- Each TSA may be re-aligned
- Established Regional Advisory Councils
 - Represent Interested Healthcare in TSA
 - Must be a Voluntary Entity
 - Must be Recognized by Bureau
 - Must Develop Regional Trauma System



RACs are the administrative bodies responsible for trauma system oversight within the bounds of a given Trauma Service Area in Texas. Each of the 22 RACs are tasked with developing, implementing, and monitoring a regional emergency medical service trauma system plan. Generally, RAC stakeholders are comprised of healthcare entities and other concerned citizens with an interest in improving and organizing trauma care. As such, not every Regional Advisory

Council is structured the same. However, each RAC has the same objectives – to reduce the incidence of trauma through education, data collection, data analysis and performance improvement. Typically, this is accomplished via the provision of educational programs and performance improvement efforts designed to offer every provider guidance and motive to reduce the incidence of trauma, as well as improve outcomes of trauma patients.

TRAUMA CENTER LEVELS

The leveling of trauma centers is based on the capabilities of each individual hospital and combined with the needs of the region. The Texas Department of State Health Services (DSHS) is responsible for the designation process on a three-year cycle. DSHS utilizes the American College of Surgeons for verification of Level I and Level II trauma centers in Texas. DSHS utilizes Texas EMS and Trauma Acute Care Foundation (TETAF) for the survey process of Level III and Level IV trauma centers in Texas. Basic definitions of each trauma level are outlined below: SOURCES: AMERICAN COLLEGE OF SURGEONS: RESOURCES FOR OPTIMAL CARE OF THE INJURED PATIENT (ORANGE BOOK); AMERICAN TRAUMA SOCIETY; TEXAS DEPARTMENT OF STATE HEALTH SERVICES.

LEVEL I (COMPREHENSIVE)

A Level I trauma center should be a regional resource center and generally serves large cities or population-dense areas. This institution should serve as the lead hospital for a system. In larger population-dense areas, more than one Level I trauma center may be needed. All Level I institutions are expected to manage large numbers of severely injured patients.

- Key elements of a Level I trauma center include 24-hour in-house coverage by general surgeons, and prompt availability of care in specialties such as orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, internal medicine and critical care. Other capabilities include cardiac, hand, pediatric, microvascular surgery and hemodialysis. The Level I trauma center provides leadership in prevention, public education and continuing education of the trauma team members. The Level I trauma center is committed to continued improvement through a comprehensive quality assessment program and an organized research effort to help direct innovations in trauma care.

LEVEL II (MAJOR)

A Level II trauma center provides comprehensive trauma care in two distinct environments that have been recognized in the ongoing verification program sponsored by the ACS-COT. The first environment is a population-dense area in which a Level II trauma center may supplement the clinical activity and expertise of a Level I institution. In this scenario, the Level I and II trauma centers should work together to optimize resources expended to care for all injured patients in their area. This implies a cooperative environment between institutions that allows patients to flow between hospitals, depending on resources and clinical expertise and matched to patient need.

The second Level II environment occurs in less population-dense areas. The Level II hospital serves as the lead trauma facility for a geographic area when a Level I institution is not geographically close enough to do so. Many rural areas use this model. This lead trauma center should have an outreach program that provides support to smaller institutions in the same service area.

- Key elements of a Level II trauma center include 24-hour immediate coverage by general surgeons, as well as coverage by the specialties of orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology and critical care. Tertiary care needs

such as cardiac surgery, hemodialysis and microvascular surgery may be referred to a Level I trauma center. The Level II trauma center is committed to trauma prevention and to continuing education of the trauma team members. The Level II trauma center is dedicated to continued improvement in trauma care through a comprehensive quality assessment program.

LEVEL III (ADVANCED)

A Level III trauma center should have the capability to initially manage the majority of injured patients and have transfer agreements with Level I or II trauma centers for seriously injured patients whose needs exceed the facility's resources. A Level III trauma center must have continuous general surgical coverage; it is expected that the surgeon will be in the emergency department on patient arrival, with adequate notification from the field. The maximum acceptable response time is 30 minutes for the highest level of activation, tracked from patient arrival. A Level III trauma center actively participates on the appropriate RAC; has appropriate services for managing stressful events available to emergency/trauma care providers; and submits data to the Texas EMS/Trauma Registry. A freestanding children's facility, in addition to meeting the requirements in this section, must meet the current ACS essential criteria for a verified Level III trauma center.

- Key elements of a Level III trauma center include 24-hour immediate coverage by emergency medicine physicians and the prompt availability of general surgeons and anesthesiologists. The Level III program is dedicated to continued improvement in trauma care through a comprehensive quality assessment program. The Level III trauma center has developed transfer agreements for patients requiring more comprehensive care at a Level I or Level II trauma center. A Level III trauma center is committed to the continued education of the nursing and allied health personnel or the trauma team. It must be involved with prevention and must have an active outreach program for its referring communities. The Level III trauma center is also dedicated to improving trauma care through a comprehensive quality assessment program.

LEVEL IV (BASIC)

Most Level IV trauma centers are in rural locations and usually supplement care within a larger trauma center. These facilities provide initial evaluation and assessment of injured patients, but most patients will require transfer to a higher-level trauma centers. A Level IV facility must have 24-hour emergency coverage by a physician or advanced practice provider. Specialty coverage may or may not be available, but a well-organized resuscitation team is important. Well-defined transfer plans are essential and, it is expected that the physician or advanced practice provider will be in the emergency department on patient arrival, with adequate notification from the field. The maximum acceptable response time is 30 minutes for the highest level of activation, tracked from patient arrival.

A defining difference between Level IV centers and higher-level trauma centers is the absence of continuous surgical and/or orthopedic coverage. The emergency department at Level IV centers must be continuously available for resuscitation, with coverage by a registered nurse and physician or advanced practice provider, and it must have a physician director. Primary care physicians usually lead the evaluation and resuscitation at these facilities, with the assistance of advanced practice providers. These providers must maintain current Advanced Trauma Life Support® (ATLS) certification as part of their competencies in trauma. To maintain knowledge of current, evidence-based trauma guidelines, all providers should attend trauma-related continuing medical education (CME) of at least 8 hours annually.

The Level IV center actively participates with their local RAC, has appropriate services for managing stressful events available to emergency/trauma care providers; and submits data to the Texas EMS/Trauma Registry.

- Key elements of a Level IV trauma center include basic emergency department facilities to implement ATLS protocols and 24-hour laboratory coverage. Transfer to higher-level trauma centers follows the guidelines outlined in formal transfer agreements. The Level IV center is committed to continued improvement of these trauma care activities through a formal quality assessment program. The Level IV center should be involved in prevention, outreach and education within their community.

Data Collection

DEFINING A TRAUMA PATIENT SOURCE: NATIONAL TRAUMA DATA STANDARD 2018 DATA DICTIONARY

A general definition of what constitutes a trauma patient is a patient who has sustained an external source of injury. In this sense, trauma is widely referred to as a surgical disease as the typical treatment of a trauma patient necessitates the expertise of a surgical skilled healthcare provider.

Trauma patients are further specifically defined as patients that have at least one ICD-10-CM coded injury within the range of **S00-S99, T07, T14, T20-T28, T30-T32 and T79.A1-T79.A9.**

In reference to Texas DSHS verbiage of 'major' or 'severe' trauma patients;

A major trauma patient is defined as:

A person with injuries, or potential injuries, severe enough to benefit from treatment at a trauma facility. These patients may or may not present with alterations in vital signs or level of consciousness or obvious significant injuries (see severe trauma patient) but have been involved in an incident which results in a high index of suspicion for significant injury and/or disability. Co-morbid factors such as age and/or the presence of significant medical problems should also be considered. These patients should initiate a system's or health care entity's trauma response, including prehospital triage to a designated trauma facility. For performance improvement purposes, these patients are also identified retrospectively by **an injury severity score of 9 or above.**

A severe trauma patient is defined as:

A person with injuries or potential injuries that require treatment at a tertiary trauma facility. These patients may be identified by an alteration in vital signs and/or level of consciousness or by the presence of significant injuries and shall initiate a system's and/or health care entity's highest level of trauma response including prehospital triage to a designated trauma facility. For performance improvement purposes, these patients are also identified retrospectively by **an injury severity score of 15 or above.**

INCLUSION CRITERIA FOR DSHS TRAUMA REGISTRY

The DSHS Trauma Registry has adopted the National Trauma Data Standards for inclusion criteria. A visual schematic flowchart for a registry inclusion process can be located in the annually revised NTDB Data Dictionary typically located on page 'V'. The DSHS criteria is the **minimum standard** for inclusion however, note that each facility can set guidelines for their individual registry inclusion criteria, such as snakebites, consults, etc.

At a minimum per DSHS criteria should include:

- All trauma deaths or dead on arrivals (DOAs)
- All major and severe trauma admissions for greater than 23 hours
- Trauma transfer-ins and trauma transfer-outs
- Readmissions within 48 hours after discharge

LOCATING PATIENTS IN YOUR HOSPITAL

There are many opportunities to acquire and identify real-time or near-time locations of trauma patients. Note that reviewing only the ED patient census may not identify trauma patients that were directly admitted to inpatient units at your facility.

- Daily census
- ED activity logs
- Transfer logs
- Admission logs
- Electronic Medical Record (EMR) reports
- Patient rounding
- Transfer center reports

Concurrent identification and review assists with timely feedback and meaningful performance improvement initiatives. Concurrent trauma registry entry allows for real time statistical reporting, as well as meeting compliance with registry standards.

AUDIT FILTERS SEE APPENDIX B FOR LEVEL III AND APPENDIX C FOR LEVEL IV TRAUMA CENTER AUDIT FILTERS
The list of DSHS Performance Improvement audit filters for Advanced Trauma Facility (Level III) and Basic Trauma Facility (Level IV) can be found in the Texas Administrative Code, Title 25, Part 1, Chapter 157, Rule §157.25.

As your trauma program matures, additional audit filters should be developed and monitored based on the needs of the trauma program. Audit filters should include special populations (i.e. burns, pediatrics, geriatrics, etc.). As you review trauma patients, these PI filters offer a flag to dig deeper into the case to find issues and processes that have potential to improve. PI filters do not necessarily imply something is wrong or bad, rather they offer the opportunity to improve the quality of care for the trauma patient.

TRAUMA REGISTRY SOURCE: [HTTPS://WWW.DSHS.TEXAS.GOV/INJURY/DEFAULT.SHTM](https://www.dshs.texas.gov/injury/default.shtm)

The Mission of the Texas Department of State Health Services Injury Epidemiology & Surveillance Branch is to improve the health of Texans by reducing morbidity and mortality resulting from unintentional and intentional injuries.

The Vision is to continually improve the surveillance of reportable events through the use of the EMS & Trauma Registries and other population-based data sources, assess Texas' EMS and trauma care systems utilizing epidemiological principles and public health best practices, and to share knowledge through data dissemination, presentations, and reports for the benefit of public health.

EMS/Trauma Registry Reporting Rules

SOURCE: HEALTH & SAFETY CODE, CHAPTER 92. INJURY PREVENTION AND CONTROL, SUBCHAPTER A.

General Provisions authorizes the Texas Board of Health to adopt rules concerning the reporting of injuries.

Texas Administrative Code, Title 25 (Health Services), Part 1 (Department Of State Health Services), Chapter 103 (Injury Prevention and Control), §103.1 – §103.8 are the rules adopted by the Texas Board of Health to implement the above legislation.

Links to the laws and rules are on the DSHS Injury website in the section titled “Data Reporting Rules” located at <http://www.dshs.state.tx.us/injury>

Data Dictionaries and Definitions

There are custom, regional, state and national required data elements that are listed and defined in specific data dictionaries. Note that if your facility’s registry contains data elements that are additional to the State and National registries, there should be a custom facility registry dictionary developed to define these custom data elements. Be aware that dictionaries should be updated on an annual basis and care must be taken to insure you are operating with the correct version of a dictionary for the correct trauma patient. It is highly advisable to maintain current versions of the DSHS and NTDB dictionaries for reference.

Texas EMS & Trauma Registry FAQ

A quick reference for hospital registry requirements and guidelines can be found at <https://www.dshs.texas.gov/injury/default.shtm> and includes such information as:

What data does a hospital have to include in the report?

For traumas, TBIs and SCIs, all of the required fields listed in the Hospital Data Dictionary, in the file format described in the data dictionary. For submersions, all data requested on the submersion form is required.

How often does a hospital submit data?

Data shall be submitted within three months from the date of discharge. The EMS/Trauma Registry recommends that hospitals and business associates submit data monthly. When there is no data for a particular month, the hospital shall submit a No Reportable Data using the online system within 90 days of that month.

How does a hospital submit data?

The trauma, TBI, and SCI data shall be submitted electronically. The appropriate method is to establish an account with the EMS/Trauma Registry and use the online system for submitting data. Hospitals may use their own software or the free online system for entering data. Submersion data shall be submitted using the paper form, which can be found on the DSHS Injury website.

Performance Improvement and Patient Safety

WHAT IS PERFORMANCE IMPROVEMENT AND PATIENT SAFETY (PIPS)?

PIPS is a confidential systematic review and discussion of the trauma patients’ care with continued monitoring of processes, systems, and the impact both have on outcomes. Trauma PIPS is a multi-step process vital to the existence of your trauma program by documenting the quality of trauma care you provide while providing direction to continually improve.

PIPS is not intended to be punitive, but is designed to identify opportunities to improve the care of the trauma patient.

WHY DO PIPS IN YOUR TRAUMA CENTER?

PIPS is required by the state trauma system in order to be designated as a trauma center. The Rural Trauma Team Development Course (RTTDC) manual quote captures the concept very well: “Without a free and broad ranging review of its own outcomes, a hospital is doomed to keep performing a potentially sub-optimal level.”

All trauma programs are quality programs, so we must constantly strive to provide the best care to all injured patients. Elements of your PI process include:

- Event identification
- Analysis
- Corrective actions to address events
- Implementation
- Evaluation of effect
- Loop closure

The goal of performance improvement is to improve patient care and outcomes while preventing repetitions of substandard care. Recommendation would be to attend a Trauma Outcomes and Performance Improvement Course (TOPIC) and Texas Trauma Designation Education Course (TTDEC).

IDENTIFICATION OF PI EVENTS FOR REVIEW

Potential sources include, but are not limited to:

- EMS documentation and medical record
 - Compare care delivered to standards of care
 - Did care adhere to or deviate from clinical practice guideline (CPGs)
- Referrals (written/verbal)
- Daily patient rounds
- Feedback from tertiary trauma centers
 - Autopsies for potential identification of missed injuries
 - Can be used to determine if appropriate lifesaving interventions were provided
 - Assist to accurately describe injuries in the trauma registry
- Reports from external agencies – as regional PI an data improves
- Audit filters SEE APPENDIX B FOR LEVEL III AND APPENDIX C FOR LEVEL IV TRAUMA CENTER AUDIT FILTERS

LEVELS OF REVIEW

1. Primary Review

Goal of primary review is to identify and validate events.

- Responsibility of the trauma program manager/coordinator.
- Validation of information is key – develop a detailed timeline of the entire episode of care.
- There are several courses of action that may follow the primary review:
 - Resolution of the event/loop closure.
 - If your findings indicate a need for further review, refer the issue on to the trauma medical director.
 - Track and trend the issue for reoccurrence.

Reoccurring events warranting tracking and trending should be complied as overall compliance. Event examples include: nursing documentation of GCS, VS, Tetanus; presence of EMS

runsheets. Example: Community EMS runsheet is missing from a medical record, continue to trend to see if a true event and if persists, address this event with the EMS agency.

2. Secondary Review

Goal of secondary review is in-depth evaluation of identified events.

Responsibility of Trauma Medical Director (TMD) – determines if standard of care is met according to national standards (ATLS, etc.).

There are several courses of actions that may follow the secondary review:

- Resolution of event/loop closure.
- Referral for review can be escalated to a specialty group (i.e. Orthopedics) or multidisciplinary peer review committee.

3. Tertiary Review

This is a structured review by a multidisciplinary group (in-house, system-wide, or regional).

Goal of the tertiary review is to determine course of action to provide loop closure and assigned preventability.

Cases appropriate for committee review:

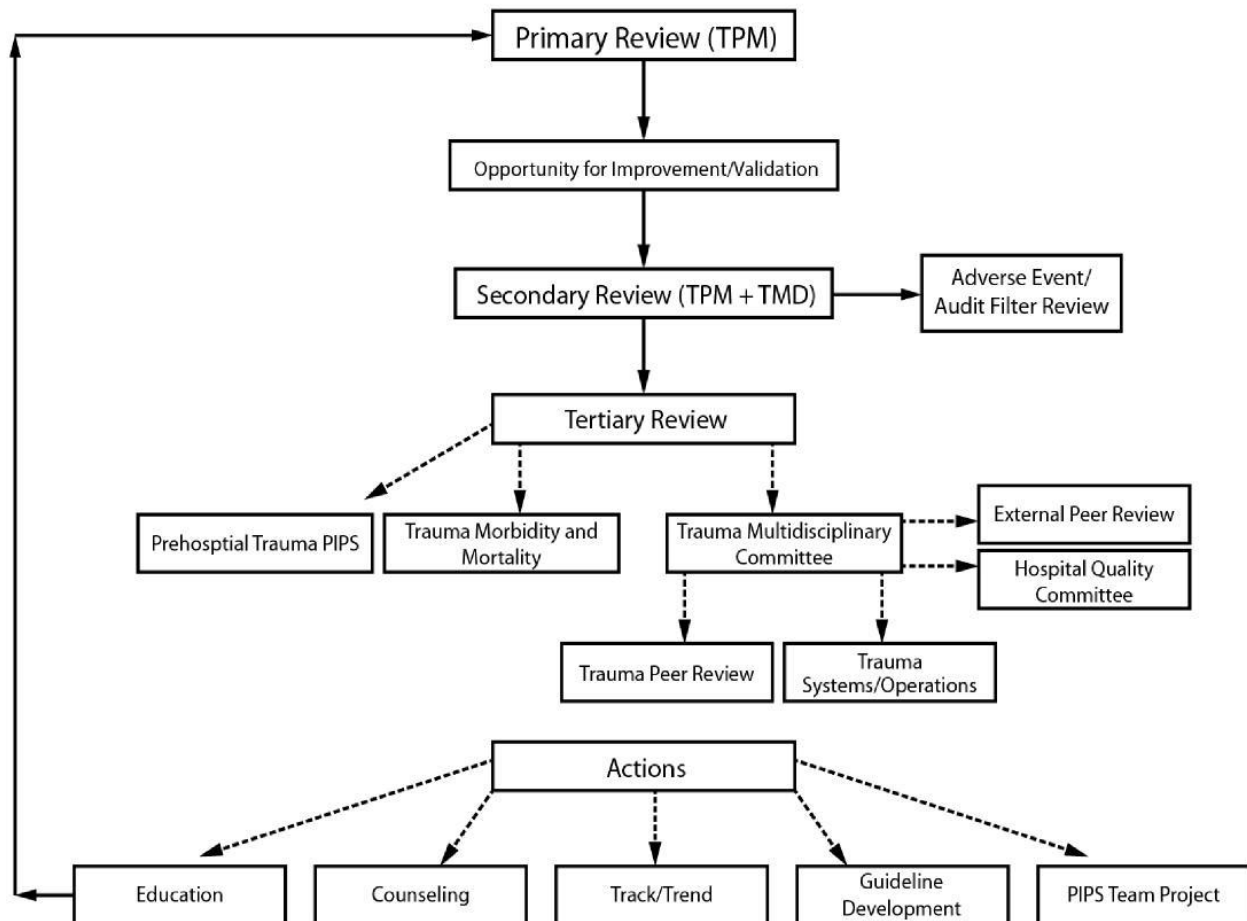
- Deaths
- Transfer outs
- Unexpected outcomes
- Review requested by trauma stakeholder
- Sentinel events
- System events
- Policy/protocol non-compliance
- Low volume populations such as pediatrics, pregnant women, burns.

Can include RAC regional PI involvement if required.

There are several courses of action that may follow tertiary review:

- Mortality determination/judgment as mortality without opportunity for improvement, anticipated mortality with opportunity for improvement, or unanticipated mortality with opportunity for improvement.
 - Mortality with opportunities for improvement provides a gross measure of individual or system errors that were evident in individual and aggregate cases.
 - Mortality without opportunity for improvement provides a gross measure in which no individual or system errors were identified in individual or aggregate cases. Corrective action plan is initiated – this will be explained in detail under the Action Plan section.

Trauma PIPS Levels of Review



TRACKING PI ACTIVITIES

It is important you have a consistent way to track what you and your team are doing from time of event identification to loop closure. There is an example included below. This will also help you organize your PI materials to show to reviewers at your site visit. Make note of every conversation and email you send related to particular cases. Example: "Sent case 12459 to Dr. Jones for review 09/10/2018".

SEE APPENDIX D FOR PERFORMANCE IMPROVEMENT TRACKING FORM

SEE APPENDIX E FOR PERFORMANCE IMPROVEMENT MORBIDITY & MORTALITY LIST

ACTION PLAN DEVELOPMENT

Once an opportunity for improvement is identified through your PI process, appropriate action must be taken to prevent similar future adverse events.

Each event should have an action plan.

Examples of corrective actions:

- Guideline/protocol development

- Focused PI workgroup
- Education
- System enhancements
- Remediation/counseling
- External review

There may be times your action plan will require more than one corrective action.

GUIDELINE/PROTOCOL DEVELOPMENT

- The goal of Clinical Practice Guidelines (CPGs) is to decrease variation in practice.
- Establishes the standard of care for all providers and provides clinical direction.
- Can be clinical or administrative
 - Clinical; Anti-coagulation Reversal
 - Administrative: Trauma call expectations
- Should be evidence based.
- Best if drafted with input from appropriate stakeholders.
- In the development of you CPG, do not re-invent the wheel. Chances are high that if you trauma center needs a CPG about a topic, others have also. Use available resources to identify what others have developed and utilize those as a starting point. CPGs should be applicable to your institution and/or region. Some of your available resources for CPGs include:
 - Contact the Trauma Program Manager at a tertiary trauma center in the region.
 - CPGs can be found at the following professional websites:
 - Eastern Association for the Surgery of Trauma – www.east.org
 - Pediatric Trauma Society – www.pediatrictraumasociety.org
 - Brain Trauma Foundation – www.braintrauma.org
 - American College of Emergency Physicians – www.acep.org
 - Western Trauma Association – www.westerntraumaassociation.org
 - Joint Theatre System – www.usaisr.amedd.army.mil/cpgs.html
 - Query other trauma professionals through organizational list serves (Example: Society of Trauma Nurses)
- All CPGs must be monitored for compliance and achievement of desired outcome.
 - For example, over the past 6 months your PI process identified an increase in poor outcomes for major trauma patients transferred from your hospital to the Level I trauma center and internal review attributed this to variation in resuscitation practice including late blood administration. As part of your action plan, a guideline for Initial Management of Major Trauma was developed to include early blood administration. Monitoring would include:
 - Outcomes – rate of poor outcomes decreases, decrease in time from identification of shock to blood administration.
 - Processes – 100% compliance with ED education regarding PMG.
- Frequency of monitoring will depend on volume – if low volume occurrence, can review each case.
- For more frequent occurrences, helpful to evaluate data in aggregate.

FOCUSED PI WORKGROUP

- Workgroup of stakeholders to work on specific event. Must have oversight by trauma center leadership.
- Use available data to determine effectiveness of suggested changes.

- For example, it is noted that frequently there is an absence of temperature documentation on the trauma flow sheet and nurses are not utilizing warming measures consistently. A workgroup of ED nurses with an interest in trauma is formed to try to improve this problem. They use chart review to evaluate documentation of temperatures, use of warming measures and temperature of the patient upon first destination from the ED. After solutions are implemented, the same metrics are utilized to determine success.

EDUCATION

Examples of Education Action Plan:

- Invite a speaker to present on an area of identified knowledge deficit.
- Address need at nursing competencies.
 - For example, case review demonstrated a knowledge/comfort deficit with pediatric medication dosing. Every ED nurse as a part of annual competencies, was required to take a medication test and return demonstration pediatric drug calculations and dosing.
- Distribute new CPGs with appropriate training:
 - On-line education
 - Newsletters
 - Conferences

SYSTEM ENHANCEMENTS

Examples:

- Resources (staff, support staff, equipment, pharmaceuticals)
 - The state site review at your visit identifies the trauma program manager/coordinator needs more dedicated time for trauma.
 - A delay in care is identified because Mannitol is not available in the ED and has to come from Pharmacy – develop a system to ensure needed pharmaceuticals are available for the team.
 - Child had a poor outcome because of an inappropriate sized ETT was utilized – implement the Broselow system and ensure appropriate equipment is available.
- Facilities
 - There is no helipad at your hospital. You create a process by which part of the parking lot is utilized into a helipad.
- Communication
 - Development of additional forms of communication such as MEDCOM, websites, EMSsystems, list serves, group pages, etc.

REMEDICATION/COUNSELING

- Remediation/counseling is rarely utilized to address PI events and is usually most effective for behavior related issues.
- Should be done as soon as possible after the event.
- Requires direct communication delivered by the Trauma Medical Director or Nurse Manager depending on who is involved.
- Must be documented.
 - The TMD has a one on one conversation with his colleague regarding his poor documentation for trauma activations. He then sends a memo to the trauma program manager/coordinator outlining the conversation and action items that came from the meeting.
- Look for trends and changes in behavior for loop closure.

- Mitigation plan may include involving administration and removing provider from the trauma call panel.

EXTERNAL REVIEW

Sometimes it is helpful with a small staff to have an outside provider review a case. The resources at a Level I and II trauma center can assist with this review. Regional PI committees can also be utilized for system problems and events that cannot be resolved between institutions. Your trauma site visit will also provide an external review of your care and processes.

MEETING STRUCTURE

The trauma program is required to have a forum in which all system, trauma-related mortalities, and other events are reviewed and discussed. The actual structure of how this is operationalized, is at the discretion of each individual center.

One option is a physician peer review committee to review provider related events. Corrective actions and judgments are referred to trauma program leadership and should be chaired by the trauma medical director. In centers where there is a separate physician PI meeting, there should also be a multidisciplinary PI meeting to review all identified events.

Attendees should include (as applicable):

- Emergency Department representatives (physician and nursing)
- Radiology representative
- Surgeons
- Orthopedic representative
- Anesthesia representative
- ICU representative
- Trauma Registrar
- TMD and TPM/coordinator
- Administration
- EMS
- Pediatrics
- Rehab specialists
- APPs involved in trauma care
- Social Services
- Education

Meeting frequency should be at least quarterly. All information presented at trauma PI meetings is confidential and protected by Texas Peer Review Statute. Attendance should be recorded for each meeting so that all disciplines are involved. Minutes from the trauma PI meetings should be written to include in-depth critical review.

SEE APPENDIX D FOR PERFORMANCE IMPROVEMENT TRACKING FORM

SEE APPENDIX E FOR PERFORMANCE IMPROVEMENT MORBIDITY & MORTALITY LIST

EVENT RESOLUTION

Event resolution refers to the ability of your trauma program to show you have resolved an identified issue. Event refers to the cycle of monitoring, identifying, resolving and monitoring again. Your resolution should address key aspects of the problem. In laymen's terms, "We have

solved the problem and here is the proof". Remember that some events take a long time to resolve and some events may never be resolved.

RESOURCES

Never hesitate to call the TPM at the Level I or II trauma center that serves as your tertiary referral center. All are well versed in PI and the PI process and are more than willing to help answer any question(s) you may have.

There are also several online resources that may be helpful:

- TOPIC (Trauma Outcomes & Performance Improvement Course) by the Society of Trauma Nurses (STN): <http://www.traumanurses.org/topic>
- ACS Orange Book: <https://www.facs.org/quality%20programs/trauma/vrc/resources>
- ACS Committee on Trauma: <https://www.facs.org/quality-programs/trauma>

SEE APPENDIX F FOR TRAUMA PERFORMANCE IMPROVEMENT PLAN TEMPLATE

Injury Prevention

Based on your level of trauma center, your Injury Prevention Program may be more robust or focus on a few key items. It can become whatever you envision, however, the projects that you focus on should be driven based on mechanism of injury patterns from either your registry or your local data. The goal is to decide on a focus, gather the data to support the project, and finally implementing your project(s).

For designation purposes, documentation of all injury prevention activities in your hospital, community and region is crucial. Include other programs hosted by your facility, not just those from the trauma program. Create a method of tracking these projects and measuring the outcomes.

The Regional Advisory Council for your area should have an Injury Prevention Committee that meets regularly to provide an open, consensus-driven environment across all relevant disciplines in the development of regional guidelines, processes and educational opportunities to facilitate injury prevention programs, projects and campaigns in an effort to better educate the public and healthcare workers in the communities we serve. Some examples of the many campaigns and projects include but are not limited to:

- Fall Awareness
- Driving Safety
- Child Heat Stroke
- Child Passenger Safety
- Safe Sleep for Children
- Safe Gun Storage
- Distracted Driving
- Water Safety
- Head Injury Awareness
- Heat Safety

REGIONAL ADVISORY COMMITTEE INJURY PREVENTION COMMITTEE

This group was formed by reaching out to community partners (healthcare and non-healthcare) with an interest in injury prevention efforts as well as current injury prevention programs. Participating resources include Department of Transportation, local energy providers, public safety agencies, and community health providers. For more information about the Regional Injury Prevention Committee or to attend the next meeting, contact your local RAC Chair or committee Chair.

DEVELOPING LOCAL IP INITIATIVES:

Collaborating with local organizations and agencies is a great way to develop a local injury prevention initiatives. To effectively reach your community, you may benefit from engaging several stakeholders such as the ones listed below:

- **Community Department of Human Resources**
 - They will help find the correct contact person to help you with your current project.
 - Contact your county directly.
- **Local Law Enforcement**
 - Network with your local law enforcement partners to develop strategies regarding injury prevention.
 - Contact your local Sheriff's Office and Police Department.
- **Physical Therapy Department**
 - Collaborating with your own PT department can often help you determine patterns of learning needs and can assist you with getting the message delivered.
- **Texas Department of Transportation**
 - Excellent resource for informational statistics and general road safety injury prevention.
- **MADD**
 - This can be a great resource in your community to develop an injury prevention campaign regarding drunk driving.
 - You can find your local office here: <http://www.madd.org/local-offices/>
- **WATCH Coalition**
 - This coalition has participation by nurses, physicians, EMS providers, public health, medical examiners, child advocacy groups, and RAC employees. A poster was developed for region-wide use. The message was communicated through the community by newspaper and television news coverage.
 - <http://www.voicessa.org/watersafety>
- **Centers for Disease Control and Prevention**
 - Another excellent resource of information, free pamphlets, statistics and even podcasts to watch. Once you determine your focus, the trick is in finding the information to support your efforts.
 - Contact: www.cdc.gov 1600 Clifton road, Atlanta, GA 30333
- **Trauma Managers and Coordinators – Don't Forget US!**
 - We are here to help!
 - Contact: See Section 4 of this Orientation Manual
- **Safe Kids**

Contacts and Resources

The Texas Trauma Coordinators Forum (TTCF), Texas Department of State Health Services and your Regional Advisory Council (RAC) maintains a contact list of trauma program managers, coordinators, and registrars in your Trauma Service Area (TSA). To be included in this database or to attend a TTCF meeting, information can be found on the TTCF Mentorship & Membership Committee page on the website.

Many resources developed by trauma program managers, coordinators, and registrars may also be found the TTCF website.

Texas Department of State Health Services (DSHS)
(512) 834-6700
<https://www.dshs.state.tx.us/emstraumasystems/>

Texas EMS Trauma and Acute Care Foundation (TETAF)
<http://www.tetaf.org>

Texas Trauma Coordinators Forum (TTCF)
<http://www.ttcf.org>

American College of Surgeons (ACS)
<https://www.facs.org/quality-programs/trauma>

National Trauma Data Bank (NTDB) Data Dictionary
<https://www.facs.org/quality-programs/trauma/ntdb/ntds>

Society of Trauma Nurses (STN)
<http://www.traumanurses.org>

American Trauma Society (ATS)
<http://www.amtrauma.org>

Trauma Center Association of America (TCAA)
<http://traumacenters.org>

Pediatric Trauma Society
<http://pediatrictraumasociety.org>

Emergency Management

CRITERIA – The Trauma Program Manager/Coordinator (TPM/C) / Trauma Medical Director (TMD) shall participate in a leadership role in the hospital, community, and regional emergency management (disaster) response committee(s).

Effective January 1, 2014, The Joint Commission approved new and revised requirements addressing leadership accountability for hospital-wide emergency management in hospitals and critical care access hospitals. Research indicates that hospitals plan and respond more effectively when accountability for hospital-wide emergency management is assigned to

leadership at a high level of the organization. While the “Emergency Management” (EM) chapter in the accreditation manuals already outlines a comprehensive approach to planning, preparedness, testing, and other essential emergency management activities, The Joint Commission determined that a clearer description of leadership-level oversight of emergency management was necessary.

The new and revised elements of performance, which were effective January 1, 2014, accomplish the following:

- Require the organization to identify a leader to oversee emergency management.
- Require the organization to consider input from staff at different levels when evaluating exercises and responses to events.
- Require senior hospital leadership to review the organization’s emergency management planning activities, performance in exercises, and responses to actual events to facilitate improved communication of problem areas and implementation of hospital-wide solutions.

For more information regarding hospital requirements, please reference The Joint Commission Requirements online at <https://www.jointcommission.org/assets/1/18/JCP0713EmergencyMgmtOversight.pdf>, visit <https://www.jointcommission.org/emergencymanagement.aspx> or contact Lynne Bergero, MHA, project director, Department of Standards and Survey Method, at lbergero@jointcommission.org.

The Joint Commission standards of care for Disaster Preparedness and Response has evolved from studies of significant disasters over the last five years. The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) guides centers on managing consequences to; provide safe and effective patient care during an emergency, clearly defining staff roles, training to those roles and responsibilities; and sustaining staff competencies over time. There are six focus areas for hospitals to demonstrate they have proper plans and response mechanisms to a disaster. During planned exercises, the [organization] monitors, at a minimum, the following six critical areas:

- Communications – Both internal and external to community care partners and state/federal agencies.
- Supplies – Adequate levels and appropriateness to hazard vulnerabilities.
- Security – Enabling normal hospital operations and protection of staff and property.
- Staff – Roles and responsibilities within a standard Hospital Incident Command structure.
- Utilities – Enabling self-sufficiency for as long as possible with a goal of 96 hours.
- Clinical Activity – Maintaining care, supporting vulnerable populations, alternate standards of care.

Recent disaster studies since 2005 have exposed difficult challenges. Maintaining the medically frail is difficult requiring major focus. Keeping hospital beds open and available is vital in participating in and meeting community responsibilities. Scarce resources against high demand in oxygen, vents, dialysis, pharmacy and home health care necessitate a broader scope of approach to planning, mitigation, response and recovery efforts.

Response Systems’ team of medical experts can help your organization define policy, procedures and planning tools based on the scenarios your facility and community is most likely to encounter.

SOURCE: [HTTPS://WWW.JOINTCOMMISSION.ORG/](https://www.jointcommission.org/)

HOSPITAL EMERGENCY MANAGEMENT COMMITTEE

A hospital emergency management committee is responsible for oversight and preparedness at the facility level. This committee implements operational aspects of the Emergency Operations Plan (e.g. drill planning and response documentation, developing and maintaining inventory of facility assets, etc.), and ensures The Joint Commission Standards are followed. The TMD / TPM/C should play an active role in helping ensure that all trauma patients are taken care of to the best of the facilities' capabilities and tie into the regional coordination process.

COORDINATION

Generally, preparedness activities are coordinated and accomplished at the facility, and the regional level. Each hospital should have a facility emergency management committee that meets and is responsible for oversight and preparedness at the facility level. In addition, community planning and participation is accomplished by high-level participation by the TMD / TPM/C / EM coordinator at the regional Emergency/Disaster Preparedness Committee. Participation and/or involvement with the hospital and regional committee will ensure that the TMD / TPM/C meet the leadership role criteria.

Trauma Education

There are numerous educational resources available for all members of your trauma service. Listed below are some of the predominant offerings that are available. Note that many trauma organizations offer educational opportunities that are tailored to clinical, management, performance improvement, injury prevention, and registry personnel.

CLASSES/CERTIFICATIONS

ACLS – The Advanced Cardiovascular Life Support course highlights the importance of high-performance team dynamics and communication, systems of care, recognition and intervention of cardiopulmonary arrest, immediate post-cardiac arrest, acute dysrhythmia, stroke, and acute coronary syndrome (ACS). SOURCE:

[HTTP://CPR.HEART.ORG/AHA/ECC/CPR/ANDECC/TRAINING/HEALTHCAREPROFESSIONAL/ADVANCEDCARDIOVASCULARLIFE-SUPPORT/ACLS/UCM_473186_ADVANCED-CARDIOVASCULAR-LIFE-SUPPORT-ACLS.JSP](http://CPR.HEART.ORG/AHA/ECC/CPR/ANDECC/TRAINING/HEALTHCAREPROFESSIONAL/ADVANCEDCARDIOVASCULARLIFE-SUPPORT/ACLS/UCM_473186_ADVANCED-CARDIOVASCULAR-LIFE-SUPPORT-ACLS.JSP)

AIS Coding Course – The AAAM's course is designed for trauma program managers/coordinators, registrars, physicians, hospital records personnel and researchers or engineers who are responsible for injury databases. Topics covered include: a brief history of injury scaling methods, the Abbreviated Injury Scale, uses, coding rules and conventions, and methods for assessing the multiply injured patient.

SOURCE: <https://www.aaam.org/abbreviated-injury-scale-ais/training-courses/>

ATCN – Advanced Trauma Care for Nurses is an advanced course designed for the registered nurse interested in increasing his/her knowledge in management of the trauma patient with multiple injuries. The ATCN course is taught concurrently with ATLS and provides skills stations in initial assessment and management, airway and ventilatory management, pediatric trauma, hemorrhagic shock, musculoskeletal & spinal trauma, and head trauma.

SOURCE: [HTTP://WWW.ATCNNURSES.ORG/](http://WWW.ATCNNURSES.ORG/)

ATLS – Advanced Trauma Life Support program can teach you a systematic, concise approach to the care of a trauma patient. ATLS was developed by the American College of Surgeons (ACS) Committee on Trauma (COT) and was first introduced in the US and abroad in 1980. Its courses provide you with a safe and reliable method for immediate management of

injured patients. This course teaches you how to assess a patient's condition, resuscitate and stabilize him or her, and determine if his or her needs exceed a facility's capacity. It also covers how to arrange for a patient's inter-hospital transfer and assure that optimum care is provided throughout the process. If you do not treat trauma patients frequently, an ATLS course provides an easy method to remember for evaluation and treatment of a trauma victim.

SOURCE: [HTTPS://WWW.FACS.ORG/QUALITY-PROGRAMS/TRAUMA/ATLS](https://www.facs.org/quality-programs/trauma/atls)

ATS Trauma Program Manager Course – The American Trauma Society's Trauma Program Manager Course, designed by expert Trauma Program Managers throughout the country, is a two-day, interactive course providing Trauma Program Managers, members of the trauma program, and those interested in joining the field with the core concepts of building a comprehensive trauma program. SOURCE: [HTTP://WWW.AMTRAUMA.ORG/?PAGE=TPMCOURSE](http://www.amtrauma.org/?page=TPMCOURSE)

ATS Trauma Registry Course – The ATS' Trauma Registry Course (TRC) has expanded to provide a deeper look into the issues that affect a trauma registrar. The TRC provides a more standardized understanding of the specialty and approach to the task of maintaining a trauma registry for the seasoned registrar. Lectures are designed to build upon experience, program maturity, and institutional needs. In this manner, the TRC is designed and appropriate for trauma registrars / data managers of all levels of experience. The TRC provides the student with national standards definitions and methodologies essential to a comprehensive trauma registry.

SOURCE: <http://www.amtrauma.org/?page=TRC>

DMC – Data Management (Registry) Course sponsored by TETAF – This course is designed to improve the skill sets of the data entry specialist specific to data input, data abstraction, and statistical reporting, which are used to improve the state's emergency care system.

SOURCE: [HTTP://TETAF.ORG/EDUCATION/](http://tetaf.org/education/)

ENPC – ENA developed the Emergency Nursing Pediatric Course to establish a standardized body of pediatric emergency nursing knowledge and to improve the care of all pediatric patients. Accurate assessment of a child with an acute illness or injury requires special knowledge and skills. ENPC gives nurses the tools to provide expert care for patients from birth to adolescence.

SOURCE: [HTTPS://WWW.ENA.ORG/EDUCATION/ENPC-TNCC/ENPC/PAGES/ABOUTCOURSE.ASP](https://www.ena.org/education/enpc-tncc/enpc/pages/aboutcourse.asp)

PALS – Pediatric Advanced Life Support is a classroom, video-based, instructor-led course that uses a series of simulated pediatric emergencies to reinforce the important concepts of a systematic approach to pediatric assessment, basic life support, PALS treatment algorithms, effective resuscitation and team dynamics. The goal of the PALS course is to improve the quality of care provided to seriously ill or injured children, resulting in improved outcomes.

SOURCE:

[HTTP://CPR.HEART.ORG/AHA/ECC/CPR/ANDECC/TRAINING/HEALTHCAREPROFESSIONAL/PEDIATRIC/UCM_476258_PALS.JSP](http://cpr.heart.org/AHA/ECC/CPR/ANDECC/TRAINING/HEALTHCAREPROFESSIONAL/PEDIATRIC/UCM_476258_PALS.JSP)

PCAR – Pediatric Care after Resuscitation is the pediatric-specific version of the adult focused TCAR course, ideal for nurses who primarily or exclusively care for children. The PCAR course offers acute care, critical care, perioperative, and rehabilitation nurses the foundational, evidence-based information and critical thinking skills necessary to address the needs of the hospitalized, injured child. PCAR covers a wide range of pathophysiologic and nursing concepts and is designed to be a broad, core-level program, rather than an advanced or specialty-specific course. Although registered nurses are PCAR's target audience, the information contained in this program has proven useful to physical therapists, paramedics, social workers, dieticians, respiratory therapists, speech and occupational therapists, LVNs/LPNs, and others who interact with pediatric trauma inpatients. SOURCE: [HTTP://TCARPROGRAMS.ORG/PCAR-PROGRAM-DESCRIPTION/](http://tcarprograms.org/pcar-program-description/)

RTTDC – Developed by the Rural Trauma Committee of the American College of Surgeons Committee on Trauma, Rural Trauma Team Development Course is based on the concept that in

most situations, rural facilities can form a trauma team consisting of at least three core members. During this course, participants will learn how to organize a rural trauma team with defined roles and responsibilities for the members, prepare a rural facility for the appropriate care of the injured patient, identify local resources and limitations, assess and resuscitate a trauma patient, initiate the transfer process early, establish a performance improvement process, encourage effective communication, define the relationship between the rural trauma facility and the regional trauma system. SOURCE: <https://www.facs.org/quality-programs/trauma/education/rttdc>

TCAR – Unlike standardized trauma programs targeted at prehospital and emergency care providers, the Trauma Care after Resuscitation (TCAR) course was specifically created to meet the learning needs of INPATIENT trauma nurses. This live, 2-day educational offerings give hospital staff members the foundational, evidence-based information and critical thinking skills necessary to meet regulatory requirements and provide excellent care to this challenging patient population. SOURCE: <http://tcarprograms.org/tcar-program-description/>

TNCC – The Emergency Nurses Association developed The Trauma Nursing Core Course to establish a standardized body of trauma nursing knowledge and to improve the care of all trauma patients. TNCC, widely recognized as the premier course for hospitals and trauma centers worldwide, empowers nurses with the knowledge, critical thinking skills, and hands-on training to provide expert care for trauma patients. SOURCE: <https://www.ena.org/education/enpc-tncc/tncc/pages/aboutcourse.aspx>

TOPIC – Society of Trauma Nurses’ Trauma Outcome Performance Improvement Course is designed for the improvement of trauma care. This course was developed in response to the need for education and better understanding of the Performance Improvement process in trauma care. TOPIC focuses on the ongoing assessment of the continuum of trauma care with a structured review of process and discussions of strategies to monitor trauma patient outcomes (TOPIC Courses, 2014). SOURCE: <http://www.traumanurses.org/topic>

TTDEC – Texas Trauma Designation Education Course – TTCF’s TTDEC course is designed specifically for newly appointed trauma program managers and coordinators in Texas. The course is offered annually in May and is highly acclaimed. SOURCE: <http://www.ttcf.org/events/ttdec-course/>

CONFERENCES

The American Association for the Surgery of Trauma – The annual meeting includes presentations of the latest studies from work dedicated to the advancement of clinical and scientific knowledge related to the care of the trauma patient.

Austin Trauma and Critical Care Conference – The conference offers basic and cutting edge guidelines and technology for evaluation, diagnosis and management of trauma patients. The curriculum is designed to enhance the knowledge and skills of physicians, nurses, allied health, and prehospital personnel caring for critically ill and injured patients in rural, urban and suburban hospitals (Austin Trauma and Critical Care Conference).

Clinical Data Management Users Conference – The annual CDM conference focuses on teaching you use of specific tools within their research registries: TraumaBase© NeuroBase© and ResearchBase©. Courses are available for all experience levels and an on-going help desk for you to ask your most important questions to and test the information you learn.

Digital Innovations Users Conference – The annual Digital Innovations (DI) Users Conference provides information presentations and extension training opportunities for their users. In the trauma forum, the DI Collector program is used throughout most of the region to serve as the registry tool for our trauma patients. Topics covered at this conference include ICD-10 coding, data validation, statistical reports, outcome data, and benchmark reports.

Society of Trauma Nurses Annual Conference – This annual conference helps to educate nurses and providers involved in the care of trauma patients and the management of trauma programs and trauma systems.

RAC Regional Advisory Councils – Individual RACs in Texas conduct annual conferences with excellent opportunities for local and regional networking and trauma program support.

Texas EMS Conference – The annual conference, held in Dallas/Fort Worth, provides comprehensive education from leaders in EMS, features state-of-the-art exhibits, and allows for great networking opportunities.

TTCF Texas Trauma Coordinators Forum conducts in-person quarterly meetings in February, May, August, and November and offers no cost trauma CEs, networking, and valuable trauma program support.

TQIP – The American College of Surgeon's TQIP Annual Scientific Meeting brings together trauma medical directors, program managers, coordinators, and registrars from participating and prospective Trauma Quality Improvement Program (TQIP) hospitals and provides an ideal venue for networking and for the sharing of best practices.

Preparing for Trauma Designation Site Visit

OVERVIEW

The trauma designation process is a quality program aimed at assuring seriously injured patients receive the best care possible based on the resources available at a given hospital. This process requires the commitment and support of hospital administration, physicians, and allied health partners. For initial designation, at least one year should be allowed to prepare for a site visit, as designation requirements include a reporting period of at least six months.

The site reviewers will compare the components of your trauma program with those required for your chosen level of trauma designation. Refer to DSHS essential criteria for minimum standards. This section will focus on those hospitals undergoing site review by the DSHS. Trauma Program Manager/Coordinators from facilities seeking review by the American College of Surgeons, are encouraged to contact the Trauma Program Managers from Level I and II facilities in your regions.

Listed below are the steps involved in preparing for your hospital's site visit.

ONE YEAR PRIOR TO THE VISIT

1. Decide the level of designation for which your hospital will apply.
 - a. The level of designation is determined by the resources at your hospital. It has no bearing on the quality of care provided. (See Level Definitions in this manual)
 - b. Level I and II trauma centers are verified by the American College of Surgeons and designated by the Texas Department of State Health Services.

- c. Level III trauma centers can be verified by the American College of Surgeons as well and are also designated by the Texas Department of State Health Services. Most Level III centers in Texas are designated by the State. REFERENCE: TEXAS ADMINISTRATIVE CODE, TITLE 25, PART 1, CHAPTER 157, RULE §157.25.
- d. Level IV trauma centers are designated by the Texas Department of State Health Services.

Consider contacting the State Hospital Designation Coordinator early on to discuss your site visit and the level your hospital should consider for designation.

Consider contacting an experienced Trauma Program Manager/Coordinator at a hospital in your region or affiliated with your hospital system as a mentor through this process.

- 2. Complete the DSHS trauma application appropriate to your level that will be submitted by your facility to familiarize yourself with the materials needed to submit with the application.
- 3. Assure all members of the trauma team have the required trauma education (refer to essential criteria).
- 4. Begin entering patients into the trauma registry. Patients are to be entered within 60 days of discharge from your hospital.
 - a. Consider delegating trauma registry duties to someone else. Possibilities include trauma registrars, medical records, QI department, ED or ICU staff nurse, etc. Assure proper training.
- 5. Evaluate injury prevention activities. The number of these will depend on the size of your facility and the number of resources you have. (See Injury Prevention section of this manual)
- 6. Join your local regional trauma advisory committee and begin attending meetings.

SIX MONTHS PRIOR TO THE VISIT

- 1. Continue performance improvement activities.
 - a. Daily review of cases.
 - b. PI reviews at committees.
 - c. Getting to “Loop Closure” on identified events.
 - d. Entering registry cases.
- 2. Continue completing education requirements.
 - a. Common reason hospitals do not pass initial designation, is failure to have all trauma team members current in educational requirements.
- 3. Complete and submit the trauma designation application. You will designate your “reporting year” on this application. Have this timeframe end no, sooner than 3 months prior to your visit so that you have adequate time to prepare all of your materials for the site reviewers.

THREE MONTHS PRIOR TO THE VISIT

- 1. Work with state designation coordinator to correct any issues/gaps found in the application.
- 2. Schedule your site visit (this will be done by the state hospital designation coordinator).
- 3. Reserve a room large enough to accommodate your hospital administrator, trauma medical director, three site reviewers, nursing administrator, and any others who may attend the meeting.
- 4. Block calendars on the above attendees. At a minimum, your trauma medical director and hospital administrator need to be available for the site reviewers. The medical director

should be available the entire day. The administrator should be available during the exit interview at a minimum.

5. Assure a large room enough to accommodate chart review for two site reviewers. Assure two people highly experienced in navigating the EMR are available (one for each reviewer).

ONE MONTH PRIOR TO THE VISIT

1. Request letter of participation from your local RAC.
2. Pull charts for the site reviewers. Cases should be identified through the trauma registry and placed in the following categories:
 - a. Deaths
 - b. Trauma Team Activation Patients
 - c. Transfers out
 - d. Trauma admissions
 - e. Trauma patients admitted by non-surgeon (Level III centers)

A record should not be in more than one category. For example, if you have a patient death that was also a non-surgical admission, the case should be in the death category only.

3. For each case – print the following:
 - a. ED record (trauma flow sheet if used)
 - b. Ambulance record
 - c. ED provider note
 - d. Surgeon note (Level III only)
 - e. All PI minutes, forms, etc. showing reviews for each record
4. Create a report to give the site reviewers about your trauma program. Power Point works well. Include the following information:
 - a. Trauma volumes, deaths, transfers out, ED volumes.
 - b. General information about your hospital (specialty services, catchment area, medical staff, etc.)
 - c. Ambulance services
 - d. Information on your Multidisciplinary Committee and Peer Review (who is on each, how often each committee meets, attendance requirements, etc.)
 - e. PI process – how events are identified, how they are reviewed, how loop closure is achieved.
 - f. Re-designation visit – How opportunities identified at last visit have been addressed.

ONE WEEK PRIOR TO THE VISIT

1. Assure all charts have been pulled and are in order.
 - a. Review each case. You will want to be familiar with them.
2. Assure one person who is experienced in navigating the EMR is available for each site reviewer the day of the review.
3. Assure no last minute meetings have been put on the trauma medical director or administrator's calendars.
4. Schedule something special just for you!
5. Schedule an after site visit "debriefing" for your trauma team (restaurant, party, etc.).

DAY OF VISIT

1. Greet site reviewers and state hospital designation coordinator at a mutually agreed upon location.
2. **SHOW OFF YOUR PROGRAM!**
 - a. You have just spent a year preparing for this day. Show off what you have done!
3. The site reviewers will offer advice based on their experience as trauma providers. Listen to them. They are there to help.
4. The tour of the hospital will follow the path of the patient. The reviewers will look at the ambulance bay, ED trauma bay, lab, radiology, OR, ICU, helipad. On the Minnesota Trauma System website look under site reviewers resources, then Tour checklist. Here you will see everything the reviewers need to find during the hospital tour. Much of this is equipment in the ED. (Look at Equipment section in this manual).
5. Expect at least two hours for chart review. You will be asked questions about the patients and/or PI. Having the PI sheets with the records will make everyone's job easier.
6. The hospital designation coordinator will go over your PI process. Be prepared to speak to how you review cases and bring things to loop closure.
7. The site reviewers will take about 30 minutes after chart reviews to summarize their findings. You will be given a time for the exit interview.
8. During the exit interview, expect to hear strengths of your program and opportunities for improvement. Having administration present to hear about these opportunities directly from the site reviewers is powerful. Get them there!

AFTER VISIT

1. Attend your "debriefing" session.
2. Take time off! Re-acquaint yourself with your family!
3. Pat yourself on the back for a job well done!
4. Update your local RAC on your designation.

Time Management

PRIORITIES

- Performance Improvement program is near real time or concurrent.
- Critical discussion of the care provided by the facility and the documentation of such review is descriptive and thorough.
- Staying on top of trauma staff education expiration dates.
- TPM/C must establish a working relationship with the TMD and all engage regularly for patient care review. TMD should be the champion for your trauma program.

MULTIPLE ROLES

Time dedicated to the trauma program may be divided between employees. Staffing should be adequate for hospitals trauma patient volume. The program's responsibility lies with the TPM/C, however, tasks may be assigned to other team members. Oversight should remain with the program manager. If multiple roles are performed, you will need to be able to demonstrate how time is divided.

Trauma Medical Directors

WORKING RELATIONSHIPS

The Trauma Program Manager (TPM) and the Trauma Medical Director (TMD) share the responsibility for the success of their trauma team. Like all partnerships, the TPM / TMD must support each other, share a common vision, establish a pool of common values and mutually respect each other and the members of their team.

They must be transparent in their pursuit of excellence, resilient in their discovery of failures and human behaviors and fearless in their speaking of the truth. Even if reporting to a different hierarchy, both share the responsibility of pursuing optimal outcomes for the trauma patient.

The clear delineation of roles and responsibilities is crucial from the onset. Boundaries, timeliness and working relationships need to be defined and discussed candidly. The logistics of accomplishing the work need to be honestly assessed and assigned. An important aspect of your relationship include establishing the best means of communication (phone, email, in-person meetings). Regardless of how you choose to communicate, transparency and confidentiality are key. Your TMD should be an ally, not the enemy. Never surprise them or ambush them in a meeting. Have difficult conversations in private. The TMD has the difficult responsibility in holding the medical staff accountable for their performance as well as setting the tone for the trauma center.

EXECUTIVE SUMMARY

Administrative

- Participate in the research, development and implementation of trauma policies, protocols and practice guidelines.
- Organize, direct and integrate the trauma program with all other departments and services within the hospital.
- Promote a cooperative and collaborative working environment among the clinical disciplines involved in trauma care.
- Maintain an effective working relationship with the medical staff, trauma service staff, administration and other departments.
- Provide advice and direction in recommending privileges for the trauma service.
- Participate in trauma program marketing activities.
- Promote a process that fosters cost-effective, high quality patient care.
- Assesses need for equipment and supplies while maintaining budgetary restraints.
- Assist the Trauma Program Manager/Coordinator in developing and meeting the trauma program budgetary goals.

Program Responsibilities

- Lead efforts to develop and maintain a trauma center.
- Establish program goals and objectives consistent with those of the hospital develop and provide input on the development and maintenance of practice guidelines, policies and methodologies for medical/surgical trauma care.
- Organize, direct and implement departmental practices to assure continued compliance with applicable laws including the guidelines established by the Statewide Trauma System and The Joint Commission.

- Demonstrate positive interpersonal relationships with colleagues, referral MDs, hospital personnel, and patients/families in order to achieve maximum operational effectiveness and customer satisfaction.
- Make appropriate referrals for specialty services and communicate regularly with referring physicians as appropriate.
- Ensure that adequate attending physician availability is provided to render care to trauma patients.
- Ensure establishment of physician/surgeon call schedules for all trauma care, excluding those who do not meet educational and credentialing requirements.
- Provide trauma care leadership and consultation for emergency, surgery and intensive care unit departments.
- Participate in regional and statewide activities affecting the trauma program.
- Attend local and national meetings and conferences to remain current regarding issues relevant to the performance of duties.
- Demonstrate consistent, efficient, cost effective and quality trauma care at all times.
 - Participate in trauma patient/family satisfaction projects as developed by the hospital.
 - TMD oversees the clinical practice of medical staff through performance improvement and credentialing.

Performance Improvement

- Determine and implement PI activities appropriate to the trauma program.
- Oversee the trauma PI program and participate in other quality initiatives that deal with the care of injured patients.
- Review and investigate all trauma PI inquiries in collaboration with the Trauma Program Manager/Coordinator and refer to the appropriate committees.
- Monitor compliance with trauma treatment guidelines, policies and protocols.
- Assure that the quality and appropriateness of patient care are monitored and evaluated and that appropriate actions based on findings are taken on a consistent basis.
- Report quality of care issues promptly to appropriate individuals, including the Trauma Program Manager/Coordinator and hospital administration.
- Identify and correct deficiencies in trauma care policies, guidelines and protocols.
- Consult with appropriate medical staff and administration regarding quality care issues and adverse outcomes; identify areas to improve patient care.
- Assure that continuum of care is maintained.
- Identify representatives from various disciplines appropriate to participate in PI activities.
- Coordinate, schedule and facilitate the PI peer review process.
- Chair the Morbidity and Mortality Committee meeting and the Multidisciplinary Trauma Conference.
- Review all trauma-related peer review and initiate action as necessary.
- Assist the Trauma Program Manager/Coordinator in evaluating the effectiveness of corrective actions resulting from PI processes.
- Assume responsibility for the accuracy and validity of trauma statistics.

Clinical Education

- Support the requirements for trauma CME by participating and assisting in the education and training of hospital personnel physicians and specialists.
- Provide education for hospital staff regarding trauma program policies and appropriate medical practices.

Community Outreach

- Maintain relations with community organization and legislative bodies whose activities relate to trauma care and injury prevention.
- Participate in hospital outreach activities.
- Develop and participate in trauma community education and injury prevention activities.
- Function as a liaison to other hospitals within the region.

Program Initiative

- Lead the hospital in program development.
- Improve outcomes through implementation of evidence-based practice guidelines.

Knowledge and Skill

Communicate effectively with a wide variety of intra- and inter-facility staff and administration using both oral and written communication.

Possess critical thinking, analytical, teaching/coaching and research skills.

Oversee, participate in and develop projects that ensure the cost-effectiveness of care provided by physicians and the hospital.

Networking

- American College of Surgeons
- Local Level I Trauma Medical Director
- Regional Advisory Council Division Director
- Regional Trauma Program Managers
- Regional Trauma Coordinators
- Regional Trauma Medical Directors
- DSHS Regional Preparedness Representatives
- Texas EMS Trauma and Acute Care Foundation
- Governor's EMS and Trauma Advisory Council
- Texas Trauma Coordinators Forum

Equipment

HAVING THE PROPER EQUIPMENT IS A MUST

The essential equipment list is located in Appendix K (Level III and IV Equipment Checklists) and Appendix L (Pediatric Injuries and Equipment Checklists). Even the essential checklist may not be all inclusive of the items needed. Keeping a copy of the equipment list should be kept in the emergency department to ensure all needed resources are available.

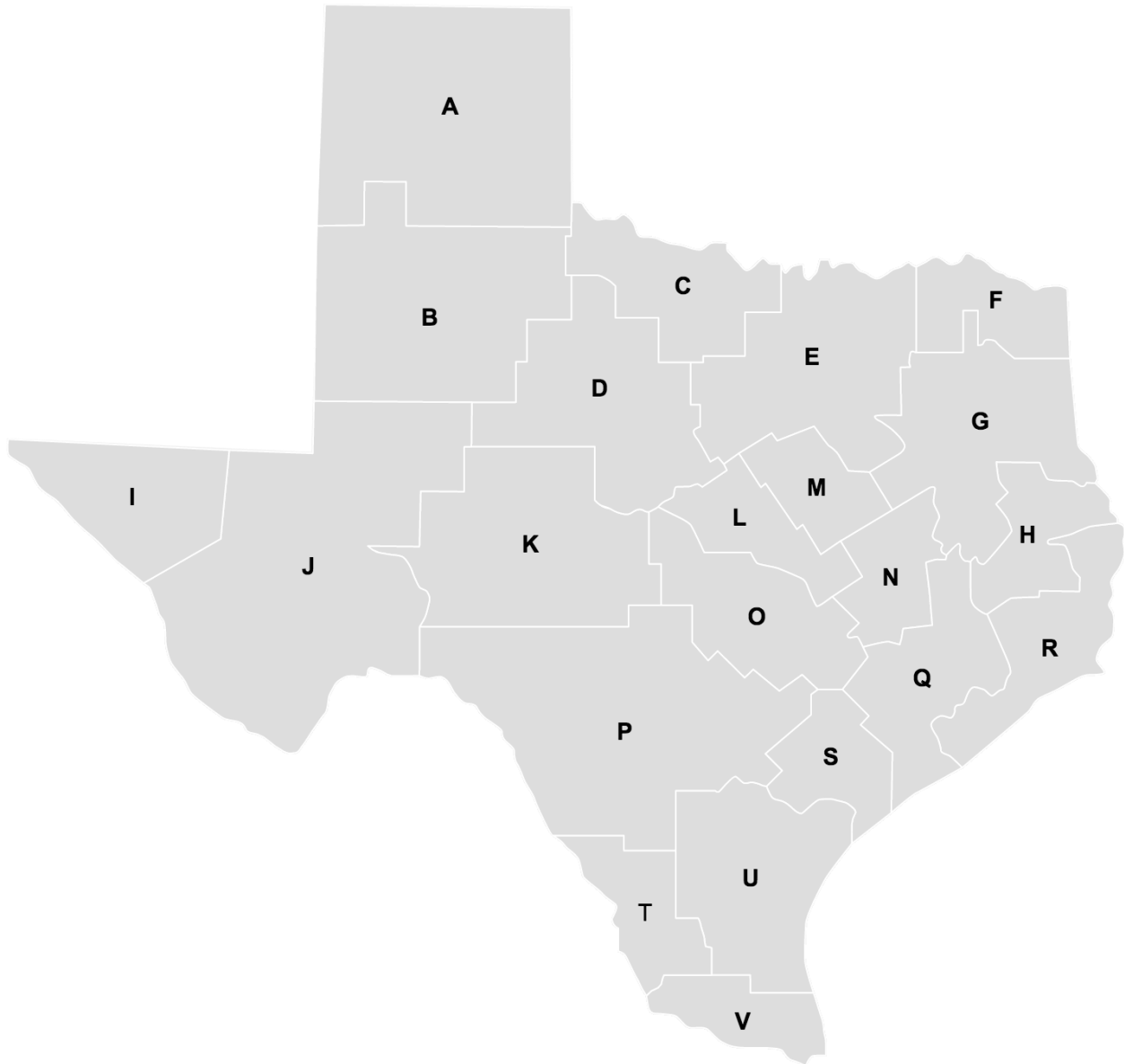
It is important to have the required equipment to treat trauma patients, but also make sure all staff is educated on when and how to use the equipment. This can be done by utilizing a nurse educator or by contacting the supplier of the equipment themselves. Many manufacturers will come to your site and instruct staff of proper use of their equipment.

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Appendices

A. Texas Map with TSA Borders



- B. Texas Level III Trauma Center Audit Filters – SEE PDF
- C. Texas Level IV Trauma Center Audit Filters – SEE PDF
- D. Performance Improvement Tracking Form – SEE PDF
- E. Performance Improvement Morbidity and Mortality List – SEE PDF
- F. Trauma Performance Improvement Plan Template – SEE MS DOC
- G. Designated Trauma Center Level III and IV Equipment Checklists SEE PDF
- H. Pediatric Injuries and Equipment Checklists – SEE PDF
- I. Special Populations – SEE PDF