Pennsylvania Trauma Systems Foundation
Annual Fall Conference

Finding Our Voice

Juliet Altenburg
Executive Director
Pennsylvania Trauma Systems Foundation
Housekeeping Items: Social Media

- Me:
  - Twitter: @AltenburgJuliet
    - #PTSF2018
  - LinkedIn

- PTSF:
  - Facebook: “Pennsylvania Trauma Systems Foundation”
    - Facebook LIVE – new this week
Housekeeping items

• Continuing Education Credits
  – Physicians – complete paper eval and submit
  – Nurses - email link to eval will be sent

• PowerPoints
  – Located on PTSF website under “Resources”
Housekeeping items

• Day 1
  – Committee meeting: Members only
  – Lunch is outside meeting room

• Day 2
  – Lunch: No Trauma Program Leadership Forum
  – PATNAC session is a workgroup NOT education

• PowerPoints
  – Located on PTSF website under “Resources”
Pat Reilly, MD
PTSF Board Chair
Finding Our Voice

Juliet Altenburg
Executive Director
Pennsylvania Trauma Systems Foundation
Finding *my* voice……

October 15, 2018
2018 PTSF Board of Directors

Missing: Rep Mike Schlossberg, Sen Lisa Baker, Sen Judith Schwank
Farewell...

Douglas Trostle, MD  
HAP

William Hoff, MD  
PAMED

James Burke  
HAP

Michelle Fontana RN, MSN  
PATNAC
The Team

Back: Linda, Tom, Kevin, Juliet, Amy, Gaby, Lyndsey
Front: Dave, Stephanie, Dor, Terry
Hospitals Pursuing Trauma Center Accreditation

Total Number of Trauma Centers: 41
- Adult Level I = 10
- Adult Level II = 17
- Pediatric Level I = 3
- Combined Adult 1/Peds II = 2
- Combined Adult I/Peds I = 1
- Level III = 1
- Level IV = 7

Effective 11/1/18

- Gold: Pursuing Level IV Accreditation (7)
- Yellow: Pursuing Level III Accreditation (2)
- White: Pursuing Level II Accreditation (1)

Map of Pennsylvania showing the locations and accreditation levels of trauma centers.
Congratulations to our newest Level IV: Fulton County Medical Center

Samantha Smith, RN  
Trauma Program Manager

Janelle Martin, MD  
Trauma Medical Director

Doug Stern, DO  
ED Director

Gerald Celestine MD  
ED Physician

Megan Early  
CRNP
Collaboration at its best

- Goal: STB Education and tourniquet distribution to 4200 Pa State Police
- Partners: PTSF, UPMC, Injury Prevention Committee, Pa State Police, Trauma Centers
2018 – 2020
PTSF Strategic Plan
Mission

Optimal outcomes for every injured patient
Vision

We are committed to Zero Preventable Deaths from injury in Pennsylvania.
2018 – 2020
PTSF Strategic Plan Goals

1. Optimize Analysis of Key Data Through TQIP and POPIMS Databases
2. Create a Plan to Effectively Use TQIP Data as Part of the Site Survey Process
3. Promote Research Utilizing PTOS Statewide Trauma Registry
2018 –2020
PTSF Strategic Plan Goals


5. Promote Appropriate Trauma Care Coverage in Geographically Underserved Areas (2018, 2019)
Denise Torres, MD

Chair, PTSF Outcomes Committee
Optimize Analysis of Key Date Through TQIP and POPIMS Databases

Objective #5
– Perform analysis of POPIMS Central Site database deaths showcasing one or more areas for improvement at PTSF annual conference. 2018, 2019, 2020

Objective #6
– Use PA TQIP Collaborative Reports to create a plan for improving performance in all trauma centers. 2018, 2019, 2020
TQIP Collaborative

• Meetings three times a year- PTSF, TQIP and late spring with a goal to coincide with report releases
• Three representatives from every trauma program
• Signed confidentiality agreements
• Jun 2018- Avery Nathans, MD presentation
TQIP Complications

Figure 5: Risk-Adjusted Specific Complications by Complication/Cohort

- Acute Kidney Injury in All Patients
- Acute Kidney Injury in Shock
- Ventilator-Associated Pneumonia in All Patients
- Ventilator-Associated Pneumonia in Severe TBI
- Pulmonary Embolism in All Patients
- Surgical Site Infection in All Patients
- Unplanned ICU Admission in All Patients
- Unplanned Return to OR in All Patients
- Catheter-Associated UTI in All Patients
Unplanned ICU admission

- Survey for TMD, TPM, and registrars
- Are we all on the same page when it comes to the definitions
- Blinded outcome data was submitted
- Does it matter?
Areas of incongruence

All questions that had more than a 30% answer differently than the most popular answer

1. Virtual upgrades- patient was written for a level of care but not actually moved and care was changed to or back to the ICU

2. Postoperative/post-procedural care

3. Medical upgrades in care
Where to go from here?

- Recommend that any time this occurrence is captured- it should be reviewed by a clinical person to see if they agree (PI coordinator, TPM, TMD)
- Communication with national TQIP to improve definition
- Petition the registry committee with our recommendations to better define unplanned ICU admission
Relationship of Unplanned Admit to the ICU and Risk-Adjusted TQIP Mortality Outcome Measurements

- There is not a statistically significant correlation between Unplanned Admission to the ICU decile and any of the studied mortality outcome variables.
- Population of patients is small when compared to all TQIP patients.
- Unplanned ICU admission may still effect outcome variables in smaller subsets of patient populations (Might be studied through PTOS registry).
Unplanned ICU admission and Central Site Data

• 16% deaths involved unplanned ICU admission
• 21 deaths were determined preventable
• 16 opportunity for improvement
• 15 no opportunities for improvement
Transfers in after 3 hours

- Outcomes committee project
- Central site data
- 10.8% incidence
- 23% opportunities for improvement
- 34% preventable

- Further presentation at the Fall PTSF conference by Alexandra Evans, RN (Hazelton TPM)
Create a Plan to Effectively Use TQIP Data as Part of the Site Survey Process

Objective #7
- Create a formula for incorporating TQIP results, significant issues citations and other parameters to determine when a survey cycle should be extended. 2020

Objective #8
- Create a plan for how the PTSF Board of Directors could potentially use TQIP as part of the decision-making process when citing significant issues and accreditation determinations. 2020
Where are we?

- Awaiting Quintiles system for TQIP
- Additional drill down features that may be useful
Strategic Plan Update: Trauma Center Distribution

Fred Rogers, MD – Chair, Trauma System Development Committee

Juliet Altenburg – Executive Director, PTSF
2018 – 2020
PTSF Strategic Plan

• Strategic Imperative: Optimize Clinical Outcomes of Injured Patients in Pennsylvania
  – Goal #1: Optimize Trauma Center Placement in Pennsylvania
  – Goal #2: Promote Appropriate Trauma Care Coverage in Geographically Underserved Areas
Goal #1: Optimize Trauma Center Placement in Pennsylvania

• Formulate a proposal for optimal placement of trauma centers that avoids the over-proliferation of Level I/II trauma centers.

• Test and validate the proposal with external stakeholders and Board of Directors.

• Pursue change of language in EMS Act if warranted
Goal #2: Promote Appropriate Trauma Care Coverage in Geographically Underserved Areas

• Create a proposal to encourage hospitals in underserved areas to elevate their level of trauma care through trauma center accreditation or other means.
TSDC Charge from PTSF Board of Directors

To develop an evidenced based process for trauma system development in Pennsylvania which takes into consideration proper placement of trauma centers based on needs of the population in a given region rather than the needs of individual hospitals or health systems.
PTSF Trauma System Development Committee

Non-Board Members
- Fred Rogers, MD – Chair
- David Loder, Esq.
- Spence Reid, MD
- Andrew Peitzman, MD
- Bill Schwab, MD
- Jami Zipf, RN

Board Members
- Meg Ashton, RN
- Charles Barbera, MD
- Rep. Bryan Cutler
- Bill Hoff, MD
- Doug Kupas, MD
- John McCarthy, DO
- Doug Trostle, MD

PTSF Staff Support: Juliet Altenburg, Dave Bradley, Terry Snavely
The Research

  - Volume decreases over time can negatively impact outcomes in severely injured patients.
The Research

  - Pts in high volume Pa TC (617 annual volume) with moderate to severe injuries achieved better patient outcomes than “low volume” trauma centers. (Used PTOS data)
The Research

  - Showed how the new development of nearby trauma centers decreased trauma volume at an already accredited Level I trauma center.
The Research

3 of 14 candidate sites consistently selected
Proposed Changes to EMS Act

1. *New* Level I or II Adult Trauma Centers must be > 25 miles from an existing Level I, II, or III Trauma Center

2. Volume criteria for Level II Trauma Centers will be the same as for Level I (600 PTOS patients/year)

3. Undistributed Level III Trauma Center funding will be allocated to rural Level IV Trauma Centers
25 Mile Criteria

• **Rationale**
  – Currently only Level III trauma centers must be > 25 miles away from a Level I, II, or III trauma center. The change will now include Level I and II trauma centers to assure appropriate volumes to maintain provider skill and patient outcomes.

• **Key Facets**
  – On the effective date of the new legislation, currently accredited trauma centers will be grandfathered in and will NOT be de-accredited.
  – If a grandfathered Level I, II, or III accredited trauma center applies for an elevation in trauma center level they will continue to be grandfathered.
  – If a Level IV trauma center applies for a higher level accreditation they MUST BE more than 25 miles away from a Level I, II, or III trauma center.
New Volume Criteria

• Rationale
  – Currently only Level I adult trauma centers have the 600 patient requirement yet Level 1 and Level 2 trauma center accreditation requirements are the same for quality of care
  – EMS Protocols dictate that the most severe trauma patients are transported to EITHER a Level I or Level II trauma center
  – Research supports that high volume = high quality

• Key Facets
  – All current Level II trauma centers meet the 600 volume requirement
  – Because volume can change annually, if a Level I/II trauma doesn’t meet the volume requirement in a given year, the board will need to consider what actions are necessary for assuring quality of care compliance.
Re-allocation of undistributed Level III funding to rural Level IV trauma centers

• Rationale
  – 10% of trauma center funding is earmarked for hospitals pursuing Level III accreditation or accredited Level III trauma centers. Funding is capped at 50% of the average Level II payment. Every year there is unspent money due to so few Level III hospitals.
  – Currently Level IV trauma centers receive NO funding
  – The rationale for specifying “rural Level IV trauma centers” is that they are in the most underserved areas in PA.

• Key Facets
  – The definition of “rural” county will be defined by the Center for Rural Pennsylvania – “A legislative agency of the Pennsylvania General Assembly.”
Next Steps

• Education of all organizations that have seats on PTSF Board of Directors
  – Department of Health
  – Hospital and Health System Assoc. of Pa
  – Pa College of Emergency Physicians
  – Pa Committee on Trauma
  – Pa Emergency Health Services Council
  – Pa Medical Society
  – Pa Neurosurgical Society
  – Pa Orthopedic Society
  – Pa State Nurses Association
  – Pa Trauma Nurse Advisory Council
  – Legislators
Next Steps

• Survey Monkey to all Trauma Program leadership staff
• Introduction of revised EMS Act legislation including proposed changes with the support of Rep. Bryan Cutler.
Questions?