Trauma Program Manager Manual

May 2026

Sarah Eason, RN, BS, CEN, EMT
Trauma System Coordinator

Jill Wheeler, RN, BSN, TCRN
Trauma Program Director

IOWA
Health and
Human Services

Table of Contents

Foreword

Welcome to trauma program management! Thank you for taking on the essential role of Trauma Program Manager (TPM) or Trauma Coordinator. For the purposes of this document, these two terms will be used interchangeably to refer to the same or similar functions and role at your facility. Your clinical leadership is critical to Iowa's trauma system. You are now part of a statewide network committed to improving care for injured patients and advancing trauma system performance.

Trauma continues to be a leading cause of death and disability, both in Iowa and across the United States. Unintentional injury is the fourth leading cause of death nationwide and the leading cause of death among individuals aged 1 to 44. In Iowa alone, hospitals report treating more than 28,000 trauma patients annually, a number that continues to rise each year. The most common causes of traumatic injury include falls and motor vehicle crashes.

Improving trauma outcomes requires more than individual clinical excellence—it takes a coordinated trauma system. This includes injury prevention, prehospital care, hospital treatment, rehabilitation and a strong focus on data-driven quality improvement. The Iowa Department of Health and Human Services (Iowa HHS), through the Bureau of Emergency Medical and Trauma Services (BEMTS), leads and supports the statewide trauma system. We utilize national standards such as the American College of Surgeons' (ACS) Resources for the Optimal Care of the Injured Patient to guide trauma program expectations, hospital verification and performance improvement efforts.

As a Trauma Program Manager (TPM) or Trauma Coordinator, you are the point person for trauma system integration at your facility. Your responsibilities typically include:

- Coordinating the trauma program's daily operations
- Leading Performance Improvement (PI) initiatives
- Overseeing data collection and trauma registry activities
- Managing trauma reverification and regulatory compliance
- Supporting injury prevention efforts within your community
- Collaborating with hospital staff, EMS agencies and regional partners

Whether you're new to trauma coordination or building on years of experience, your leadership will shape the quality of trauma care in your facility and throughout Iowa. You are part of a strong network of TPMs, Trauma Medical Directors (TMD), EMS professionals and system partners across the state. The team at BEMTS is here to support you with guidance, resources and technical assistance. This manual is intended to provide helpful tools in understanding the role of the TPM and how to successfully develop a hospital trauma program, in conjunction with your trauma center's orientation process.

Thank you for your commitment to advancing trauma care in Iowa. We're excited to work alongside you to develop an optimally functioning state trauma system.

Sincerely,

Trauma Program Staff
Bureau of Emergency Medical and Trauma Services
Iowa Department of Health and Human Services
321 E. 12th Street
Des Moines, IA 50319
iowahhsbemts@hhs.iowa.gov

Introduction

Who We Are

The state trauma program is a small, dedicated team made up of a Trauma Program Director, Trauma System Coordinator, and Epidemiologist. The program also works closely with the EMS and EMS for Children programs within the bureau to support and strengthen trauma care across the state. Oversight is provided by the Chief of the Bureau of Emergency Medical and Trauma Services.

Trauma Program Director

Jill Wheeler is the Trauma Program Director, overseeing the development, implementation and continuous improvement of Iowa's statewide trauma system to ensure high-quality care for injured patients throughout the trauma care delivery spectrum. You may contact her at jill.wheeler@hhs.iowa.gov or (515) 201-4735.

Trauma System Coordinator

Sarah Eason is the Trauma System Coordinator, responsible for trauma center verifications, program technical assistance, education and overall coordination of trauma-related initiatives. Her previous experience as a hospital Trauma Program Manager uniquely positions her to provide valuable guidance and support for your trauma program. She may be reached at sarah.eason@hhs.iowa.gov or (515) 672-5253.

Epidemiologist

Dr. Nicolas Foss serves as the EMS and trauma epidemiologist, specializing in the analysis and improvement of outcomes related to prehospital emergency care and trauma incidents across the state. He is a subject matter expert in the use of ImageTrend™ registries and the development of reports for both internal and external stakeholders. Dr. Foss is available to provide technical assistance related to the trauma registry or report generation. He may be reached at nicolas.foss@hhs.iowa.gov.

Iowa Trauma System History

In 1995, the Iowa Trauma Care System Development Act was enacted by the state legislature, marking a pivotal advancement in Iowa's healthcare system. This legislative milestone entrusted the Iowa Department of Health and Human Services (HHS)—formerly the Iowa Department of Public Health (IDPH)—with leading the development and implementation of a statewide trauma care system. To support evidence-based decision-making and ongoing system evaluation, the Act established the Trauma System Advisory Council (TSAC), a body tasked with advising Iowa HHS on issues and strategies to achieve optimal trauma care delivery, and the System Evaluation Quality Improvement Committee (SEQIC) to evaluate system effectiveness. The legislation also introduced the State Trauma Registry, mandating the statewide reporting of injuries.

On January 1, 2001, the Iowa Trauma System became fully operational, underpinned by a comprehensive committee structure designed for oversight and evaluation, alongside the robust deployment of the Trauma Registry. All hospitals in Iowa had become verified trauma centers, and each hospital had at least one physician with Advanced Trauma Life Support (ATLS) training. This trauma system framework relies heavily on the active involvement of emergency departments, hospitals, ambulance services, and the healthcare professionals who serve in these critical roles.

In 2015, the American College of Surgeons–Committee on Trauma (ACS-COT) conducted a consultative visit to evaluate the Iowa trauma system. Their comprehensive review produced numerous recommendations, with a key emphasis on leveraging data more effectively to drive and document improvements. The full ACS Trauma System Consultation Report is available on the Iowa HHS Trauma website. Since the 2015 consultation, significant progress has been made in aligning Iowa's trauma system with ACS's data reporting standards and strengthening the inclusive system.

BEMTS hosted a follow-up ACS Trauma System Consultation revisit in September 2025 to highlight the progress made since the 2015 consultation and to receive further expert insights and recommendations aimed at advancing overall system performance. The team noted significant progress, including a more inclusive system engaging all hospitals statewide, stronger leadership, and improved data collection. Despite these gains, the ACS consultation team stressed that Iowa's trauma system remains significantly under-resourced and under-funded.

The trauma system's overarching goal remains consistent: to provide timely, specialized care by matching trauma patients with the appropriate resources—from the moment of injury through rehabilitation. Achieving this requires cohesive collaboration among trauma care providers and stakeholders statewide, addressing every stage of trauma care. This integrated systems approach recognizes the full continuum of care and has been empirically shown to reduce costs, disability and mortality resulting from traumatic injuries. To further accelerate the reduction of trauma-related morbidity and mortality, the three core components of injury control—prevention, acute care, and rehabilitation—must continue to coordinate their efforts in a unified, system-wide approach.

The Evolution of Trauma Centers

Over the past several decades, trauma care has evolved into a highly specialized, multidisciplinary field. What were once traditional emergency rooms have grown into designated trauma centers, offering structured, evidence-based care to injured patients—from initial response through rehabilitation. These centers are a cornerstone of regional and statewide trauma systems and provide critical, often lifesaving interventions.

The public depends on trauma centers to deliver timely, high-quality care—whether that care is initiated in a community hospital or a tertiary trauma center. Regardless of setting or hospital size, every verified trauma center plays a vital role in Iowa's trauma system.

As a Trauma Program Manager (TPM), your leadership directly impacts the quality and consistency of trauma care at your facility. TPMs coordinate system processes, promote compliance with

verification standards, and support clinical teams through data collection, performance improvement, policy development, and educational initiatives. This manual is designed to guide you through the essential responsibilities of your role and serve as a reference throughout your work. The term TPM will be used throughout to refer to individuals leading trauma program operations at the facility level.

Trauma Center Levels and Verification

Trauma center categorization reflects a hospital's ability to deliver specific levels of trauma care. The Iowa Department of Health and Human Services (Iowa HHS), through the Bureau of Emergency Medical and Trauma Services (BEMTS), verifies Level III and IV trauma centers using standards aligned with guidance from the American College of Surgeons Committee on Trauma (ACS-COT). Facilities pursuing Level I or II verification undergo a rigorous site visit and review by the ACS-COT, also utilizing published national standards set forth by the ACS.

Level I Trauma Center

Verified by ACS-COT, a Level I Trauma Center serves as a comprehensive, regional resource and the highest level of trauma care. These centers provide total care for every aspect of injury—from prevention through rehabilitation.

Key capabilities:

- 24/7 in-house coverage by general surgery
- Immediate availability of subspecialists (e.g., orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, internal medicine and critical care)
- Additional services often include cardiac, hand, pediatric and microvascular surgery
- Leadership in injury prevention, public education, trauma team training, research and trauma system development
- Robust trauma registry and quality improvement program

Level II Trauma Center

Also verified by ACS-COT, a Level II Trauma Center is capable of providing definitive care for all injured patients but may refer certain tertiary-level or specialty services to a Level I center.

Key capabilities:

- 24/7 immediate coverage by general surgeons and core specialty services
- Ability to initiate comprehensive trauma care
- Transfer agreements for complex cases requiring higher-level specialty services
- Strong commitment to education, injury prevention and performance improvement

Level III Trauma Center

Verified by ACS-COT or BEMTS, a Level III Trauma Center provides prompt assessment, resuscitation, stabilization and emergency operations for injured patients, with transfer agreements in place for those needing more complex care.

Key capabilities:

- 24/7 immediate emergency department coverage
- Prompt availability of general surgery and anesthesia
- Active trauma performance improvement and education programs
- Formal transfer protocols to Level I or II centers
- Engagement in prevention and community outreach

Level IV Trauma Center

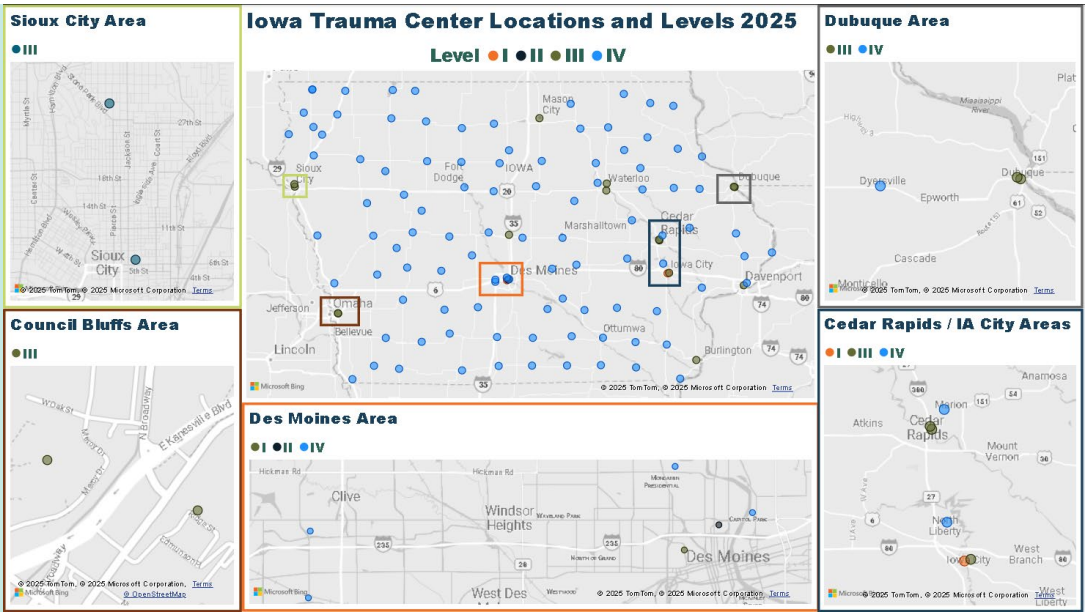
Verified by BEMTS, a Level IV Trauma Center provides Advanced Trauma Life Support (ATLS)-based care, stabilizes patients and coordinates rapid transfer to higher-level centers when resources are exceeded.

Key capabilities:

- Basic emergency department with ATLS protocols in place
- 24-hour laboratory and radiology services
- Established transfer processes for timely escalation of care
- Participation in prevention, outreach and education
- Commitment to quality improvement activities

View the map and list of Verified Iowa Trauma Centers and their Levels.

https://hhs.iowa.gov/emergency-medical-services-trauma/trauma-care-facilities



Core Job Responsibilities

Ideally, the Trauma Program Manager (TPM) possesses both educational preparation and clinical experience in the care of injured patients. The TPM is responsible for the development, implementation and ongoing evaluation of the trauma program, as outlined by the American College of Surgeons Committee on Trauma (ACS-COT, 2014). Whenever applicable, the TPM should oversee ancillary staff required to meet the operational needs of the trauma system. A clearly defined, written job description is essential to articulate the TPM's responsibilities, scope of authority and alignment with the overall goals of the trauma program.

In 2023, the Society of Trauma Nurses (STN) released a position statement detailing recommended qualifications and competencies for TPMs. This resource may be a helpful reference when developing or refining job descriptions within trauma care facilities. The position statement is available at: https://www.traumanurses.org/resources/position-papers. The STN and ACS-COT have a longstanding collaborative relationship in defining and supporting the TPM role nationally.

The TPM holds primary responsibility for day-to-day trauma program operations, with a particular focus on process and performance improvement activities involving nursing and ancillary staff. The TPM also collaborates with the Trauma Medical Director (TMD) to facilitate the same functions among the physician team (ACS-COT, 2014). The TPM and TMD are jointly accountable for trauma team success. As with any effective partnership, mutual respect, shared vision and consistent support are essential to the collaboration between these two leaders. Although they report through different administrative hierarchies, both bear the responsibility for ensuring the delivery of high-quality trauma care.

It is critical that the TPM and TMD roles be clearly delineated right from the beginning. A trauma-specific organizational chart should define the program's hierarchy. Boundaries, timelines, working relationships and logistics must be established through candid discussions. The TPM and TMD must determine how responsibilities are divided, who holds accountability for specific functions and what communication methods (e.g., phone, email, in-person meetings) will be used to support a strong working relationship.

Support from the hospital's senior administrative leadership is vital. The TPM must be provided with adequate resources to meet the demands of a high-functioning trauma system. These resources may include, but are not limited to, secretarial staff, clinical nursing personnel for outreach and discharge planning, performance improvement staff, trauma registry personnel, injury prevention coordinators, and trauma nurse clinicians. The level of administrative and budgetary support required usually varies based on hospital size and trauma patient volume.

While specific qualifications and responsibilities will be further detailed in subsequent chapters, the core functions of the TPM typically include (ACS-COT, 2014):

- Clinical activities
- Educational responsibilities
- Performance improvement
- Program administration
- Oversight of the Trauma Registry
- Consultative and liaison roles
- Research
- Involvement in community & national trauma care systems

Clinical Activities

According to the American College of Surgeons Committee on Trauma (ACS-COT, 2014), the Trauma Program Manager (TPM) is responsible for "coordinating management across the continuum of trauma care, which includes the planning and implementation of clinical protocols and practice management guidelines, monitoring care of in-hospital patients, and serving as a resource for clinical practice."

Trauma protocols should be regularly reviewed and updated to ensure alignment with current national standards and emerging best practices. While the frequency and scope of these reviews should follow each facility's internal protocol review policy, the content must be critically evaluated for clinical relevance and effectiveness. Practice guidelines go hand-in-hand with protocol development and should be evidence-based. The primary goal of guidelines is to reduce variation in care by promoting adherence to established, standardized approaches. Practice guidelines can be clinical (e.g., a massive transfusion protocol) or administrative (e.g., trauma team on-call response times).

Engaging appropriate stakeholders during protocol or guideline development is essential for achieving broad acceptance, ensuring compliance with the most up-to-date guidelines, and fostering a collaborative trauma care environment. Compliance and effectiveness of these guidelines should be routinely evaluated through the trauma program's performance improvement (PI) process.

Key Takeaway: *Don't reinvent the wheel.* If your trauma facility requires a new guideline, it is likely that other institutions have already developed similar tools. Leverage available resources and adapt existing guidelines to meet the specific needs of your organization. Valuable sources for guidelines and protocols include:

- Level I or II trauma centers that serve as referral partners
- Your facility's healthcare system or affiliate organizations
- Professional organizations offering best practice guidelines:
  - American College of Surgeons
  - American College of Emergency Physicians
  - Brain Trauma Foundation
  - Pediatric Trauma Society
  - Eastern Association for the Surgery of Trauma
  - Western Trauma Association
  - American Trauma Society
  - Society of Trauma Nurses
  - Iowa Hospital Association
  - Trauma System News
  - Region VII Disaster Health Response Ecosystem
- Iowa HHS BEMTS Trauma Website

In addition to protocol and guideline oversight, the TPM often monitors in-hospital patient care to ensure a smooth transition from pre-hospital services through discharge, including transfer to definitive care or rehabilitation. The more seamless this process, the more efficiently patients will move through the trauma continuum, resulting in improved outcomes and program performance.

The TPM also acts as a clinical resource by:

- Answering practice-related questions
- Educating clinical and non-clinical staff
- Disseminating updates to practice guidelines to ensure adherence to evidence-based standards of care

Educational Responsibilities

According to the American College of Surgeons Committee on Trauma, the Trauma Program Manager (TPM) is responsible for "providing intra-facility and regional professional staff development, participating in case review, implementing practice guidelines, and directing community trauma education and prevention programs" (ACS-COT, 2014).

Professional Staff Development

Intra-facility and regional staff development involves engaging with healthcare professionals both within the trauma center and throughout its broader service area. This outreach supports the professional growth of all members of the trauma team who may be involved in the care of injured patients. These individuals may include EMS and pre-hospital personnel, flight crews, emergency department staff, operating room and inpatient nurses, laboratory and radiology personnel. Each of these roles contributes critically to the timely and effective care of trauma patients. TPMs should foster partnerships with regional care providers and develop targeted educational initiatives that enhance trauma competency across the care continuum.

Numerous educational opportunities are available through definitive care facilities, the Iowa Department of Health and Human Services and national organizations that support trauma provider development. Examples of these educational programs include:

- Resource-Variable Trauma Team Development Course (RTTDC)
- Trauma Care After Resuscitation (TCAR)
- Trauma Nursing Core Course (TNCC)
- ATS Trauma Program Management Course (TPMC)
- Trauma Certified Registered Nurse (TCRN)
- Trauma Outcomes and Performance Improvement Course (TOPIC)
- Rural Trauma Outcomes and Performance Improvement Course (Rural TOPIC)
- Advanced Trauma Life Support (ATLS)
- Advanced Trauma Care for Nurses (ATCN)

Practice Guideline Implementation

As previously discussed, practice guideline implementation should occur in collaboration with appropriate stakeholders within the trauma center. Effectively communicating practice changes is essential for achieving staff buy-in and successful adoption. Communication should include:

- A clear explanation of the change
- Supporting evidence or rationale
- How the change benefits patients and aligns with national standards

The method of dissemination should be tailored to the facility's communication practices. Common strategies include emails, flyers, presentations at staff meetings and updates shared through clinical leadership channels.

Community Trauma Education and Prevention

Community outreach is another key component of the TPM's educational responsibilities. Trauma education and injury prevention initiatives should be informed by trauma registry data and the specific needs of the local population. For instance, if the facility identifies a trend of pediatric ATV injuries related to lack of helmet use, the TPM may develop a school-based education program on ATV safety and the importance of protective gear.

Many hospitals successfully implement community outreach by adapting established programs to their unique community demographics. Engaging with internal and external stakeholders—including local organizations, schools, and community groups—not only helps identify outreach priorities but may also uncover valuable funding opportunities and partnerships.

Performance Improvement and Patient Safety

According to the American College of Surgeons Committee on Trauma, one of the Trauma Program Manager's (TPM) critical roles is to "monitor clinical processes and outcomes and system issues related to the quality of care provided; develop quality filters, audits, and case reviews; identify trends and sentinel events; and help outline remedial actions while maintaining confidentiality" (ACS-COT, 2014). This responsibility is arguably the most essential function of the TPM. Continuous monitoring, identification and resolution of issues that contribute to suboptimal care is fundamental to developing and sustaining a high-quality trauma program.

When building or refining a Performance Improvement and Patient Safety (PIPS) program, refer to Chapter 16 of *Resources for Optimal Care of the Injured Patient (ACS-COT, 2014)*. This chapter provides a robust framework including operational concepts, core measures, audit filters and detailed guidance for constructing a successful PIPS program. ACS-COT emphasizes that performance improvement activities should align with the Institute of Medicine's six quality aims for patient care: safe, effective, patient-centered, timely, efficient and equitable.

The Continuous PIPS Process

Trauma Performance Improvement and Patient Safety (PIPS) should follow a continuous, circular process of monitoring, assessment and management to consistently improve patient care. All trauma centers—regardless of level—have opportunities for improvement. The concept of PI goes beyond negative outcomes, because in trauma care, even when a patient outcome is favorable, underlying issues in process may still need to be addressed.

Value of Care Framework

A guiding principle of PIPS is improving the value of care. This can be summarized with the following formula:

Value of Care = (Quality of Process + Quality of Outcome) / Cost

According to ACS-COT (2014, p. 117), value can be enhanced by:

- Improving process quality
- Improving outcome quality
- Reducing costs

PIPS encompasses both system-level metrics and individual provider performance, recognizing that some factors (e.g., injury severity, comorbidities) are not modifiable but many (e.g., timeliness, communication, decision-making) are.

Developing a PIPS Plan

A written Performance Improvement and Patient Safety (PIPS) plan is a required element for trauma center verification at all levels, and almost certainly the most important policy to guide the trauma program. This document outlines the program's structure, operational processes, levels of review and integration with the hospital's broader quality improvement efforts. It serves multiple essential functions: providing consistency in performance improvement activities, supporting new staff during onboarding, and offering a formal roadmap for identifying, addressing and monitoring opportunities for improvement across the continuum of trauma care.

An effective PIPS plan should clearly articulate the program's guiding philosophy, mission, and vision. It must define the authority and scope of the trauma performance improvement program, including which individuals and departments are responsible for oversight, decision-making and implementation. A well-developed committee structure, including member roles and responsibilities, is essential to ensure all facets of trauma care are represented and accountable.

The plan should identify the key indicators and audit filters used to monitor clinical and operational performance. It must also describe the process for identifying events that warrant review, along with the methods used for data collection, analysis and management. Confidentiality protocols should be addressed explicitly to protect sensitive patient information and maintain review process integrity.

Importantly, the PIPS plan needs to outline the levels of review used to assess the significance of events, as well as how peer review determinations are made. It should also include procedures for developing and implementing corrective action plans and how those actions are monitored for effectiveness over time. Finally, the plan must describe how the trauma PIPS program is linked to the institution-wide quality and safety programs to ensure alignment and shared accountability.

In establishing the foundational elements of the PIPS plan, it's critical to define who holds authority over the program and clarify the areas it encompasses. Clearly delineating the roles of team members ensures responsibilities are assigned appropriately, while formalizing links to the hospital's existing quality improvement infrastructure strengthens collaboration and institutional support.

Event Identification

Once the structure is defined, the PIPS plan should describe how trauma patients are identified and how adverse events are reviewed. Many TPMs collaborate with coding/billing and IT departments to generate reports from the electronic medical record (EMR) that identify trauma patients meeting state trauma registry inclusion criteria.

A standardized chart audit tool should be used to evaluate the care provided. This tool applies trauma-specific benchmarks, assesses timeliness and appropriateness of care and helps determine whether an adverse event or opportunity occurred.

PIPS Audit Tools

Developing or adopting a standardized PIPS audit form improves consistency and objectivity in review. Contact the state trauma program staff or partner hospitals for additional access to resources for chart audit templates. Shared templates can be tailored to each facility. These tools help identify patterns and systemic issues, define the taxonomy of events (impact, location, cause, prevention, outcome) and findings may even be directly documented in the state trauma registry using the Performance Improvement tab. Establishing whether it is a system or provider-related issue will help determine the course of action for the event. These PIPS audit tools serve like a roadmap designed to assist in consistently drilling down common PI events. *Suggested article: Manage Levels of Review More Efficiently with Event Review Templates by Kathleen Martin (Trauma System News, May 13, 2022).*

Levels of Review

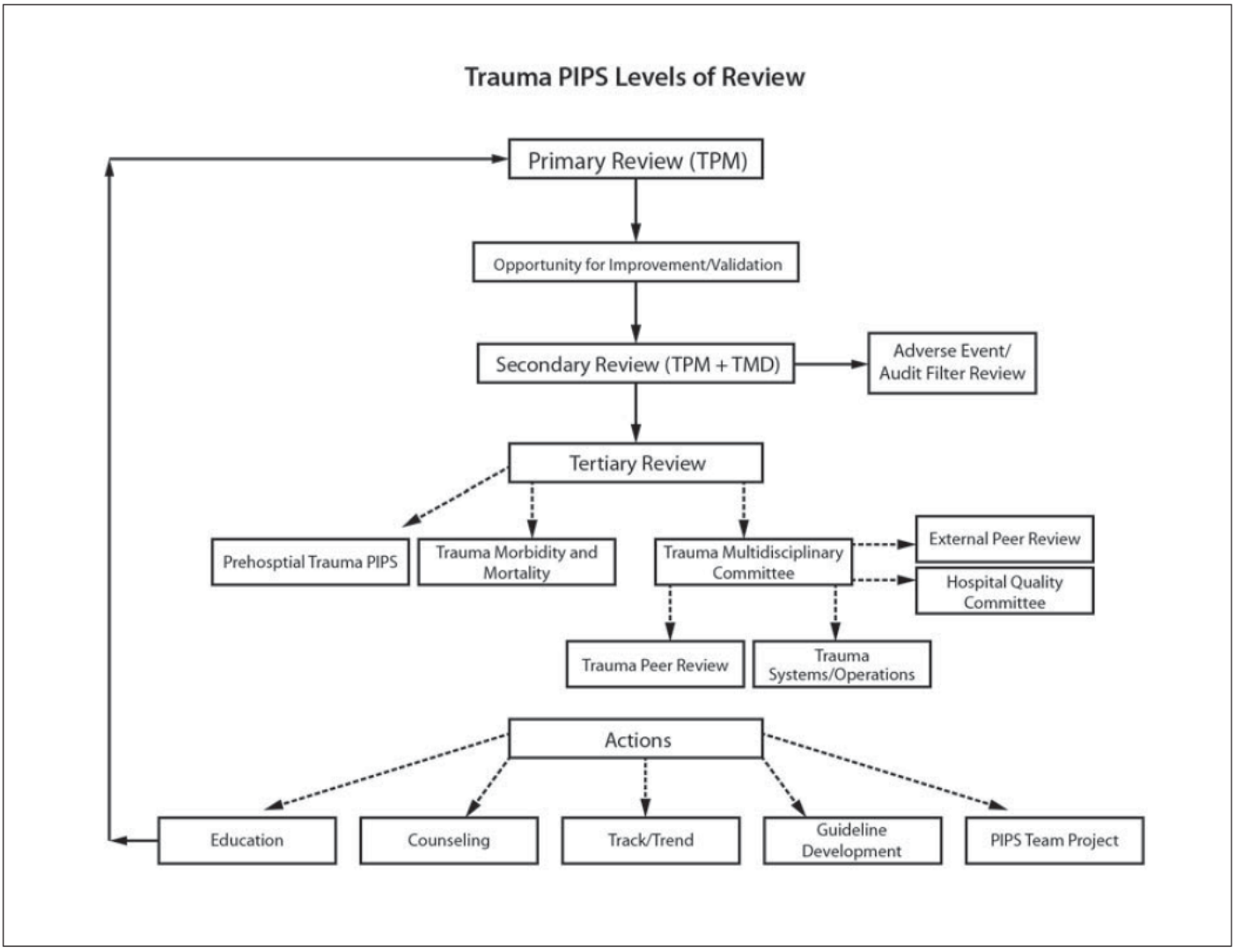
Trauma case reviews are typically tiered, based on the level of harm and who is involved in the review. Keep in mind that event resolution (loop closure) may occur at any level and the process must always be tracked and documented. The tracking system should show the event addressed, actions, trending issues, and resolutions. There must be a way to demonstrate issues that occurred, how they were addressed and confirmation they are resolved.

- **Primary Review** – The first level of review is typically performed by the TPM and occurs for every trauma patient to capture and confirm/validate events. Information can be gathered from trauma registry entries, medical records, EMS reports, audit filter worksheets, compliance with protocols/guidelines and even staff “elevator conversations.” Many events have no or undetectable harm and the case can often be closed out without advancing to the next level of review. The TPM can manage system issues with no patient impact and resolve the event.
- **Secondary Review** – When an opportunity for improvement or adverse event is identified, an additional layer of review is warranted and the TMD is looped in. These events impacted the patient with minimal or moderate harm and/or identified provider issues. These events may involve deeper review of the medical records, assessing deviation from standards, or referral to a subspecialist. This level of review is generally triggered by the PIPS audit tool during the primary level of review. If the issue is not closed or resolved at this level, it may be referred to tertiary review through applicable committees.
- **Tertiary Review** –This formal level of review occurs after the TPM and TMD have reviewed the case and determined that further review is necessary, typically through the multidisciplinary trauma committee. Tertiary review may also include a prehospital PI committee, morbidity and mortality review, peer review committee or the hospital quality department. This level of review is for events involving provider issues, serious harm or unresolved issues after the primary and secondary reviews. The TPM should prepare and present to the committee a full timeline of care with supporting documentation with detailed analysis of clinical decisions, communication and systems. The committee can collectively

determine corrective recommendations/actions. Eventually, an event may be resolved at this level. Documentation of the entire review process is critical.

- **Quaternary Review** – This level of review is not always utilized in a trauma program's PIPS process, but it is reserved for situations that warrant external peer review or additional review by the hospital quality committee, hospital administration, hospital board, or legal department. It could be triggered by legal risk or litigation, high-profile cases, sentinel events or serious breaches of ethics or professionalism.

The following figure illustrates an example of the Levels of Trauma Performance Improvement and Patient Safety (PIPS) Review from the *Resources for Optimal Care of the Injured Patient (2014)*:



Levels of Harm

Understanding the levels of harm is crucial for evaluating patient outcomes, identifying opportunities for improvement, and tracking the severity of adverse events. These levels help trauma teams categorize events and prioritize responses based on the actual or potential harm to the patient. Determining the level of harm may also help guide escalation through the levels of PIPS review. The levels of harm utilized in hospital trauma programs are listed below:

- **No harm** – the standard of care was met despite minor deviations, but no harm reached the patient. Often referred to as a “near miss” event.
- **No detectable harm** – the event occurred and reached the patient, but the patient was not affected. It may require additional monitoring, but no additional treatment is necessary.
- **Minimal harm** – the patient was impacted with mild or temporary symptoms, minimal loss of function. Minimal intervention (extra observation, investigation review, minor treatment) is needed.
- **Moderate harm** – an injury or adverse event occurred, the patient is symptomatic, requires treatment, and there is an increase in level of care and often extended hospital stay.
- **Severe harm** – the event caused a major or permanent impact to the patient, requiring critical interventions.
- **Death** – when death was caused or expedited by the event or system failure.

Corrective Action

Corrective actions arising from PIPS reviews may be system-based, provider-based, or both. To ensure effectiveness, corrective actions should follow the SMART goal format. Framing action plans as SMART goals allows for clear expectations, tracking and evaluation:

- **S**pecific
- **M**easurable
- **A**chievable
- **R**elevant
- **T**ime-bound

The actions that can result from PIPS reviews fall into any of several categories. Education, counseling, track/trend, guideline or policy development, Ongoing Professional Practice Evaluation (OPPE) and/or a focused PIPS project can result out of an effective PIPS process. These actions should then be monitored for the effectiveness of event mitigation. The goal of corrective action is to keep the issue from potentially harming more patients.

Event Resolution and Loop Closure

Determining whether an event is truly resolved is an important component of the PIPS cycle, commonly referred to as loop closure. The “loop” represents the continuous cycle of identifying issues, implementing improvements, and re-evaluating outcomes. Completing the steps through the PIPS process—identification, analysis, development and implementation of a corrective action plan—does not automatically indicate that the issue is resolved. The event (loop) is considered resolved (closed) when the desired outcome has been achieved, and the **change is sustained**.

Effective documentation is essential to show that the corrective action had its intended impact. It must be clear that the intervention led to measurable changes in practice or system conditions, reducing the likelihood of similar events recurring. Ongoing monitoring and evaluation confirm the success of the intervention and ensure that loop closure is valid and lasting.

Data Management and Confidentiality

The PIPS plan must clearly outline how data and patient information are handled, stored, and protected. Confidentiality safeguards should be in place to ensure sensitive information remains secure. These may include labeling documents as “confidential” or “not discoverable,” collecting and securing materials after meetings, and storing data in protected systems or locked locations. When appropriate, using de-identified data is also recommended to further protect patient privacy.

Program Administration

The Trauma Program Manager (TPM) is responsible for managing “the operational, personnel, and financial aspects of the trauma program, as appropriate. [The TPM] serves as a liaison to administration and represents the trauma program on various hospital and community committees to enhance and foster optimal trauma care” (ACS-COT, 2014).

In many smaller facilities, a dedicated trauma program budget may not fall under the TPM’s direct oversight. However, when such a budget is available, the TPM should manage it appropriately, recognizing the importance of strategically allocating resources to improve both the trauma program and patient care outcomes. With a comprehensive view of the program, the TPM is best positioned to identify areas where resources will have the greatest impact.

Some TPMs in higher-resourced facilities are fortunate to have additional dedicated personnel, such as a trauma registrar, performance improvement coordinator, or a community outreach coordinator. These individuals should report to the TPM, fostering a close, collaborative working relationship focused on advancing trauma care. In settings with limited staffing, TPMs may occasionally recruit and train bedside nurses or ancillary staff to assist with data abstraction on an ad hoc or voluntary basis, even in the absence of a formal full-time equivalent (FTE) position. Regardless of available resources, TPMs must be resourceful and proactive in leveraging available support to enhance program effectiveness.

Serving as a liaison to hospital administration may involve regular meetings with the Director of Nursing or equivalent leadership to provide updates on program activities and accomplishments. Additionally, the TPM should keep executive leadership informed of significant cases or sentinel events. Ongoing communication with the C-suite can help ensure the trauma program receives the necessary support and resources to deliver optimal care to injured patients.

Participation in hospital and community committees is another critical function of the TPM. Engagement in groups such as pain management, fall prevention, skin integrity, quality improvement, and critical care committees—alongside trauma-specific PIPS and multidisciplinary committees—enhances the trauma program’s visibility and integration throughout the organization. Active committee participation also promotes greater buy-in when trauma-related practice changes are proposed.

Beyond the hospital, TPMs are encouraged to connect with regional healthcare coalitions, particularly around emergency preparedness initiatives. These partnerships can provide access to valuable resources and grant opportunities that may not otherwise be available. While community committee opportunities may be more limited, efforts to engage with local organizations can help build strategic relationships. Such partnerships can be especially valuable when planning targeted outreach activities, allowing the trauma program to collaborate with established community allies who share common goals.

Oversight of the Trauma Registry

Trauma Registry Management

The role of the TPM includes the responsibility to “supervise collection, coding, scoring, and developing processes for validation of data. Design the registry to facilitate performance improvement activities, trend reports and research while protecting confidentiality” (ACS-COT, 2014). The trauma registry is a powerful tool at every level of the trauma system. At the state level, it informs research, supports injury prevention strategies, shapes education and training programs, and provides critical data to the Trauma System Advisory Council and state legislators. Locally, TPMs can use registry data to drive performance improvement initiatives, guide outreach and prevention efforts, and develop internal training based on injury patterns and outcomes.

In the State of Iowa, ImageTrend™ is the designated software vendor for trauma data collection. The trauma registry can be accessed at: https://iowa.imagetrendregistry.com. Access to the system must be requested through the Iowa HHS trauma program staff.

Per trauma center verification requirements, the trauma registry must be concurrent, defined as having a minimum of 80 percent of trauma patient records entered into the registry within 60 days of the patient discharge date. Timeliness of data collection is necessary so that centers can validate their data and identify opportunities for improvement at the earliest possible time. The TPM is responsible for overseeing the trauma registry process, including ensuring the completeness and accuracy of all data entries.

Iowa Trauma Patient Data Dictionary

The inclusion criteria for which incidents must be reported are detailed in the Iowa Trauma Patient Data Dictionary, available here: https://hhs.iowa.gov/emergency-medical-services-trauma/trauma-system-resources/trauma-data-registry. The Iowa Trauma Patient Data Dictionary serves as a comprehensive guide for TPMs and trauma registrars, providing clear definitions and required formats for collecting information in each data field. Each field entry includes the definition of the data element, accepted format for the value, data sources, validation scores, and registry specifications.

Abbreviated Injury Scale (AIS) and Injury Severity Score (ISS)

Accurate AIS coding is just as essential as diagnosis coding. The Abbreviated Injury Scale (AIS), developed by the Association for the Advancement of Automotive Medicine (AAAM), provides standardized terminology to describe injuries and assigns a severity score to each. The AAAM offers an AIS course, which provides in-depth instruction on injury coding and its impact on trauma system outcomes. Trauma Registrars at Level I, II, and III trauma centers are required to take the course and it is strongly recommended for Level IV trauma registrars to participate in the course as well. More information is available at: https://www.aisinjuryscale.org/home.

Each patient's Injury Severity Score (ISS) is calculated using the highest AIS scores from up to three injured body regions. The ISS is determined by squaring the highest AIS score from each of the three most severely injured body regions and summing those values. ISS values range from 1 to 75, with higher scores indicating greater injury severity and higher risk for mortality and morbidity. The ISS has a linear relationship with outcomes, meaning the higher the ISS, the greater the likelihood of mortality, complications, and longer hospital stays. Patients with an ISS greater than 16 are considered to have sustained major trauma (ACS-COT, 2014).

Accuracy in AIS coding is critical. Even small errors in AIS scoring will result in incorrect ISS values, potentially misrepresenting the patient's condition and skewing registry data used for performance improvement and research. To support accurate coding, staff are encouraged to use the AIS "lookup" feature within ImageTrend™ Patient Registry.

Local Trauma Registry Reports

The State of Iowa Trauma Registry has the capability to run registry-based reports to assist a trauma program with registry utilization for performance improvement and patient safety, as well as outreach and education. The state trauma epidemiologist can assist with the development and generation of reports, specific to the trauma center's individual needs.

Furthermore, the System Evaluation and Quality Improvement Committee (SEQIC), in concert with Iowa HHS, has developed a set of performance indicators designed to monitor statewide trauma care quality and provide hospitals with actionable insights to support ongoing quality and process improvement efforts. Each trauma center will periodically receive two key statistical reports from the State Trauma Epidemiologist: risk-adjusted mortality metrics, and SEQIC performance indicators.

ImageTrend™ University

Iowa's trauma registry vendor, ImageTrend™ provides an online education and training platform to all Iowa users with an account. It offers self-guided tutorials, educational videos, manuals, and quick guides, all designed to help users learn how to use ImageTrend's software and tools effectively. Some of the most referenced materials include retrieving a username or password, adding/editing new users at your trauma center, creating new incidents, and Report Writer assistance. In addition to this useful helpdesk, there are also live and recorded webinars on various trauma registry topics available on demand.

Consultative and Liaison Roles

According to the ACS-COT (2014), one of the key responsibilities of the TPM is to “stabilize the complex network of the many disciplines that work in concert to provide high-quality care. Serve as an internal resource for staff in all departments, and act as a liaison for EMS agencies.” The size and complexity of a facility’s trauma network may vary, but most programs will interface regularly with departments such as Emergency Medical Services (EMS), the Emergency Department (ED), laboratory and radiology. Additional departments that often play a role in trauma care include surgery, orthopedics, neurosurgery, anesthesia, critical care, medical/surgical units, physical therapy, occupational therapy, speech therapy, case management, administration, social work and others. The TPM is responsible for ensuring that all of these disciplines are communicating effectively, staying informed through education, and working collaboratively to deliver consistent, evidence-based care across the entire continuum of trauma care.

To remain a reliable and informed resource, the TPM should stay current on trauma care best practices and evidence-based guidelines. Building relationships with other TPMs within the state and participating in professional organizations can provide valuable networking, mentorship, and benchmarking opportunities. Involvement in state and national organizations enhances professional growth and supports the implementation of high-quality trauma initiatives.

Establishing a strong working relationship with EMS is a vital component of the TPM’s liaison role. A good starting point is identifying the EMS agencies that regularly transport patients to and from the trauma center. Communication should begin with EMS service directors, rather than individual field providers, especially for discussions related to performance improvement, case review and loop closure.

In Iowa, EMS run reports—the documentation of prehospital care—are required to be submitted to the receiving trauma care facility within 24 hours of patient transport. These may be submitted in either paper or electronic format. Like hospitals, EMS agencies in Iowa also utilize ImageTrend™ software to input data into the EMS registry—ImageTrend Elite. The TPM should coordinate discussions between hospital staff and EMS service directors to determine the most practical and mutually agreeable method for submission of prehospital reports. This collaborative approach fosters respect, promotes consistency, and ensures compliance with regulatory requirements.

Serving as a liaison to EMS is also an opportunity to build trust and partnership between organizations. Many EMS agencies are active in community outreach and injury prevention efforts. For facilities with limited resources, forming partnerships with EMS can extend the hospital’s reach and enhance the effectiveness of community initiatives.

Research

It is the role of the TPM to “have an active involvement in research projects and the analysis and distribution of findings. Facilitate protocol design for accurate data collection, feedback, and analysis” (ACS-COT, 2014).

The nature and scope of research involvement will vary depending on the trauma center’s verification level. At larger ACS-verified Level I facilities, formal research initiatives are often ongoing, and TPMs may have direct opportunities to participate in study design, data analysis, and dissemination of findings. In contrast, Level IV facilities may not have dedicated research departments or infrastructure; however, meaningful research contributions can still occur through participation in the state trauma registry and local performance improvement initiatives.

TPMs at smaller facilities are encouraged to explore research opportunities within their own institutions and should consider reaching out to TPMs at higher-level centers for mentorship and collaboration. Collaboration across the trauma system strengthens statewide research efforts and fosters consistency in data quality and interpretation.

Community and National Involvement

According to the ACS-COT (2014), the role of the TPM includes participation in the “development of trauma care systems at the community, state, provincial, or national levels.”

Community-Level Engagement

At the community level, TPMs serve as vital liaisons among a wide range of stakeholders along the trauma care continuum. This may include EMS agencies, hospital departments, definitive care facilities, skilled nursing facilities, rehabilitation centers, home health services and long-term care facilities.

By fostering communication and collaboration among these entities, the TPM helps ensure seamless transitions of care for trauma patients and gains valuable insight into how care is delivered across the system. These relationships not only strengthen care coordination but also empower the TPM to identify gaps, advocate for improvements, and drive change within the trauma program.

Participation in the local healthcare coalition or regional service area can further strengthen community connections and facilitate trauma system integration at a broader level. Each hospital in Iowa belongs to a designated service area, determined by intra-facility trauma transport patterns. Service area meetings, typically held quarterly, offer a structured opportunity for TPMs to collaborate on regional performance improvement initiatives. Participation in these meetings strengthens inter-facility communication, fosters joint problem-solving and promotes consistent care practices across facilities.

State-Level Involvement

Trauma System Advisory Council (TSAC)

Iowa has a long-standing commitment to trauma system development and governance through the Trauma System Advisory Council (TSAC). By attending quarterly TSAC meetings or engaging in its open subcommittees, TPMs can offer input, stay informed on system-wide initiatives, and play an active role in shaping trauma policy and practice across the state. Information on meeting dates, times, and locations can be obtained by contacting the state trauma program administrators.

Trauma Program Manager (TPM) Webinars

The State Trauma System Coordinator hosts monthly webinars covering a variety of educational trauma-related topics. These sessions are recorded and made available as on-demand YouTube videos for convenient viewing. Select webinars, when attending live with registration, may be eligible for nursing or EMS continuing education credits. Previous recorded webinars can be accessed in the “Trauma” playlist within the HHS YouTube channel.

Trauma Bulletins

Monthly state trauma bulletins are distributed from BEMTS via an email subscription through the Granicus digital communications platform. Newsletter content includes trauma system updates, program management tips, trauma registry guidance, Q&A sections, relevant events and opportunities

and more. These bulletins also contain the registration information for the monthly TPM webinars. They are a valuable resource to help keep you and your trauma program informed and up to date.

State Trauma and Preparedness Conferences

Iowa HHS hosts a biennial State Trauma and Preparedness Conference, which brings two full days of didactic educational sessions and hands-on learning opportunities. Opportunities exist to get involved with the conference planning committee, speaking engagements or participating as an attendee.

Emergency Medical Services Advisory Council (EMSAC)

The Bureau of Emergency Medical and Trauma Services (BEMTS) EMS program convenes quarterly meetings of the EMS Advisory Council (EMSAC) to help shape statewide priorities for the prehospital care system. This multidisciplinary group provides guidance to Iowa HHS on EMS protocols, clinical guidelines, pilot projects, scope of practice, and system development initiatives, ensuring safe and effective interventions during the out-of-hospital phase of patient care. Prehospital trauma care is an integral component of these discussions.

Pediatric Emergency Care Coordinators (PECC)

A Pediatric Emergency Care Coordinator (PECC) serves as a designated point of contact within an EMS agency, hospital emergency department, fire department, law enforcement agency, or school, committed to receiving periodic updates and resources on pediatric care. The BEMTS EMS for Children Program Director maintains an active roster of PECCs to provide access to free virtual continuing education, clinical resources, and networking opportunities. Trauma Program Managers are encouraged to act as pediatric champions within their trauma centers, sharing relevant information with staff and partners to promote best practices in the care of children.

Iowa Hospital Association (IHA)

TPMs can contribute to trauma system development at the state level in several meaningful ways. One key opportunity is participation in the Iowa Hospital Association's (IHA) Iowa Trauma Coordinators (ITC) group, which connects TPMs with a statewide network of peers for shared learning, collaboration and support. While IHA is a separate organization from Iowa HHS, the two entities maintain a strong collaborative relationship to support and engage hospitals across the state.

National-Level Participation

National engagement offers TPMs access to cutting-edge research, best practices and broader professional networks. TPMs are encouraged to participate in trauma-related national organizations. Membership provides access to educational resources, conferences, advocacy efforts and national benchmarking opportunities that can inform and enhance local trauma program development.

Recommended organizations include, but are not limited to:

- Society of Trauma Nurses (STN)
- Emergency Nurses Association (ENA)
- American Trauma Society (ATS)
- Trauma Center Association of America (TCAA)

Trauma Center Verification

In the State of Iowa, trauma center verification for Level III and Level IV facilities not verified by the American College of Surgeons (ACS) is overseen by the State of Iowa Trauma System Coordinator. The rules and requirements for trauma center categorization and verification are established under the Iowa Administrative Code IAC 641-134 (147A). These administrative rules are available on the Iowa Legislature website: https://www.legis.iowa.gov/.

Iowa has formally adopted by reference the *Resources for Optimal Care of the Injured Patient*, developed by the ACS Committee on Trauma, as the standard for all trauma center levels. These guidelines serve as the foundation for trauma center verification in the state.

- The 2014 edition is currently used for Level IV trauma centers.
- The 2022 edition is the standard for Level I, II and III trauma centers.

Both versions can be downloaded free of charge at https://www.facs.org/quality-programs/trauma/quality/verification-review-and-consultation-program/standards/.

It is highly recommended that every Trauma Program Manager (TPM) obtain and review the version relevant to their facility's trauma level. These documents outline the standards necessary for achieving and maintaining trauma center verification and provide essential guidance on the development and operation of an effective trauma program. While the core principles between the 2014 and 2022 editions are similar, there are notable differences in specific standards and program requirements. The 2014 edition remains a valuable reference, due to its detailed explanations and contextual guidance within the textbook. TPMs are encouraged to retain a copy of this version for ongoing reference, even if their facility is using the newer standards.

Familiarity with the applicable verification standards is essential for TPMs, as these standards influence program design, performance improvement efforts, documentation practices, and ongoing compliance with state and national regulatory requirements.

The Verification Process for ACS-Verified Level I, II or III Trauma Centers

The American College of Surgeons (ACS) must verify Level I and II trauma centers in Iowa, as required by Iowa statute and administrative rules. Level III trauma centers may opt to be verified by ACS, if desired. The process is designed to evaluate and enhance trauma center performance by assessing compliance with standards outlined in *Resources for Optimal Care of the Injured Patient* (2022 Standards).

Trauma centers initiate the process by submitting an online site visit application and submit a completed Pre-Review Questionnaire (PRQ) application. About 120 days prior to the scheduled site visit, the ACS will confirm the visit and agenda, provide information on the assigned review team, and coordinate with relevant state and regional leaders.

During the on-site or virtual review, the review team—typically composed of two trauma surgeons and a nurse reviewer—evaluates the center's commitment, readiness, resources, policies, performance improvement, and overall trauma care delivery. The visit follows a structured agenda: patient care chart audits, performance improvement assessment, hospital tour, and exit interview where preliminary strengths, deficiencies and opportunities for improvement are shared with leadership.

Following the site visit, the review team drafts a final report summarizing deficiencies, strengths, and opportunities for improvement, which is reviewed by the Verification Review Committee (VRC) to validate findings. Facilities that meet all standards receive a three-year verification certificate. Those with up to three minor (Type II) deficiencies may receive a one-year certificate pending a focused review. Facilities with major (Type I) deficiencies or more than three minor issues may not be verified.

The Verification Process for State-Verified Level III and IV Trauma Centers

Verification is the process by which each trauma center in Iowa receives its trauma designation every three years, by the Iowa HHS Bureau of Emergency Medical and Trauma Services. The due date for reverification is listed on the facility's most recent verification certificate. If the certificate is unavailable the TPM should contact the State of Iowa Trauma System Coordinator to obtain this information.

Approximately six months before the reverification expiration, the State Trauma System Coordinator will reach out to the TPM via email. This message will include the Self-Assessment Categorization Application (SACA) along with other reference materials necessary to complete the application. The SACA serves as the central document in the verification process and includes instructions for submitting essential attachments such as relevant policies, procedures, and meeting minutes.

All required documentation must be gathered and submitted electronically to the State Trauma System Coordinator four months prior to the reverification due date. This timeline allows for adequate review and follow-up before the current verification expires. After submission, the coordinator will review the materials and request any additional documentation or clarification as needed. A state trauma verification review team will also be assembled to provide subject matter expertise for the virtual or on-site visit.

Once the review is complete, the State Trauma System Coordinator issues a final report summarizing the trauma program's strengths, identifies any criteria deficiencies, and provides recommendations for continued improvement. If no major deficiencies are found, a new verification certificate is issued, extending the facility's designation for three years from the expiration date of the current certificate. However, if significant issues are identified that require follow-up, the facility may be issued a one-year certificate, pending a focused review to ensure the program gets back on track.

The outcome of the reverification process may result in a letter confirming successful reverification, a letter of warning, or, in cases of unresolved deficiencies, disciplinary action. Details about these outcomes and the steps involved in each will be covered in the next sections of this manual.

State-Verified Level III Reviews

An on-site verification review is required for all Level III trauma care facilities in Iowa. There may be circumstances in which a traditional in-person review cannot be conducted and the review will occur via virtual platform. The state trauma verification survey team is composed of two physician reviewers—one of whom must be a surgeon and the other typically an Emergency Medicine physician—along with a nurse surveyor who has trauma program experience. The State of Iowa Trauma System Coordinator organizes and oversees the entire review process. The review typically spans five hours and is structured into five distinct sessions:

1. **Opening Session:** This session involves hospital administration, board members, liaisons from prehospital and hospital departments, and other trauma program stakeholders. It provides the survey team with insight into the facility's leadership support for the trauma program, as well as the goals it aims to achieve.
2. **TPM and TMD Interview:** The TPM and Trauma Medical Director (TMD) meet with the survey team to discuss their working relationship and demonstrate how trauma care processes and procedures are operationalized at the facility.
3. **Facility Tour:** A brief tour is conducted to familiarize the surveyors with key clinical areas. This includes the Emergency Department, trauma bays, radiology, laboratory/blood bank, Operating Room, ICU and medical/surgical units.
4. **PIPS and Chart Review Session:** Often considered the most valuable component of the verification visit, this session provides a deep dive into the facility's Performance Improvement and Patient Safety (PIPS) process. A sample of trauma charts is reviewed to illustrate patient care and the facility's performance improvement strategies. Many TPMs use a PowerPoint presentation to walk surveyors through the patient journey, highlight PIPS interventions and demonstrate loop closure. Others may project the electronic medical record on a large screen to narrate the case in real time. The format is flexible and should reflect what best represents the facility's trauma care processes. This session is not intended to critique the patient care provided but rather to offer surveyors an inside view of how the trauma team identifies opportunities for improvement, develops action plans, ensures follow-through and closes the loop.
5. **Survey Team Closed Session:** After the chart review, the survey team holds a closed meeting to deliberate their findings and finalize their assessment.
6. **Exit Summary:** The day concludes with a summary session, during which the surveyors present their observations and recommendations. Attendance is open to any individuals the trauma program deems appropriate (it is common for the same participants from the opening session to be in attendance), and it is strongly encouraged that hospital administration and board members attend. This final session provides valuable context for stakeholders and helps communicate the needs, strengths, and resource requirements of the trauma program.

State-Verified Level IV Reviews

The on-site verification visit for a Level IV trauma center is similar in structure to that of a Level III facility but includes a few key differences. The verification survey team typically includes one physician (either a trauma surgeon or an emergency medicine physician), an experienced trauma nurse surveyor and the State of Iowa Trauma System Coordinator. These reviews usually last about 4 hours and follow the same five-session format as Level III reviews. However, sessions are often shorter and involve fewer participants, reflecting the generally smaller size of Level IV facilities and the limited number of departments—such as operating rooms or intensive care units—that typically care for injured patients.

Level IV trauma centers have three options for verification: an on-site visit, a virtual review, or a paper review, depending on the needs and resources of the facility. Both the on-site and virtual visits involve the same review team configuration and cover the same content, with virtual visits conducted remotely via video conferencing platforms.

A paper review may be chosen by Level IV trauma centers when an on-site or virtual visit would place undue strain on staffing or resources. This type of review is conducted solely through the evaluation of the SACA and supporting documentation by a trauma nurse surveyor and the State of Iowa Trauma System Coordinator. During the process, the TPM may be contacted for clarification or additional information. Once the review is complete, the team collaborates to issue a final report and verification certificate. While a paper review satisfies the minimum requirements for reverification, it offers only a limited perspective—restricted to what is documented on paper—and lacks the real-time dialogue, in-depth assessment, and expert feedback available during on-site or virtual reviews. As a result, many trauma centers find greater value in hosting an in-person team, as it allows for more meaningful engagement, tailored support and shared learning that ultimately help strengthen the trauma program and improve patient care.

Disciplinary Action

Disciplinary action following a state trauma center verification is determined collaboratively, based on recommendations from the state trauma verification survey team, the State of Iowa Trauma System Coordinator, the Chief of the Bureau of Emergency Medical and Trauma Services, the compliance officer, and Iowa HHS legal counsel. Building on the guidance provided in the *Resources for Optimal Care of the Injured Patient* (ACS-COT, 2014, 2022), criteria deficiencies are categorized into three types:

- **Type I:** The deficiency requires a collaboratively developed plan of correction, approved by hospital administration and trauma program leadership, and must be followed by a focused site visit, typically within 3-6 months.
- **Type IIB:** The deficiency must be resolved through a focused site visit within 6-12 months.
- **Type II:** The deficiency can be addressed with written resolution submitted within 6-12 months.

The classification of a deficiency as Type I, II, or IIB is determined by the Bureau of Emergency Medical and Trauma Services, with input from the Verification Subcommittee of the Trauma System Advisory Council (TSAC). These decisions are guided by the standards outlined by the ACS-COT.

Administrative Rules and Statute

Iowa Statute 147A: Emergency Medical Care – Trauma Care

This Statute governs the statewide trauma system. It designates Iowa as an inclusive trauma system, meaning that all hospitals in the state are required to be verified at the level of trauma care they are capable of providing. It is essential for Trauma Program Managers to review and understand both the statute and the administrative rules, as they serve as the framework and legal foundation for the facility's trauma program. These rules provide the official guidance for trauma care operations and represent the binding agreement by which every trauma care facility in Iowa must comply. The statute and administrative rules governing the trauma system can be found on the Bureau of Emergency Medical and Trauma Services (BEMTS) website: https://hhs.iowa.gov/emergency-medical-services-trauma/trauma-system-resources.

641-134: Trauma Care Facility Categorization and Verification

This rule establishes a structured framework to ensure that hospitals and emergency care facilities across Iowa meet standardized trauma care requirements. Its primary goal is to promote consistent, high-quality trauma care statewide. The rule adopts the 2022 edition of the ACS *Resources for Optimal Care of the Injured Patient* (commonly referred to as the "Gray Book") for Level I, II, and III trauma centers, while continuing to utilize the 2014 edition (referred to as the "Orange Book") for Level IV trauma centers.

641-135: Trauma Triage and Transfer Protocols

This rule adopts the *2021 National Guideline for the Field Triage of Injured Patients* as a reference. A slightly modified trauma triage guideline was created to reflect Iowa's specific needs while preserving local flexibility. A copy of the Iowa Guideline for the Field Triage of Injured Patients (July 2025) can be found on the BEMTS website listed above.

641-136: Trauma Registry

This rule establishes the framework for maintaining Iowa's statewide trauma registry, requiring trauma care facilities to submit standardized patient data. It supports statewide trauma surveillance and system improvement through medical record reviews and ongoing data validation. Notably, it removes reference to a specific version of the Iowa Trauma Patient Data Dictionary, giving BEMTS the flexibility to update data standards annually and more efficiently as reporting needs evolve.

641-137: Trauma Education and Training

This rule ensures that healthcare professionals involved in trauma care receive initial and continuing education aligned with nationally recognized standards. Trauma team members must meet requirements based on their facility's verification level as outlined in the appropriate edition of *Resources for Optimal Care of the Injured Patient*.