The following communication highlights recent activity from the PTSF Board of Directors meeting on March 8, 2019. PTSF and the Board of Directors wish to thank each trauma center—and trauma care provider—for their ongoing commitment to the care of injured patients. You advance our mission and vision each and every day! If you have questions related to the content of this update, please contact Juliet Altenburg, MSN, RN—Executive Director.

HB 786 AIMED AT OPTIMIZING PA TRAUMA CENTER VOLUMES & OUTCOMES
Submitted by Juliet Altenburg, PTSF Executive Director

March 12, 2019—HB 786 was introduced and referred to the PA House Health Committee. HB 786 is the result of a two-year effort undertaken by the PTSF Trauma System Development Committee that was implemented as part of the PTSF Board-approved strategic plan.

The evidence for the changes is based on a robust review of research conducted in Pennsylvania and nationally that indicates achieving and maintaining trauma center volumes is critical in optimizing clinical outcomes for trauma patients. Geospatial research conducted in Pennsylvania further indicates that current urban trauma center coverage provided by level 1, 2 and 3 trauma centers provides appropriate access for trauma patients in Pennsylvania. Additionally, future trauma center distribution of these higher level trauma centers must avoid close proximity of neighboring centers to optimize volumes and clinical outcomes. Three main EMS Act changes within HB 786 are as follows:

1. Hospitals may only apply for level 1 and 2 trauma center accreditation in the future if they are greater than 25-miles away from a neighboring level 1, 2, or 3 trauma center. Since 2004, this 25-mile restriction exists for hospitals applying to be level 3 trauma centers. Current accredited level 1 and 2 trauma centers would be “grandfathered” into the legislation and not be required to meet these criteria.

2. The same volume criteria will be required for level 2 adult trauma centers as for level 1 adult trauma centers (600 patients) since both levels require the same optimal level of patient care. Of note, all currently accredited level 2 trauma centers meet this requirement except for those who have been accredited less than 2 years.

3. The funding formula will be revised to allow for reallocation of undistributed level 3 trauma center money to level 4 trauma centers in rural counties as defined by the Center for Rural Pennsylvania. Level 4 trauma centers do not receive funding through the current EMS Act.

This legislation will be moved through the House and Senate Health Committees so contacting these legislators first will be crucial. To find out who they are and the areas they represent go to the PTSF website to find the PA House and Senate Health Committee members document. Stakeholder groups and individuals are encouraged to contact your legislators to support this legislation. HB 786, a “talking points” document and a legislator letter template can be found on the website too. All of these documents are posted to the Resources section of the website, located in the “Research & References” subsection. Can’t find them, or have a question? Contact Juliet Altenburg.

COALITION OF TRAUMA CENTERS FOR FIREARM INJURY PREVENTION LAUNCHED IN PA

A new multidisciplinary coalition has been formed in PA under the leadership of Temple University Hospital Trauma Surgeon, Zoe Maher, MD. The coalition advocates for measures which serve to reduce firearm injury in the Commonwealth.
The Coalition of Trauma Centers for Firearm Injury Prevention (CTCFIP) is a statewide collaboration in Pennsylvania with physician, nurse, resident, medical student, administrator and ancillary staff members from trauma centers. Formed in early 2019, the mission of the organization is to support evidence-based, data-driven legislative and non-legislative change to reduce rates of firearm injury.

Interested in joining this group? Contact Zoe Maher. The CTCFIP mission, including its priorities can be found in the Resources area of the PTSF website.

DMIST PROJECT APPROVAL

The Boards of both the PTSF and Pennsylvania Emergency Health Services Council (PEHSC) recently approved the educational rollout of a collaborative approach to transfer of care of the trauma patient from EMS to the Trauma Center called, “DMIST.”

DMIST stands for focus areas of the report including: (D) Demographics, (M) Medical Complaint/Mechanism, (I) Inspections/Injuries, (S) Signs—vital signs, (T) Treatment.

Three (3) agencies collaborated on the DMIST project, including:
- Pennsylvania Bureau of EMS (PBEMS)
- Pennsylvania Emergency Health Services Council (PEHSC)
- Pennsylvania Trauma Systems Foundation (PTSF)

The project is based on the support of national organizations such as the World Health Organization, and the Joint Commission which recognize transfer of care as an activity that has potential for medical error. The American College of Emergency Physicians (ACEP), National Association of State EMS Physicians (NASEMP), National Association of State EMS Officials (NASEMSO), and Emergency Nurses Association (ENA) position statements suggest that the transfer of care process should include a verbal report, written report, and opportunity for the receiving provider to ask questions.

The initiative was advanced in reaction to PTSF receiving questions and comments from trauma centers and EMS agencies about the challenges that can occur during the transfer of care, specifically the verbal report. Trauma centers receive patients from multiple EMS agencies with varied reporting processes and EMS may deliver patients to multiple trauma centers with each center having its own verbal report process or requirement. Challenges and the need for a standardized process were further confirmed from results of a survey deployed to trauma centers and EMS providers.

Pennsylvania, like most states, does not have a standardized transfer of care process upon EMS patient delivery to the trauma team, so in the Spring of 2018, a workgroup was formed with the goal of improving patient care (from a communications standpoint) by standardizing the EMS verbal report process.

The workgroup developed educational tools that include a DMIST PowerPoint and DMIST Poster with an implementation plan, including:
- Emailing educational tools to all PA EMS Agency Chiefs/Directors & all PA pursuing and accredited trauma center Trauma Program Managers and Medical Directors.
- Presenting the DMIST process at 2019 conferences including:
  - PA Regional EMS Conferences (several).
  - PTSF Mini-Conference (June 2019).
PA EMS Conference (Sept 2019).
- PTSF Fall Conference (Oct 2019).
  - Incorporating into appendix of PA State-Wide EMS Protocols.
  - Considering incorporation of DMIST into the PTSF Standards of Accreditation as a recommendation.

The ultimate goal is for trauma centers and EMS Agencies to work collaboratively on adoption of the DMIST process as a method to improve communication during the transfer of care of a trauma patient.

**Technology & Trauma Registry Update**

**PTSF Education Software Approved for use by Trauma Centers**
The PTSF Board approved a proposal from Digital Innovations, Inc. (DI) that will provide the Educational software used by PTSF staff to perform inter-rater reliability testing to all pursuing and accredited PA trauma centers at no additional cost. Inter-rater reliability is a requirement in the PTSF Standards of Accreditation; this tool will allow the IRR process to become more efficient and consistent at pursuing and accredited PA trauma centers.

The software can be used to compare each PTOS data element to the patient’s actual medical record. Every PTOS element can be marked as correct or incorrect and also provides an ability to insert comments with rationale. Once a review is complete, a written summary and report card can be generated from the software and exported in Excel. The written summary lists each record and the elements within that record that were marked incorrect with their associated comments. The report card shows percentages of accuracy for each record and also a total accuracy percentage for the entire review.

PTSF staff will work with DI to determine start and end target dates for this project. Stay tuned for more information including timelines for installation and education on how to use the software.

**2019 Cv4 COLLECTOR™**
The 2019 Cv4 COLLECTOR™ Update is available and should have been installed at your facility. If you have not yet done so, contact Digital Innovations, Inc. (DI) to schedule your installation. DI Technical Support can be reached at 800-344-3668 ext. 4 or support@dicorp.com.

**PTSF Registry Resources**
The 2019 PTOS Manual, 2019 PTOS Change Document and 2019 facility lists were updated in March 2019 and have been posted to the Trauma Registry area of the PTSF website. Additional registry resources are also posted in this area including Frequently Asked Questions (FAQs) which are updated weekly and all PA trauma registry related education (https://www.elearningonnex.com/ptsf/). You will be notified by PTSF staff as new education is released. Please note that the Basic and Intermediate registry courses are still accessed on the PTSF website under the Education tab.

**Calling All Speakers!**
PTSF is looking for PA registrars willing to share best practices at the Fall Conference. Presentations can be 15-minutes or more. If interested, contact Lyndsey Diehl.

**Trauma Registry Questions**
To contact PTSF staff with any trauma registry questions, please email: RegistryQuestions@ptsf.org. A staff member will get back to you quickly—no question is too big or small.
The Standards Committee and PTSF Board of Directors approved the following changes and clarifications to the Standards of Accreditation. All changes are effective immediately, as they lessen requirements or provide clarification, unless otherwise noted.

**Standard 6: Performance Improvement & Patient Safety (PIPS) Program**
- PI Coordinator Attendance update. Compliance is expected effective January 1, 2020.
  - Any RN (regardless of FTE) fulfilling any component of the PI Role must maintain 75% attendance at the PI meetings.

**Standard 7: Continuing Education Programs**
- Continuing Education update. Compliance is expected effective January 1, 2020.
  - There will be formal internal programs in continuing education provided by the institution concerning the treatment of trauma patients of all ages for the following audiences at least once annually.
  - For level 1 and 2 trauma centers: There will be at least four (4) formal external programs in continuing education provided by the institution concerning the treatment of trauma patients of all ages for the following external audiences.

**Standard 10: Physicians**
- EM Physician Involvement in Highest Level of Alert clarification:
  - An Emergency Medicine physician must respond to the highest level of trauma alert.
  - In an Emergency Department where a trauma surgeon is present in the ED at all times, the EM Physician is not required to respond to highest level activations.

**Standard 13: Nursing**
- Patient care by a Non-trauma credentialed RN update. Compliance is expected effective January 1, 2020.
  - In circumstances where a patient is admitted to the unit under the care of a non-trauma credentialed RN there must be oversight by a trauma credentialed RN, which must include at a minimum immediate availability as a resource. This must be defined by the trauma program.
- Revision of Pa Trauma Nurse Core Curriculum (PaTNCC). Compliance is expected effective January 1, 2020.
  - For pediatric trauma centers, the geriatric module is optional. Nurses transferring from a pediatric to adult trauma program must complete the module, if applicable.
  - For level 4 centers, the PaTNCC curriculum is modified and therefore, a RN transferring from a level 4 to a higher-level trauma must retake the course.
  - For RN’s transferring from a level 1, 2, or 3 trauma center to another trauma center, the PaTNCC is transferrable, but the hospital-specific module must be completed within one year of hire.

The updated PaTNCC document can also be found on the PTSF website in the Resources tab under “Standards of Accreditation.” The previous version will remain on the PTSF website through 2019.
Nursing Continuing Education tracking exceptions clarification. Additional certifications were added for those nurses with an advanced certification that do not require a continuing education log in lieu of requirements of their specialty boards.

- The ANCC Medical-Surgical Nursing RN-BC.
- CNOR: Certification for Peri-Operative Nurse Specialty.
- CPAN: Certified Post Anesthesia Nurse.

Standard 23: Radiology
  - Level 1 & 2: A minimum of one 64-slice CT capability.
  - Level 3 & 4: A minimum of one 64-slice CT capability in hospitals where vascular imaging occurs.
    - A minimum of one 16-slice CT capability where vascular imaging does not occur.
  - The process of second opinion for radiology reads on transfer-in patient radiology studies is best practice and should be considered.
  - An annual review of radiation safety programs must occur.

Appendix A: Inter-Facility Transfer & Consultation Requirements for Level 3 & 4 Trauma Centers
- Compliance is expected effective January 1, 2020.
- Bilateral rib fractures (all) or 2 or more unilateral rib fractures with the presence of pulmonary contusion and/or Flail Chest.
- Non-occult pneumothorax which must be further defined by the trauma program.

Appendix C: Admission Guidelines for Level 4 Trauma Centers
- Compliance is expected effective January 1, 2020.
- Pneumothorax (isolated injury and asymptomatic).
  - This requires a clinical management guideline which must include provider-specific credentialing for chest tube insertion and management.

The revised Standards of Accreditation will be posted to the website with revision date of April 1, 2019. Additional details can be found in the Standards documents located on the PTSF website. The next Standards Committee meeting occurs in June. Any requests for subject discussion must be submitted by May 1st.

TRAUMA REGISTRY COMMITTEE UPDATE
Simon Lampard, MD, FACS—Committee Chairman
Deborah Chappel, MSN, RN—Committee Vice Chairman
Lyndsey Diehl, RHIA, CHDA, CSTR—Staff Liaison

The PTSF Board of Directors approved the following changes to PTOS/Collector for 2020 admissions:

- Addition of the NTDB/TQIP element INITIAL ED/HOSPITAL HEIGHT.
- The addition of the element “Signs of Life” to the query for Audit Filters #16 and #20.
- Patients with an injury time greater than 24 hours prior to arrival at the referring hospital to be excluded from Audit Filter #11a.
- Addition of an auto-calculation to the Acute Care/Arrival/Admission tab of Collector. This calculation will calculate the administrative ED length of stay.
The addition of the NTDB/TQIP elements INITIAL ED/HOSPITAL OXYGEN SATURATION and INITIAL ED/HOSPITAL SUPPLEMENTAL OXYGEN to PTOS.

Enabling of the PGY field for all “Others Called to ED” providers on the ED Response and Consults tabs.

The addition of an optional element to capture “Admit Unit” to PTOS.

Requiring Time of Death/Transfer be recorded for all types of discharges.

Please note that these changes will not be effective until January 1, 2020 admissions. All 2020 changes will be presented at the 2019 PTSF Fall Conference and reflected in the 2020 PTOS Manual.

PA-TQIP COLLABORATIVE UPDATE

Forrest Fernandez, MD, FACS; Denise Torres, MD, FACS; Donna Titus, MSN, RN, CEN; & John Gallagher, DNP, RN, CCRN-K, CCNS, TCRN—Leadership Team,
Terry Snavely, MSN, RN, TCRN & Gaby Wenger, RHIT, CPC, CAISS—Staff Liaisons

At the PTSF Board Meeting on March 8th, Denise Torres, MD, provided an overview regarding the Pennsylvania Trauma Quality Improvement Program (PA-TQIP) Collaborative and future plans. Key highlights are noted below.

Background:
On March 22, 2016 the PTSF Board of Directors approved that all eligible PA Trauma Centers participate in data submission to the American College of Surgeons (ACS) Trauma Quality Improvement Program (TQIP). This led to the formation of the PA -TQIP Collaborative which enabled Pennsylvania trauma center data to be benchmarked statewide and nationally.

December 1, 2016 marked the first PA TQIP Collaborative in-state meeting. Since that time there have been nine in-person meetings with staff from over 35 hospitals participating, and 17 Best Practice presentations focusing on innovative strategies for overcoming common issues. Goals continue to be focused on working to improve trauma care across the state and globally. High-performing centers help low-performing centers with best practices. Education occurs on effective data evaluation, validation and analysis. Collaborative initiatives serve to enhance outcomes and evidenced-based practice through research.

In 2018, the committee focused on unplanned admissions to the ICU which were identified as an opportunity for improvement compared to national data. This project identified inconsistencies in interpretations of the definition in PA state data, which led to the ACS clarifying the definition and no longer considering it as a “major complication.” Recommendations to standardize state abstraction were reviewed by the PTSF Trauma Registry Committee and follow up education was sent to every program including patient scenarios with explanations on how they relate to unplanned ICU admission.

Future Initiatives:
 Collaborate with ACS regarding future projects including the possibility of open data sharing and initiatives involving the Outcomes™ central site death repository;
 Ensure clarity and standardized application of definitions;
 Clarify application of taxonomy, and improve death classification for opportunities for improvement;
 Continue education for all members of the trauma program;
 Draft proposal for presentation at December PTSF board meeting involving using data to extend accreditation cycle;
 Standardize VTE prophylaxis with a focus on pulmonary embolism reduction.
2019 Meeting Schedule:
- May 23, 2019—Go-to-Meeting, web-based conference call (1 p.m. – 2 p.m.)
- June 25, 2019—PTSF Spring Mini-Conference, Best Western Premier, Harrisburg, Pa. (Time – TBD)
- October 17, 2019—PTSF Fall Conference, Sheraton Hotel, Harrisburg, Pa. (11 a.m. – 12:30 p.m.)
- November 16-18, 2019—Hilton Anatole, Dallas, Texas (Date/Time – TBD)

OUTCOMES COMMITTEE UPDATE

DENISE TORRES, MD, FACS—COMMITTEE CHAIRMAN
TERRY SNAVELY/GABY WENGER—PTSF STAFF LIAISON

The Outcomes Committee is the “oversight committee” and steering committee for performance improvement and outcome activities for the PTSF. The Performance Improvement and Patient Safety Committee (PIPS) and Outcomes Committees, along with the Pa-Trauma Quality Improvement Program (TQIP) Collaborative work in collaboration with one another. Committee membership includes Trauma Program Medical Directors (TMD), Trauma Program Managers (TPM)/Coordinators, PI Coordinators (PIC) and Trauma Registrars from all trauma center levels. The committee works to align with the PTSF strategic objectives and 2019 will focus on goal #4 of the PTSF Strategic plan: Create a Plan to Effectively Use TQIP/PTOS Data as Part of the Site Survey Process.

Two subcommittees have been formed to create a draft proposal for the Board’s consideration. The first subcommittee is charged with the development of a best practice Trauma Program leadership attrition plan template. The second group will focus on developing basic PI Metrics for optimal trauma program performance. Committee members will draft a proposal for consideration by the PTSF Board in December using data and outcome measurements to extend the site survey cycle.

PIPS COMMITTEE UPDATE

SANDI GARRETT, MSN, RN—COMMITTEE CHAIRMAN; DR. DENISE TORRES, MD, FACS—VICE CHAIRMAN
TERRY SNAVELY—PTSF STAFF LIAISON

The PIPS Committee membership includes all levels of PA Trauma Center representation with a multidisciplinary group of TMD, TPM, and PI Coordinators. This committee’s goals are to work on the fundamental building blocks necessary to establish a robust standardized statewide performance improvement process. The 2019 priorities will have work groups focusing on the following three areas:

1. PA V5 Outcomes – will work on providing several taxonomy case presentations by WebEx and continue to review Outcomes software revisions.
2. PIPS Data elements – will review ACS best practices to ensure the PTSF trauma registry contains the appropriate data elements.
3. Occurrence Reporting – will review occurrences and variances in definitions and their application

2019 PA Outcomes Central Site Submission
- Moving forward, keep doing PI as you have done it in the past!
- PTSF Outcomes Central Site will include taxonomy data.
- For taxonomy classifications utilized for all issues/events associated with death case submissions, only list “9” if an issue/event occurred that directly impacted Death.
  - #9. On balance of probabilities, death was caused or brought forward in the short term by the incident.
Effective January 1, 2019, Trauma Outcomes Policy TO-100, Timeliness of Submissions to the Outcomes Central Site became effective. The policy can be found in the Resources area of the PTSF website.

**EDUCATION**

**PTSF Online Education**

PTSF Online Education is now hosted and supported by KnowledgeConnex. PTSF-sponsored educational sessions remain at no cost to PA trauma program staff.

Use the following link to access online education: [https://www.elearningconnex.com/ptsf/](https://www.elearningconnex.com/ptsf/)

Once at the site, you can log in if you’ve previously registered for a course, or if it’s your first time visiting, you can just view courses or register—either way, use the link above. Once registered, you can log in at any time, from any location. The three most recent courses will be visible, but by clicking on “View More” all available courses will show. To register for a course, click “View Course Outline.” Click “Purchase Course” on the next page; this will take you to the registration page.

As mentioned above, **all courses are free for PA Trauma members by selecting “Pennsylvania Trauma Member” under “Member Type.”** Please note that at the bottom of the screen you can also register for additional courses at the same time by clicking “Attend This Session” for any other course listed. Once finished, click “Save Registrant.” You will then receive an email from KnowledgeConnex with login information to set up an account and complete their courses. **You need to save and remember your login information.** You will use this to access any future courses without having to go through all of these steps.

**New Pennsylvania Trauma Medical Director Course Being Launched**

Under the direction of Forest Fernandez, MD, FACS, Trauma Program Medical Director of Reading Hospital – Tower Health who is serving as the Pennsylvania Committee on Trauma Chairman, a new course is being launched for Trauma Medical Directors in Pennsylvania which will be FREE OF CHARGE.

The first program will be presented during the PTSF “Mini-Conference” in June. The target audience is Trauma Medical Directors new to their role in PA to help them learn administrative aspects of their positions. Sessions will be conducted by “veteran” PA trauma medical directors on “hot topics” identified on a recent survey monkey deployed by PTSF to the trauma medical director group. PTSF will send out statewide registration information once details are finalized.

**Local, State & National Meetings & Education Opportunities**

Save the Date . . . for upcoming events. Items in **BOLD** print are PTSF-sponsored events. As events and meeting dates are confirmed in 2019, they are added to the website calendar. If you have events that you would like to advertise on the PTSF calendar, contact Linda Stamey.

- March 27-29, 2019—Society of Trauma Nurses (STN) Annual Trauma Conference
- April 2-5, 2019—American Burn Association (ABA) Annual Meeting
- **April 9, 2019— “New” Trauma Program Manager/Coordinator, PI Coordinator Orientation Class, PTSF**
Office

- April 13, 2019—Medical Disaster Response Conference
- April 14-17, 2019—Trauma Critical Care & Acute Care Surgery Conference
- April 23-24, 2019—American Trauma Society, Pennsylvania Division, Annual Conference
  www.atspa.org/conference. Registration closes on March 29th
- May 19-22, 2019—American Pediatric Surgical Association (APSA) Annual Meeting
- May 23, 2019 – PA-TQIP Collaborative Web-based meeting
- June 24-25, 2019—PTSF Annual Spring Mini-Conference & PA-TQIP Collaborative Meeting, Best Western Premier, The Central Hotel and Conference Center, Harrisburg, PA
- July 18-19, 2019—PTSF Board of Directors Meeting & Annual Summer Deliberations, Sheraton Harrisburg - Hershey Hotel
- September 10, 2019—“New” Trauma Program Manager/Coordinator, PI Coordinator Orientation Class, PTSF Office
- September 14-19, 2019—American Health Information Management Association (AHIMA) Conference
- September 18-21, 2019—The American Association for the Surgery of Trauma (AAST) Annual Member Meeting & Clinical Congress of Acute Care Surgery
- September 23-26, 2019—Digital Innovations, Inc. Annual Users Conference
- September 27, 2019—PTSF Board of Directors Meeting & Annual Fall Deliberations, Sheraton Harrisburg - Hershey Hotel
- October 16-18, 2019—PTSF Fall Conference & PA-TQIP Collaborative Meeting, Sheraton Harrisburg - Hershey Hotel
- October 17, 2019—PaCOT Annual Resident Trauma Paper Competition (at Fall Conference)
- October 27-30, 2019—American College of Emergency Physicians (ACEP) Scientific Assembly
- October 27-31, 2019—American College of Surgeons (ACS) Annual Meeting & Clinical Congress
- November 16-18, 2019—TQIP Annual Conference, Dallas Texas & PA-TQIP Collaborative Meeting
- December 6, 2019—PTSF Board of Directors Meeting