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Determination definitions

Outcomes Committee
Presented by:
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1

Determination Options

- ~~• Unanticipated Event with Opportunity for Improvement~~
- Mortality/Event **with** Opportunity for Improvement (OFI)
- Mortality/Event **without** Opportunity for Improvement (OFI)
- Undetermined Opportunity for Improvement

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2

Determination Options

- **Event with Opportunity for Improvement**

Mortality – (death event with OFI identified; examples below are non exhaustive)

- Anatomic injury or combination of injuries considered severe but survivable under optimal conditions
- Standard protocols not followed **contributing to mortality, possibly resulting in unfavorable consequence**
- Provider related care considered sub-optimal **contributing to mortality, possibly resulting in unfavorable consequence**
- P(s) \geq 0.25 by TRISS methodology

Other Events – (non-death event with OFI identified; examples below are non exhaustive)

- **Unexpected injury progression**
- Complication **indirectly** related to deviation from standard protocol, operator error or error in judgment
- Provider related care considered suboptimal **indirectly** resulting in unfavorable outcome



3

Determination Options

- **Event without Opportunity for Improvement**

Mortality - (death event without OFI identified; examples below are non exhaustive)

- Anatomic injury or combination of injuries considered non-survivable with optimal care
- Standard protocols followed or if not followed, did not result in unfavorable consequence
- Provider related care appropriate or if sub-optimal, did not result in unfavorable consequence
- P(s) < 0.25 by TRISS methodology

Other Events - (non-death event without OFI identified; examples below are non exhaustive)

- Complication occurred despite adherence to a reasonable standard protocol
- Complication occurred despite appropriate care and good judgment

- **Undetermined Opportunity for Improvement**



4

Instructions

Go to:

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Enter the code

6707 2774



Or use QR code

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5

Case Scenario #1

30-year-old male motorcycle rider is brought to your Level I trauma center after suffering a collision with a truck. His GCS is 15, and presenting BP is 88/55 mm Hg with a HR of 114 bpm. FAST is positive in the RUQ and LUQ and he is complaining of abdominal pain throughout the examination.

He is transfused 2u PRBC and admitted to the SICU for serial abdominal examinations.

Over the next 3 hours, he becomes progressively more tachycardic and hypotensive, eventually developing cardiopulmonary arrest. Attempts at resuscitation are unsuccessful and he is pronounced dead.

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6

What is the determination for the death event?

- Mortality with Opportunity for Improvement (OFI)
- Mortality without Opportunity for Improvement
- Undetermined Opportunity for Improvement

7

What is the determination for the death event?

Mentimeter



33

8

What is the determination for the death event?

- Mortality with Opportunity for Improvement (OFI)
- Mortality without Opportunity for Improvement
- Undetermined Opportunity for Improvement

Case Scenario #1 - Rationale

This patient's presentation and examination is concordant with a likely abdominal solid organ injury for which he should have undergone an emergent exploratory laparotomy.

Failure to operate on this patient contributed to mortality.

Case Scenario #2

29-year-old female presents to your Level II trauma center after being stabbed during a car jacking. Examination reveals a single stab wound to the right lateral chest, with a large right hemothorax (HTX) on initial CXR. A right-sided large-bore chest tube is placed which drains 100 mL of blood. An immediate follow-up CXR in the trauma bay re-demonstrates the HTX remains largely undrained.

Over the next several days, the chest tube drainage volumes are <50 mL/day. CXR remains “stable” per team (large right retained HTX). Given the low chest tube output and “stable” CXR, the chest tube is removed, and patient discharged home.

The patient presents one week later to the ED with severe shortness of breath and is admitted and taken to the OR for a right VATS with evacuation of the retained HTX.



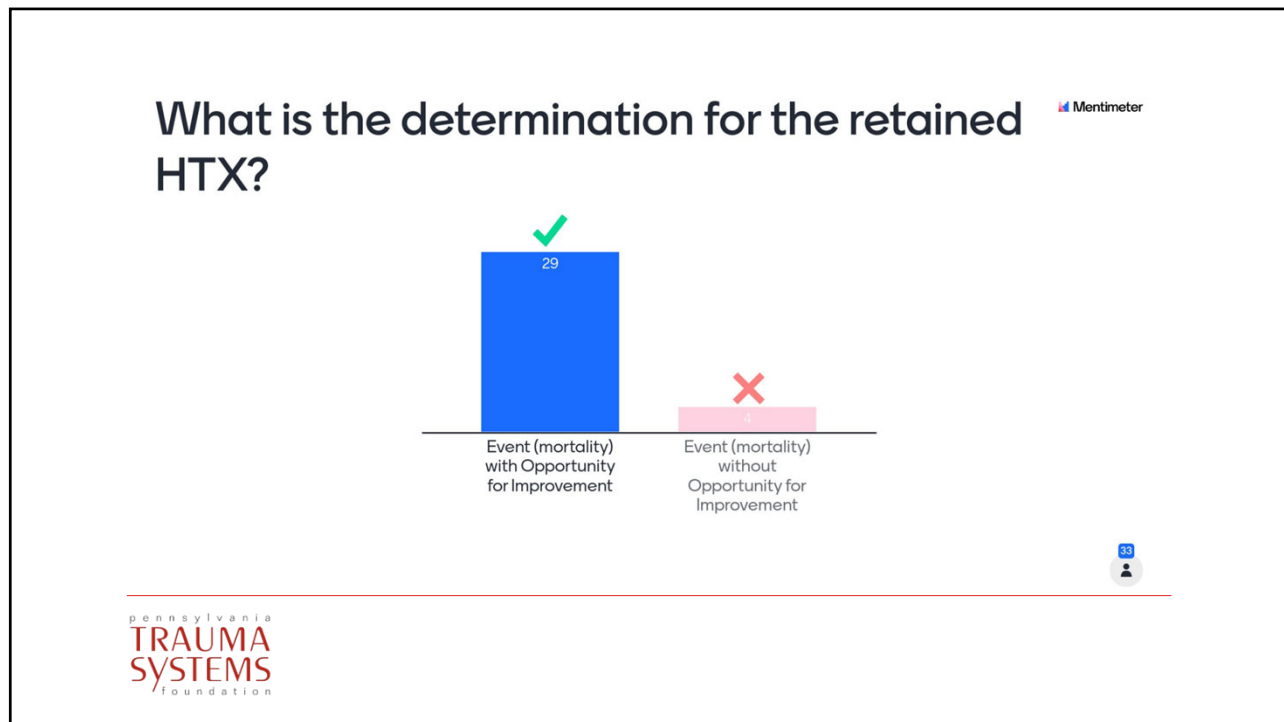
13

What is the determination for the retained HTX?

- Event with Opportunity for Improvement (OFI)
- Event without Opportunity for Improvement
- Undetermined Opportunity for Improvement



14



15

What is the determination for the retained HTX?

- **Event with Opportunity for Improvement (OFI)**
- Event without Opportunity for Improvement
- Undetermined Opportunity for Improvement

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17

Case Scenario #2 - Rationale

This patient's retained HTX should have prompted an evaluation of the initial chest tube for its proper placement inside the pleural cavity.

Furthermore, attempts at drainage of this retained HTX should have been undertaken (additional chest tube, TPA, VATS with evacuation).

Failure of these attempts and suboptimal care contributed to unexpected injury progression and unfavorable outcome.



18

Case Scenario #3

66-year-old retired male with a PMH of CHF (EF35%), AF (on AC), DM, COPD, fell from a 10-foot ladder at home. He was found by his neighbor 3 hours after the fall, intubated in the field by EMS and brought to your Level I trauma center.

His presenting GCS was 5, and INR was 2. A pan-scan revealed a large SDH with 3 cm midline shift, and multiple bilateral rib fractures. He was given appropriate agents for reversal of anticoagulation and taken to the operating room immediately for an emergent decompressive craniotomy.

Over the next 10 days, his neurological examination failed to improve and remained at a GCS of 3. A goals of care meeting was held where the family chose to withdraw care.



19

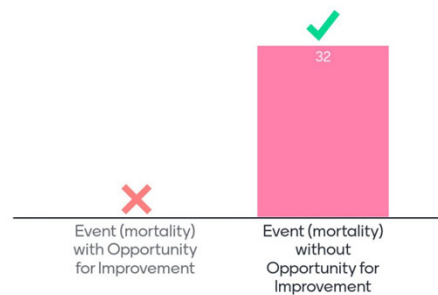
What is the determination for the death event?

- Mortality with Opportunity for Improvement (OFI)
- Mortality without Opportunity for Improvement
- Undetermined Opportunity for Improvement

20

What is the determination for the death event?

Mentimeter



32

21

What is the determination for the death event?

- Mortality with Opportunity for Improvement (OFI)
- **Mortality without Opportunity for Improvement**
- Undetermined Opportunity for Improvement

23

Case Scenario #3 - Rationale

This patient's care was appropriate.

Despite the ultimate unfavorable outcome, optimal care for his SDH was provided and standard protocols followed.

24

Case Scenario #4

48-year-old male with a PMH of GERD presents to your trauma bay after a motor vehicle collision. Workup reveals a right acetabular fracture as his only injury.

He is admitted to the Orthopedic Surgery service and made NPO at midnight for operative fixation the next morning. Enoxaparin 30 mg q12 hrs and pain medications are started. He is taken to the OR in the morning and undergoes right acetabular fixation. Chemical DVT ppx and bilateral SCDs are continued throughout his stay.

Over the next several days, when working with PT, he complains of right calf pain and swelling. Non-invasive ultrasound studies reveal a right femoral vein DVT. He is started on AC and ultimately discharged to an acute rehabilitation facility.



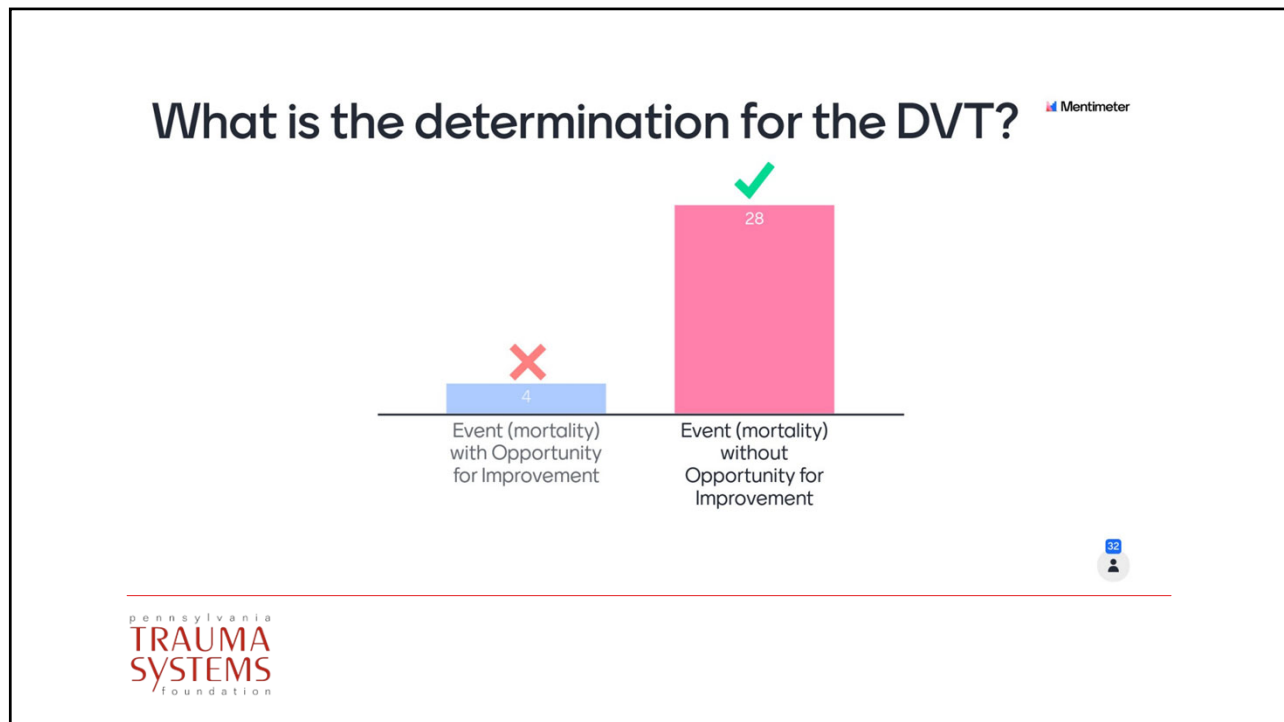
25

What is the determination for the DVT?

- Event with Opportunity for Improvement (OFI)
- Event without Opportunity for Improvement
- Undetermined Opportunity for Improvement



26



27

What is the determination for the DVT?

- Event with Opportunity for Improvement (OFI)
- **Event without Opportunity for Improvement**
- Undetermined Opportunity for Improvement

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29

Case Scenario #4 - Rationale

This patient's care was appropriate.

Despite the ultimate unfavorable outcome (LE DVT), optimal care was provided and standard protocols for DVT prophylaxis were followed with chemical and mechanical agents.



30

Determination Options

- ~~Unanticipated Event with Opportunity for Improvement~~ (retired)
- Mortality **with** Opportunity for Improvement (OFI)
- Mortality **without** Opportunity for Improvement
- Event **with** Opportunity for Improvement (OFI)
- Event **without** Opportunity for Improvement
- Undetermined Opportunity for Improvement



31

Determination Options

- **Event with Opportunity for Improvement**

Mortality – (death event with OFI identified; examples below are non exhaustive)

- Anatomic injury or combination of injuries considered severe but survivable under optimal conditions
- Standard protocols not followed contributing to mortality
- Provider related care considered sub-optimal contributing to mortality
- $P(s) \geq 0.25$ by TRISS methodology

Other Events – (non-death event with OFI identified; examples below are non exhaustive)

- Unexpected injury progression
- Complication related to deviation from standard protocol, operator error or error in judgment
- Provider related care considered suboptimal resulting in unfavorable outcome



32

Determination Options

- **Event without Opportunity for Improvement**

Mortality - (death event without OFI identified; examples below are non exhaustive)

- Anatomic injury or combination of injuries considered non-survivable with optimal care
- Standard protocols followed or if not followed, did not result in unfavorable consequence
- Provider related care appropriate or if sub-optimal, did not result in unfavorable consequence
- $P(s) < 0.25$ by TRISS methodology

Other Events - (non-death event without OFI identified; examples below are non exhaustive)

- Complication occurred despite adherence to a reasonable standard protocol
- Complication occurred despite appropriate care and good judgment

- **Undetermined Opportunity for Improvement**



33

Next steps

- Definition clarifications- clarifications only, so effective immediately.
- *Unanticipated*- retired. Will still be available in ESO software until 2023 Updates installed



34

PTSF Standards Levels I-III: Standard 6: PIPS 13,B

13. All cases of traumatic injury related mortality (dead on arrival, died in ED or inpatient, and withdrawal of life-sustaining care) must be reviewed and classified for potential opportunities for improvement.
 - A. The best practice for review of traumatic injury related mortality is through tertiary review. At a minimum, all traumatic injury related mortalities must go through secondary review and mortalities with opportunities for improvement must go through tertiary review.
 - B. Deaths must be categorized as:
 - i. Event/mortality with an opportunity for improvement
 - a. A death should be designated as "mortality with opportunity for improvement" if any of the following criteria are met:
 - i. Anatomic injury or combination of severe injuries but may have been survivable under optimal conditions
 - ii. Standard protocols were not followed, possibly resulting in unfavorable consequences
 - iii. Provider care was suboptimal
 - b. Event/mortality without an opportunity for improvement
 - c. Undetermined opportunity for improvement
 - C. Recommend reviewing patients discharged to hospice to ensure there were no opportunities for improvement in care that might have significantly changed the clinical course that ultimately led to the decision for hospice care.

35

Thank you to:

2022 Outcomes Committee members

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36



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 Preventable Deaths from Injury
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37