

Trauma Program Manager Educational Webinar



AUGUST 27, 2021



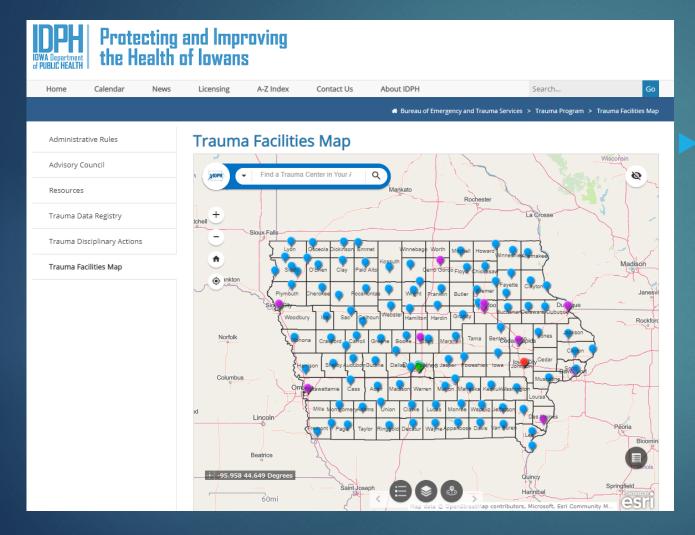
Jill Wheeler, RN, BSN, CCRN, SCRN, TCRN
Trauma Nurse Coordinator
Bureau of Emergency and Trauma Services

Housekeeping Items



- Update on ATS TPM Course
 - ▶ IDPH had funds to send 50 participants
 - Scheduled for September 17-18 and September 24-25
 - Capacity = 25/each *FULL*
 - ▶ There is a waitlist if IDPH/BETS has funds to host in the future
 - Contact ill.wheeler@idph.iowa.gov if interested

Housekeeping Items





- Review the Trauma Care Facilities Map
 - https://idph.iowa.gov/bets/ trauma/facilities-map
 - Ensure your facility has the correct contact person and information





Fall Prevention Awareness Week

- Iowa Falls Prevention Coalition
- ► September 20 24, 12:00-4:30pm
- Virtual via Zoom
- Cost: FREE
- CEU's provided
- ▶ Brochure here
- Register here





- 2021 Preventing Childhood Injury Conference
 - ▶ Tuesday, September 21 9:00am-4:30pm
 - Education & Research Center @ Iowa Methodist Medical Center
 - Cost: \$40 until August 31, then \$65 from September 1-13
 - CEU's provided
 - More information: blankchildrens.org/ipc
 - ► Register here





- **EMS World Trauma Symposium**
 - October 5 7:00am-4:00pm
 - Cost: \$120 (Virtual)
 - CEU's provided
 - More info: https://www.emsworldexpo.com/
 - ► Register here





- 2021 Omaha Area Trauma Symposium
 - ▶ Friday, October 8 7:30am-4:00pm
 - Creighton University Harper Center OR virtual
 - Cost: \$60 \$130, depending on your role
 - CEU's provided
 - ► More info: https://excellence.creighton.edu/2021Trauma
 - ► Register Here

Trauma System Advisory Council (TSAC)



- July 20, 2021 meeting highlights
 - Member appointments:
 - Jeri Babb Urban TPM
 - Dr. Gary Hemann ED Physician
 - ▶ Nicole Nigg Rehab Services
 - Veronica Fuhs Rural Hospital Administrator
 - Alan Faith Rural TPM
 - Dr. John Hartman ACS
 - Nella Seivert IEMSA
 - Reconvene Subcommittees: Triage & Transport, Verification, System Development, and Trauma Conference Planning





- Chapter 2: Description of Trauma Centers and Their Roles in a Trauma System
 - ▶ (2-1) This trauma center must have an integrated, concurrent performance improvement and patient safety (PIPS) program to ensure optimal care and continuous improvement in care.
 - > PIPS policy reviewed annually
 - ▶ PIPS meeting minutes demonstrate PI conversations
 - Method of identifying trauma patients
 - ▶ PI monitoring



Level III Level IV BOTH III & IV



- Chapter 2: Description of Trauma Centers and Their Roles in a Trauma System
 - ▶ (2-5) Through the trauma PIPS program and hospital policy, the trauma director must have responsibility and authority for determining each general surgeon's ability to participate on the trauma panel based on an annual review.
 - ▶ Includes all providers involved in trauma (ED physicians, ortho, surgeons, neurosurgeons, APPs) also see (see also 5-11)
 - ► The liaisons can do the annual reviews, but there must be a section for the TMD to sign-off on trauma-related requirements
 - ▶ OPPE's are great
 - Must be completed ANNUALLY

Annual Trauma Care Evaluation

Example



Annual Trauma Care Evaluation

Provid	der:	Date of Review:						
Revie	wer:							
urpo	se of F	Review:						
□ Ong	going F	Professional Practice Evaluation (OPPE)						
□ Adv	vanced	Practice Provider						
ATLS	certific	ation: 🗆 Yes 🗆 No ATLS expiration date:						
Board	certifi	cation: 🗆 ER Med 🗎 Ortho 🔠 Surgery 🗎 Other:						
Y es	No	Competency Assessment						
		Patient Care: Provided Patient Care that is compassionate, appropriate and effective for the promotion of health, prevention of illness, treatment of disease, and care at the end of life.						
	 Medical/Clinical Knowledge – Demonstrated knowledge of established and evolving biomedical, clinical, and social sciences and the application of their knowledge to patient care and the education of others. 							
		Practice-based Learning and Improvement – Uses scientific evidence and methods to investigate, evaluate, and improve patient care practices.						
	Interpersonal and Communications Skills – Demonstrates interpersonal communication skills that enable them to establish and maintains professional relationships with patients, families and other members of health care teams.							
		Professionalism – Demonstrates behaviors that reflect a commitment to continuous professionalism development and educational requirements.						
		System-Based Practice - Demonstrates both an understanding of the contexts and systems in which healthcare is provided and the ability to apply this knowledge.						
Com	ments:							
Γraum	na Medi	ical Director: Date:						
ssue	d 09/20	19						









- Chapter 2: Description of Trauma Centers and Their Roles in a Trauma System
 - ▶ (2-13) Well-defined transfer plans are essential.
 - Capabilities of the institution
 - What injuries stay? What injuries transfer?
 - Sometimes included in EMTALA policy
 - ▶ Interfacility transport protocols
 - Consideration for Early Transfer Policy
 - Bonus points if you demonstrate input from higher level facilities (ex: burn, neuro, spinal care)

Transfer Plan Example

HOSPITAL

Policy Title: Transfer-Consideration for Early Transfer		Policy Number: ED01507		
Department: Nursing - Emergency		Effective Date: 08-28-2003		
Dates Reviewed: 09-01-2015;12-22-2015, 09-26-2017	Date 2015	s Revised: 07-14-2008; 12-22-		

Scope: Emergency Department

<u>Purpose:</u> To provide appropriate screening, treatment and stabilization (in accordance with the federal EMTALA regulations) by qualified licensed health care practitioners within the capabilities of the practitioner and facility. All medical interventions necessary to stabilize and treat the patient in the Emergency Department will be started and continued throughout the transfer. The patient's condition, potential for deterioration, current treatments, and medical interventions will be taken into consideration to determine appropriate mode of transportation and the appropriate skill level of the emergency medical providers treating the patient during transport to receiving facility.

Policy

For those patients, in which their condition and or medical needs extend beyond the capabilities of HOSPITAL, appropriate transfer arrangements will be made with a healthcare facility that has the capabilities to provide the anticipated and necessary medical care. The Emergency Department practitioner will contact the receiving facility and consult with the accepting physician. The Emergency Department nurse will contact the receiving facility and provide patient report to the nursing staff of the receiving facility. Transfer arrangements shall be consistent with the federal EMTALA regulations and HOSPITAL policies

Definitions:

- Patient transfer is the responsibility for care of a patient from one facility to another
- Risk criteria is the terms of standards or expectations used in making a judgement or decision on the risk being assessed.

Procedure:

High Risk Criteria for Consideration of Early Transfer:

- 1) Central Nervous System
- a) Head injury:
 - i. Penetrating injury or open fracture (with or without cerebrospinal fluid leak);
 - ii. Depressed skull fracture;
 - iii. Glasgow Coma Scale (GCS) score deterioration;
- iv. Lateralizing signs.

Document Title: Transfer-Consideration for Early Transfer	Page 1 of 3
Policy Number: ED01507	

- b) Spinal Cord Injury:
 - i) Spinal Column injury or major vertebral injury.
 - Lateralizing signs.
- 2) Chest
- a) Major chest wall injury;
- b) Wide mediastinum or other signs suggesting great-vessel injury;
- c) Cardiac injury:
- d) Patients who requiring chest tube / require prolonged ventilation.
- 3) Pelvis
- a) Unstable pelvic ring disruption;
- b) Unstable pelvic fracture with shock or other evidence of continuing hemorrhage:
- c) Open pelvic injury.
- 4) Major Extremity Injuries
 - a) Fracture/dislocation with loss of distal pulses:
- b) Open long-bone fractures;
- c) Extremity ischemia.
- 5) Multiple-System Injury
- a) Head injury combined with face, chest, abdominal, or pelvic injury;
- b) Burns with associated injuries;
- c) Multiple long-bone fractures;
- d) Injury to more than two body regions.
- 6) Comorbid Factors
- a) Age > 55 years;
- b) Children:
- c) Cardiac or respiratory disease:
- d) Insulin-dependent diabetics, morbid obesity;
- e) Pregnancy:
- f) Immunosuppression.
- 7) Secondary Deterioration (Late Sequelae)
- a) Mechanical ventilation required;
-) Sepsis:
- c) Single- or multiple-organ system failure (deterioration in central nervous, cardiac, pulmonary, hepatic, renal, or coagulation systems):
- d) Major tissue necrosis.

Tag Number: C-0192, C-0210, C-0230, C-0267, C-0373, C-0376,

<u>References:</u> American College of Emergency Physicians, Guide for Interfaculty Patient Transfer by the National Highway Traffic Safety Administration.

Relevant Documents: NA.

Document Title: Transfer-Consideration for Early Transfer	Page 2 of 3
Policy Number: ED01507	









- Chapter 2: Description of Trauma Centers and Their Roles in a Trauma System
 - ▶ (2-18) The multidisciplinary trauma peer review committee must meet regularly, with required attendance of medical staff active in trauma resuscitation to review systemic and care provider issues, as well as propose improvement to the care of the injured.
 - Recommendation: Develop a chart demonstrating members, specialty, meeting dates, and percentage of attendance.
 - Peer review agendas
 - Demonstrate there is a peer review process for trauma cases







- Chapter 2: Description of Trauma Centers and Their Roles in a Trauma System
 - (2-19) A PIPS program must have audit filters to review and improve pediatric and adult patient care
 - Don't forget pediatric population
 - Can have as many audit filters as you want
 - Recommend ongoing meeting discussions surrounding data and whether or not the audit filters remain applicable
 - If your audits are always 100%, it may be time to work on new metrics



Audit Filter Worksheet Example



Trauma PI Filter Tracking Worksheet

atient name:	Admit date

Medical record #:

Complete for any case involving a trauma team activation, admit, transfer or death.

PI Filter	Yes	No	N/A
Under-triaged/trauma team not activated when criteria met			
Over-triaged/trauma team activated unnecessarily			
Trauma team response times incomplete/missing			
Trauma care provided by non-ATLS provider			
Transfer to level I trauma center > 60 minutes			
Transfer to non-designated trauma center			
GCS not recorded			
GCS ≤ 8 and no endotracheal tube or surgical airway within 15 minutes of arrival			
No chest tube placed for pneumothorax or hemothorax before transfer			
Complete initial vital signs not recorded (HR, BP, RR, temp, GCS, SaO2)			
Vital signs no recorded every 15 minutes			
Spinal immobilization indicated and arrived via EMS without spinal immobilization			
EMS report not in patient chart			
EMS times incomplete/missing			
EMS on scene time >15 minutes without documented extrication efforts			
Blunt chest or abdominal, multi system or high-energy trauma admitted with no general surgeon evaluation			
Open fracture – no antibiotics			
Trauma surgeon response time incomplete/missing			
Volume of infused fluids not documented			
Unstable vitals/hemodynamic compromise and no blood products ordered			
Missed injury/injury diagnosed >24H after initial traumatic event			
No alcohol screening done			
PEDS – Safety Equipment Documented (helmet, seatbelt)			
PEDS – Appropriate C-spine immobilization			
PEDS – Weights recorded in EPIC			
	П	П	П

Any chart that generated a "Yes" must be reviewed by trauma PI team.

	No improvement opportunities identified
Co	mments:





Level III Level IV BOTH III & IV



- Chapter 3: Prehospital Trauma Care
 - ▶ (3-3) Rigorous multidisciplinary performance improvement is essential to evaluate overtriage and undertriage rates to attain the optimal goal of less than 5% undertriage.
 - ▶ Recommend standing agenda item in MDTC
 - What was the ultimate outcome? Was the patient harmed by not being triaged appropriately?
 - ▶ Not a criterion for Level IV, but may be helpful for PI
 - ▶ (16-7) Rates must be monitored and <u>reviewed quarterly</u>





- Chapter 3: Prehospital Trauma Care
 - ▶ (3-7) When a trauma center is required to go on bypass or to divert, the center must have a system to notify dispatch and EMS agencies.
 - Prearrange alternative destinations with transfer agreements in place
 - Notify other centers of divert or advisory status
 - Maintain a divert log
 - Subject all diverts and advisories to PIPS procedures





- Chapter 4: Inter-hospital Transfer
 - ▶ (4-3) Evaluating transport activities and PIPS review of all transfers
 - Are you receiving feedback?
 - Was the patient appropriately transferred or could the patient have been cared for at your facility?
 - Was there a transfer delay?
 - Recommend "trauma transfers" as standing agenda item in PIPS meetings



Transfer Follow-Up Example

This document is used for continuous quality improvement and is protected and confidential.

TCF Patient (transfer) Follow-Up Request Form						
nis section to be completed by the re	questing (tr	ansferring) TCF,)			
Patient Name:				D.O.E	3/	/
Date of Transfer:		Transfe	rred By:	<u></u>		
Transferring Agency:						
Address:						
City/State/Zip:						
Transferring Surgeon:						
Fransferring ED Physician:						
Other Transferring Physician:						
FNC/TC & Phone Number:				(-
(This section	n to he comp	oleted by the receiv	ino TCF)			
Diagnoses known as of this date:		icica by the receiv	mg ICI)			
	_					
Diagnostics & procedures perfor	med to date	e:				
Known problems with transfer:						
Additional comments:		(Attach dis	scharge sum	mary to	o this do	cument)
SS: Probability of Surv	ival:	Admit GCS	: [Admi	t RTS:	
Attending trauma surgeon:						
Other attending physician:						
Other attending physician Other attending physician						
Name of person completing form			Т	itle:		
value of person completing form] 1.	itic.		
Signature:			Date	e:	/	_/
Please return this form to the r Submit QI do		CF, at the above to hospital QM d		s soon	as poss	ible.







- Chapter 5: Hospital Organization and the Trauma Program
 - **(5-1)** A decision by a hospital to become a trauma center requires the commitment of the institutional governing body and the medical staff.
 - Documentation via resolution letter with signatures
 - ▶ Needs to be reaffirmed continually (every 3 years) and must be current at the time of verification (5-2, 5-3)

Resolution Letter Example

January 1, 2021							
lowa Department of Public Health Bureau of Emergency & Trauma Services 321 E 12 th St Des Moines, IA 50319							
Dear Sir or Madam:							
The Board of Directors and Medical and Hospital stathe necessary physical, human, and financial resource Hospital strives to continuously improve health care lowa Trauma System is recognized by Hospitemergency medical services to patients and families	ses to support the lowa Trauma System services to and surrounding counties. The sal as an opportunity to better coordinate						
As part of the annual planning process, Hospital has evaluated the resources needed to support the guidelines described in the Level III Hospital & Emergency Care Facility Categorization Criteria Hospital's trauma services includes an adequate number of medical, nursing, and support staff, as well as the necessary specialties. In addition, the trauma service identifies both the equipment and training required to successfully continue the program. The Board of Directors and medical and Hospital staff are satisfied that all key resources have remained in place since January 1, 2000.							
Sincerely,							
President & CEO	Chair, Board of Directors						
							
VP, Medical Staff Affairs	Chief Nursing Officer						
Trauma Medical Director	Trauma Program Manager						





Level III Level IV BOTH III & IV



- Chapter 5: Hospital Organization and the Trauma Program
 - ▶ (5-11) The TMD, in collaboration with the TPM, must have the authority to correct deficiencies in trauma care and exclude from trauma call the trauma team who do not meet specified criteria. In addition, the TMD must perform an annual assessment of the trauma panel providers in the form of OPPE and FPPE when indicated by findings of the PIPS process.
 - ▶ Trauma org chart demonstrates a link between TPM & TMD
 - ► ANNUAL assessment of trauma panel providers
 - ► See also related criterion (2-5)







- Chapter 5: Hospital Organization and the Trauma Program
 - **(5-13)** The criteria for a graded activation must be clearly defined by the trauma center, with the highest level of activation including the six required criteria listed in Table 2.

Table 2

Minimum Criteria for Full Trauma Team Activation

- Confirmed blood pressure less than 90 mm Hg at any time in adults and age-specific hypotension in children;
- Gunshot wounds to the neck, chest, or abdomen or extremities proximal to the elbow/knee;
- **3** Glasgow Coma Scale score less than 9 with mechanism attributed to trauma;
- Transfer patients from other hospitals receiving blood to maintain vital signs;
 - Intubated patients transferred from the scene, OR -
- Patients who have respiratory compromise or are in need of an emergent airway
 - Includes intubated patients who are transferred from another facility with ongoing respiratory compromise (does not include patients intubated at another facility who are now stable from a respiratory standpoint)
- Emergency physician's discretion

Level III Level IV BOTH III & IV



- ▶ (6-8) Each member of the group of general surgeons must attend at least 50% of the multidisciplinary trauma peer review committee meetings.
- ▶ (7-11) Emergency medicine liaison...
- ► (8-13) Neurosurgery liaison...
- ▶ (9-16) Orthopedic liaison...
- ► (11-13) Anesthesiology liaison...
- ► (11-62) ICU liaison...
- ▶ (16-15) Each member of the committee...



Specialty	Name	3/4/2020	6/3/2020	9/2/2020	12/2/2020	Total
TMD	Dr. Boss	Χ	Χ	Χ	Χ	100%
TPM	Ella Vader	Χ	X	Χ	Χ	100%
Surgeons	Dr. Grey	Χ		Χ	Χ	75%
	Dr. Colon	Χ	Χ	Χ		75%
	Dr. Spleen	N/A	X	Χ	Χ	75%
ED	Dr. Kevorkian	Χ	X	Χ	Χ	100%
Ortho	Dr. Knee	Χ				25%
	Dr. Hip					0%
Neurosurgery	Dr. Matter	Χ	X	Χ		75%
Radiology	Dr. Pacs	Χ	X	Χ	Χ	100%
Anesthesia	Dr. Slumber	Χ			N/A	25%
	Dr. Airway	N/A	N/A	N/A	Χ	25%
ICU	Dr. Graves		X	Χ		50%
EMS	Justin Thyme	Χ	X	Χ	X	N/A
Lab	Paige Turner	Χ	X	Χ	Χ	N/A
OR	Dinah Mite	Χ	X	Χ	Χ	N/A
Administration	Stan Dupp		X		X	N/A
Quality	Sandy Beach	Χ	X	Χ	Χ	N/A
Respiratory	Frank N. Stein	Χ	X	Χ	Χ	N/A
Other	Scotty - Injury Prevention		X	Χ		N/A
	Robyn Banks - Social Services	Х	X	X	Χ	NI/A
		X	٨	X	X	N/A
	Dr. Jones - Hospitalist Dr. Tim Burr - PM&R	X	Χ	X	X	N/A N/A









- Chapter 11: Collaborative Clinical Services
 - ▶ (11-84) Trauma centers of all levels must have a massive transfusion protocol developed collaboratively between the trauma service and the blood bank.
 - Correct definitions: "transfusion of >10 units of blood in 24 hours or >4 units in 1 hour"
 - Ensure it reflects the capabilities of the institution









Released October 2014

"The purpose of the guidelines is to identify the necessary components of a Massive Transfusion Protocol and address key issues involved in developing an MTP for trauma."









- Chapter 11: Collaborative Clinical Services
 - ▶ (11-87) The trauma program must also demonstrate appropriate orientation, credentialing processes and skill maintenance for advanced practitioners, as witnessed by an annual review by the trauma medical director.
 - ► OPPE's work well
 - Must be completed ANNUALLY





- Chapter 14: Guidelines for the Operation of Burn Centers
 - ▶ (14-1) Trauma centers that refer burn patients to a designated burn center must have in place written transfer agreements with the referral burn center.
 - Transfer agreement!
 - University of Iowa
 - St. Elizabeth (Lincoln, NE)
 - Regions Hospital (St. Paul, MN)
 - ▶ Burn policy should include burn management prior to transfer
 - Utilize referral burn center when making the policy







- Chapter 15: Trauma Registry
 - ▶ (15-1) Trauma registry data must be collected and analyzed by every trauma center.
 - ▶ (15-3) The trauma registry is essential to the PIPS program and must be used to support the PIPS process.
 - "Meaningful use of the registry"
 - Are you tracking data? What are you doing with it?
 - ▶ PIPS meeting minutes with data discussions and what is being done with the findings
 - ▶ Thorough description on SACA
 - Graphs and visualizations







- Chapter 15: Trauma Registry
 - ▶ (15-4) Furthermore, these findings must be used to identify injury prevention priorities that are appropriate for local implementation.
 - ImageTrend report can pull trends
 - ▶ Trauma committee meeting minute discussions
 - Injury prevention activities related to registry trends
 - Collaborate with your physical therapy department





- Chapter 15: Trauma Registry
 - (15-6) Trauma registries should be concurrent. At a minimum, 80% of cases must be entered within 60 days of discharge.
 - ▶ The reports pulled for registry compliance with trauma reverifications are based on the 12-month date range the facility selects on the SACA.

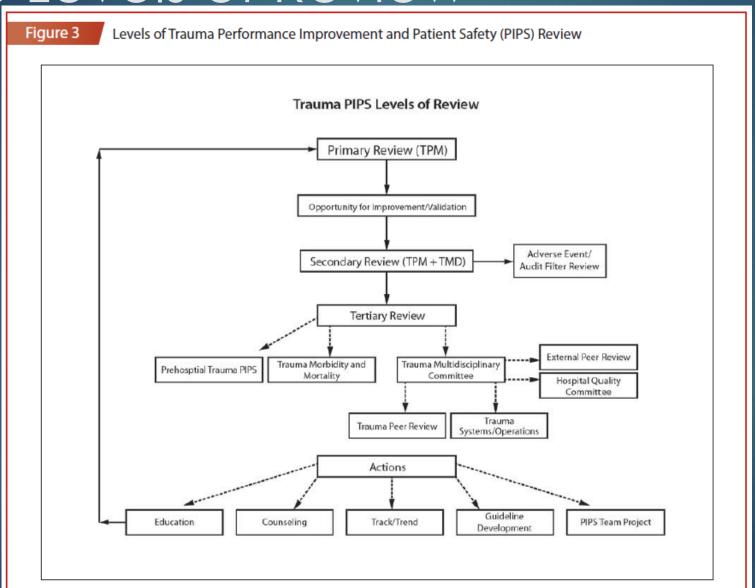




- Chapter16: Performance Improvement & Patient Safety
 - ▶ (16(2-17)) The processes of event identification and levels of review must result in the development of corrective action plans, and methods of monitoring, reevaluation, and benchmarking must be present.
 - (16-10) Sufficient mechanisms must be available to identify events for review by the trauma PIPS program.
 - ▶ (16-11) Once an event is identified, the trauma PIPS program must be able to verify and validate that event.



PIPS Levels of Review









- Chapter16: Performance Improvement & Patient Safety
 - (16-5) All process and outcome measures must be documented within the trauma PIPS program's written plan and reviewed and updated at least annually.
 - Written PIPS plan/policy
 - ► Policy reviewed ANNUALLY
 - Modify audit filters







- Chapter18: Prevention
 - ▶ (18-1) Trauma centers must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data.
 - Find registry trends and develop outreach activities
 - Similar to (15-4)
 - ▶ (18-2) Each trauma center must have someone in a leadership position that has injury prevention as part of his or her job description.
 - Usually in TPM or TNC job description







- Chapter 21: Solid Organ Procurement Activities
 - ▶ (21-3) It is essential that each trauma center have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.
 - Frequently missing confirmatory testing
 - Ensure the policy reflects the capabilities of the facility
 - ▶ It is okay to indicate that the patient is showing clinical signs of brain death and the patient will be stabilized until transfer.

Resources



- ▶ Trauma Program Manager Manual
- ▶ BETS Trauma Website
- American College of Surgeons Verification Website

Thank you



- Next TPM webinar: September 24 10:00am-11:00am via Zoom
 - ▶ Topic: Human Trafficking presented by Vicki Petersen

▶ Jill Wheeler

- jill.wheeler@idph.iowa.gov
- **(515)** 201-4735