

Colorado Trauma Network Winter 2019 Conference PI/Registry Subcommittee



TPM/ TNC PI Subcommittee



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- Karen Clark-Bond
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- Tiffany Moore
- Pam Vanderberg
- Lana Martin
- Lori Kennard
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Survey

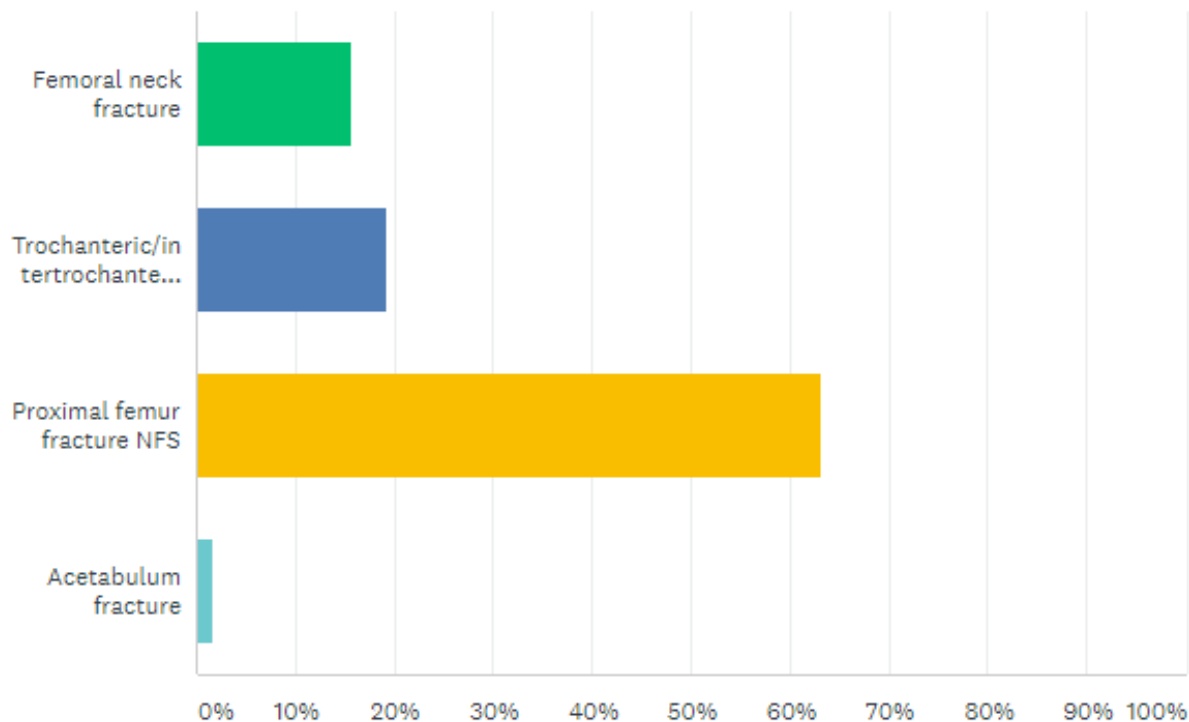
Thank you for participating!

How is an injury described as a “hip fracture” coded?

- A. Femoral neck fracture
- B. Trochanteric/intertrochanteric fracture
- C. Proximal femur fracture NFS
- D. Acetabulum fracture

How is an injury described as a “hip fracture” coded? □

Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Femoral neck fracture	15.79% 9
▼ Trochanteric/intertrochanteric fracture	19.30% 11
▼ Proximal femur fracture NFS	63.16% 36
▼ Acetabulum fracture	1.75% 1
TOTAL	57

How is an injury described as a “hip fracture” coded?

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- D. Acetabulum fracture

C. Proximal femur fracture NFS

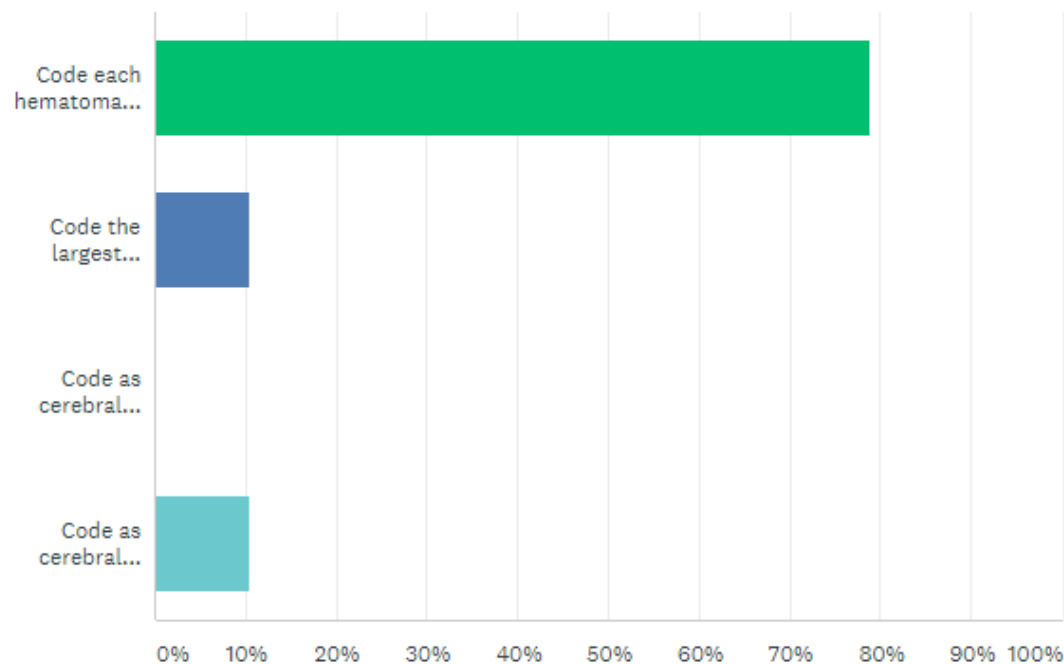
How are multiple cerebral hematomas coded?

- A. Code each hematoma individually if they are separate and individual bleeds of the same hemisphere. If both hemispheres are involved, use the bilateral code.
- B. Code the largest hematoma as a subdural to the correct hemisphere.
- C. Code as cerebral subdural NFS
- D. Code as cerebral hematoma NFS



How are multiple cerebral hematomas coded?

Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES
<ul style="list-style-type: none"> Code each hematoma individually if they are separate and individual bleeds of the same hemisphere. If both hemispheres are involved, use the bilateral code. 	78.95% 45
<ul style="list-style-type: none"> Code the largest hematoma as a subdural to the correct hemisphere. 	10.53% 6
<ul style="list-style-type: none"> Code as cerebral subdural NFS 	0.00% 0
<ul style="list-style-type: none"> Code as cerebral hematoma NFS 	10.53% 6
TOTAL	57

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 - B. Code the largest hematoma as a subdural to the correct hemisphere.
 - C. Code as cerebral subdural NFS
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-
- A. Code each hematoma individually if they are separate and individual bleeds of the same hemisphere. If both hemispheres are involved, use the bilateral code.**

Pre-existing Conditions

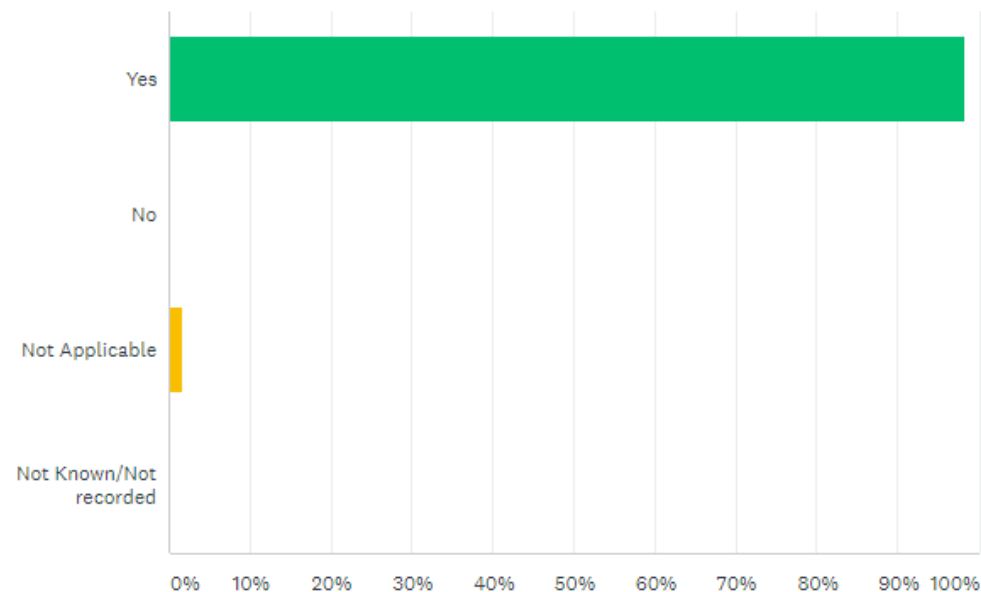
On September 5th, 2019, a 75-year-old female was admitted to your hospital with a hip fracture following a mechanical fall at home. Past Medical History is positive for hypertension, COPD, and atrial fibrillation for which she is taking Coumadin. There is a previous admission on August 10th, 2019 for COPD exacerbation and the patient wears 3L O2 at home. Based on this information, what value should be recorded for the pre-existing condition COPD?

Based on this information, what value should be recorded for the pre-existing condition COPD?

- A. Yes
- B. No
- C. Not Applicable
- D. Not Known/Not recorded

On September 5th, 2019, a 75-year-old female was admitted to your hospital with a hip fracture following a mechanical fall at home. Past Medical History is positive for hypertension, COPD, and atrial fibrillation for which she is taking Coumadin. There is a previous admission on August 10th, 2019 for COPD exacerbation and the patient wears 3L O2 at home. Based on this information, what value should be recorded for the pre-existing condition COPD?

Answered: 57 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ Yes	98.25%	56
▼ No	0.00%	0
▼ Not Applicable	1.75%	1
▼ Not Known/Not recorded	0.00%	0
TOTAL		57

Rationale

Definition

Lung ailment that is characterized by a persistent blockage of airflow from the lungs. It is not one single disease but an umbrella term used to describe chronic lung diseases that cause limitations in lung airflow. The more familiar terms "chronic bronchitis" and "emphysema" are no longer used, but are now included within the COPD diagnosis and result in any one or more of the following:

- Functional disability from COPD (e.g., dyspnea, inability to perform activities of daily living [ADLs]).
- Hospitalization in the past for treatment of COPD.
- Requires chronic bronchodilator therapy with oral or inhaled agents.
- A Forced Expiratory Volume in 1 second (FEV1) of < 75% or predicted on pulmonary function testing.

This patient had COPD diagnosed in their medical record, and they have required hospitalization for treatment of COPD in the past, meeting the criteria for COPD as a pre-existing condition.

Pre-existing Conditions

On September 5th, 2019, a 75-year-old female was admitted to your hospital with a hip fracture following a mechanical fall at home. Past Medical History is positive for hypertension, COPD, and atrial fibrillation for which she is taking Coumadin. There is a previous admission on August 10th, 2019 for COPD exacerbation and the patient wears 3L O2 at home. Based on this information, what value should be recorded for the pre-existing condition COPD?

Based on this information, what value should be recorded for the pre-existing condition COPD?

- A. Yes
- B. No
- C. Not Applicable
- D. Not Known/Not recorded

Answer: YES

Hospital Events

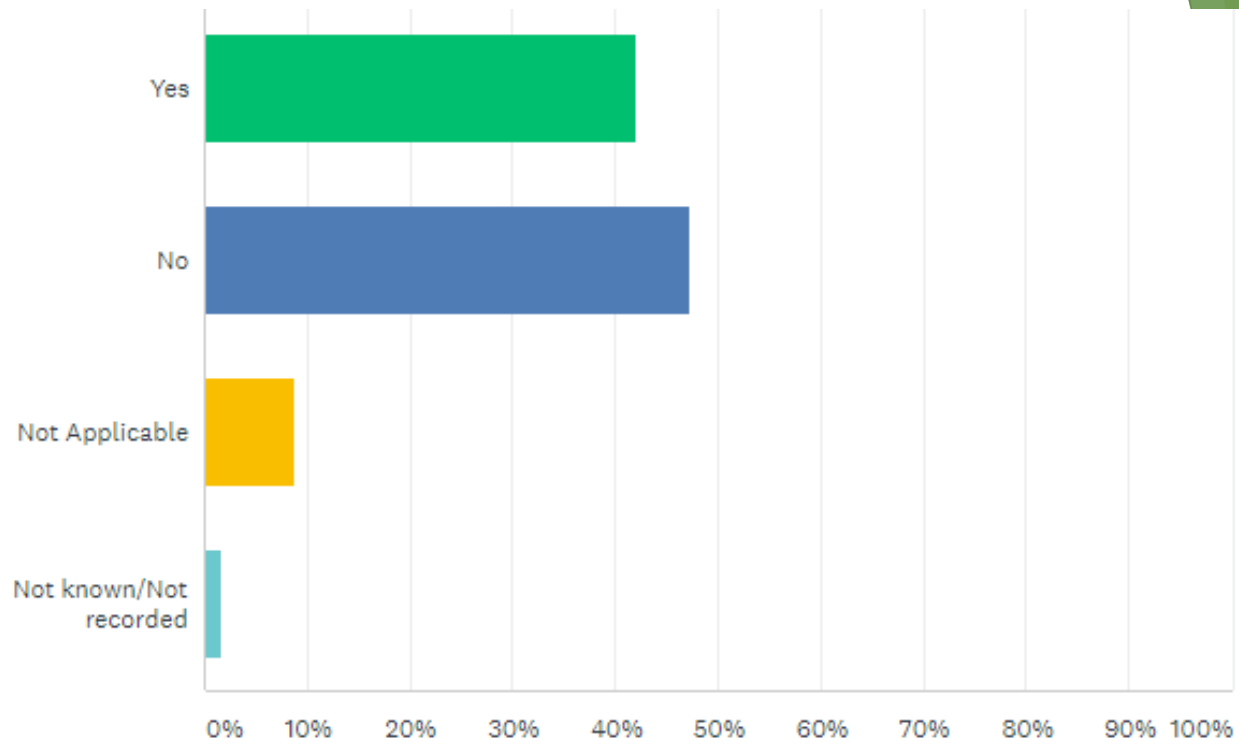
On July 4, 2019, a patient sustained a gunshot wound to the abdomen. On July 5, 2019, the patient was directly admitted to your trauma center after being transferred from a referring hospital. At the referring hospital, the patient had an emergent exploratory laparotomy and surgical repair of the colon. The patient was discharged from your hospital on July 25, 2019.

On July 29, 2019, the patient returned to your emergency department, was admitted, and had laparoscopic lysis of adhesions performed and placement of a central venous line on July 30, 2019. On August 5, 2019 the patient developed bloodstream infection and was confirmed by laboratory that was not related to another infection. The physician diagnosed the patient with a CLABSI and ordered intravenous antibiotic therapy to treat the bloodstream infection.

Based on the information provided, which *Field Value* should be reported to NTDB/TQIP for the Central Line Associated Blood Stream Infection (CLABSI) data element?

Answer

- ▶ Yes
- ▶ No
- ▶ Not Applicable
- ▶ Not known/Not recorded



ANSWER CHOICES	RESPONSES
▼ Yes	42.11% 24
▼ No	47.37% 27
▼ Not Applicable	8.77% 5
▼ Not known/Not recorded	1.75% 1
TOTAL	57

Answer

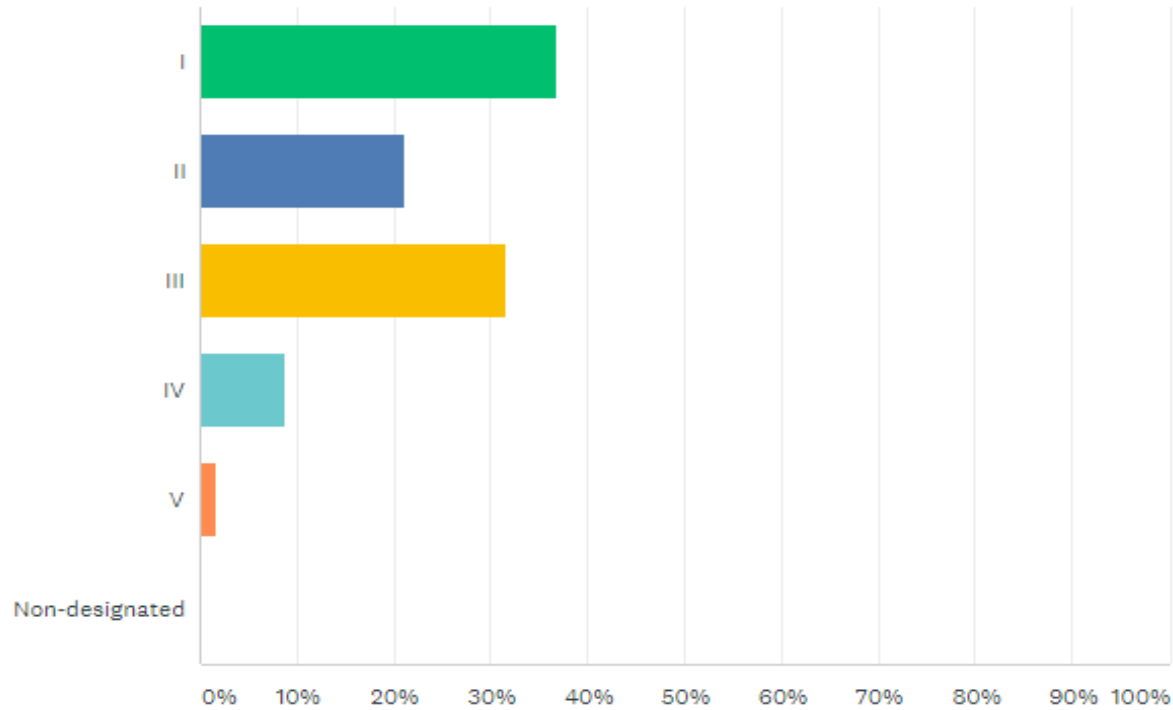
- ▶ Yes
- ▶ No
- ▶ Not Applicable
- ▶ Not known/Not recorded

- ▶ **Answer: NO**

- ▶ Rationale:

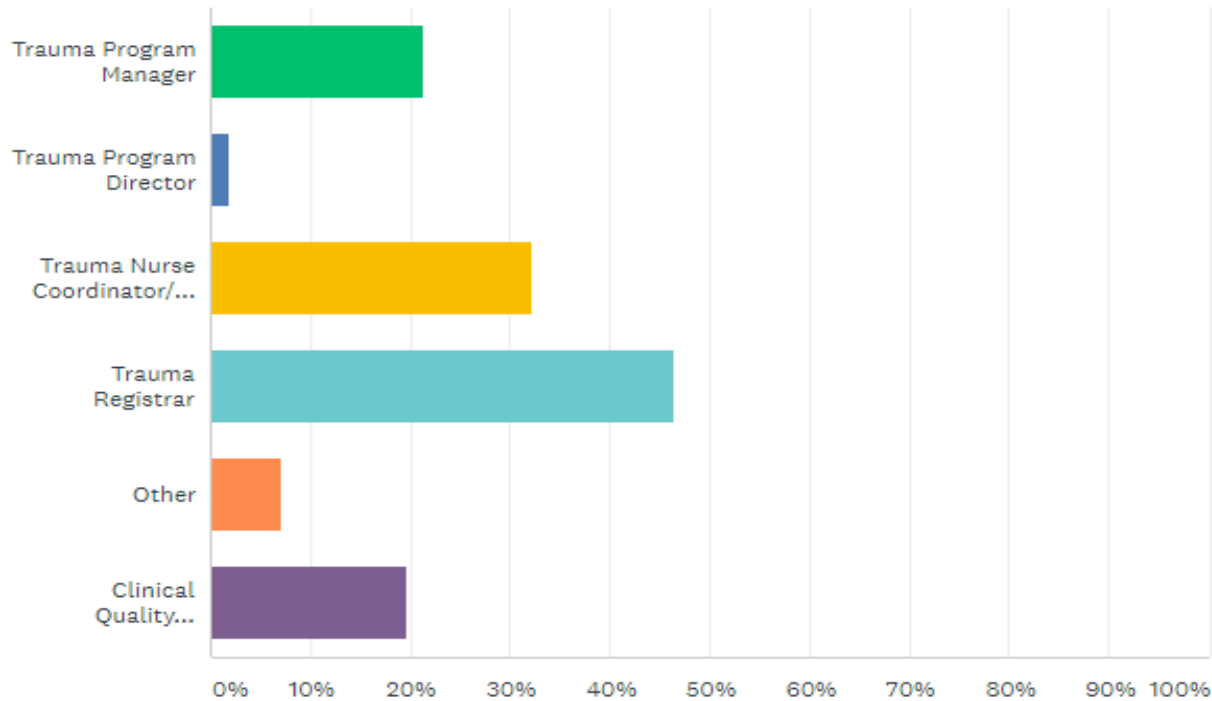
Correct answer is B No. In the NTDB data dictionary in the additional information section, it states “Must have occurred during the patients initial hospital stay at your hospital.” The patient in this scenario did not experience CLABSI during their initial stay at the hospital; it occurred during a readmission to the hospital. This is considered post-discharge information.

What level is your trauma center?



ANSWER CHOICES	RESPONSES
I	36.84% 21
II	21.05% 12
III	31.58% 18
IV	8.77% 5
V	1.75% 1
Non-designated	0.00% 0
TOTAL	57

My role at my trauma center?



ANSWER CHOICES	RESPONSES
▼ Trauma Program Manager	21.43% 12
▼ Trauma Program Director	1.79% 1
▼ Trauma Nurse Coordinator/Trauma Nurse Clinician	32.14% 18
▼ Trauma Registrar	46.43% 26
▼ Other	7.14% 4
▼ Clinical Quality Specialist/PI Coordinator	19.64% 11
Total Respondents: 56	

Pediatric Trauma

Lana Martin

Pediatric Considerations

PI

- ▶ Registry data review
 - ▶ Perpetrator codes
 - ▶ Documented weights
 - ▶ A&O documentation - GCS
- ▶ PI data review
 - ▶ Referring facility radiology practices
 - ▶ Pre-arrival intubation attempts
 - ▶ ED LOS
 - ▶ ICP Monitoring

Resources

- ▶ Know your resources
- ▶ Field questions regarding need for transfer relating to all aspects of pediatric care including NAT and trauma

AIS 2005 / 2008 Update

Clarification Document

Pam Vanderberg

New Clarification Document

- ▶ Available at AAAM website: https://www.aaam.org/wp-content/uploads/2019/10/ClarificationDocument.Oct_.10.2019.rev_.pdf
- ▶ Searchable PDF file
- ▶ Split into sections: General, Definitions, Rules-guidelines, Head, Face, Neck, Thorax, Abdomen, Spine, Upper Extremity, Lower Extremity, External, Other
- ▶ Chart/tables—Very helpful document for pelvic ring and acetabular fractures

General

- ▶ Palsy/Paresis are coded as nerve contusion.
- ▶ Paralysis or Total Loss of Function is coded as nerve laceration.
- ▶ Pseudoaneurysm is coded as a minor artery laceration.
- ▶ **Morel Lavalle Lesion:** internal shearing or degloving injury of an extremity is coded as a degloving injury in the appropriate extremity chapter.

Head

- ▶ **24 hour statement:** Patients with transient signs and symptoms should be coded even if they are resolved within the 24 period (also same for spine!)
- ▶ **Blood along the tentorium:** Supratentorial codes to cerebrum; interpeduncular fossa (cistern) basal cisterns code as injury involving hemorrhage in the brain stem.
- ▶ **Acute on Chronic bleeds:** If not differentiated code as NFS in the appropriate section
- ▶ **Multiple hematomas:** Code each individually IF they are separate and individual bleeds of the same hemisphere. If both hemispheres are involved, use the bilateral code

Face/Neck

- ▶ **LeFort Fractures:** "LeFort" must be specified in the medical documentation to use the LeFort fracture codes, otherwise, code individual fractured bones.
- ▶ **Palate injuries:** Soft palate perforation code as laceration; hard palate perforation code as fracture. If palate is not specified as soft or hard, code as fracture.
- ▶ **Carotid Artery injuries:** Carotid Artery injury not specified should be coded to Common Carotid Artery.
- ▶ **Jugular Venous injuries:** Jugular Vein injury not specified should be coded to Internal Jugular Vein
- ▶ Multiple mandible fractures receive only one AIS code. The fracture should be assigned to the largest mass area of the mandible that is involved.

Spine

- ▶ Spinal cord injury such as compression, epidural or subdural hemorrhage associated with a fracture AND there is NO neurologic deficit, the coder must choose to either code the cord injury OR the fracture. Current rules prohibit coding both.
- ▶ Cauda equina injuries described as laceration should be coded under cauda equina contusion.
- ▶ Lateral mass fractures: coded as pedicle fractures
- ▶ "Spine Coding Algorithm" To facilitate obtaining the correct code for spinal injuries, the following algorithm is offered: 1) Is the spinal cord involved? 2) Is it a contusion/laceration? 3) Is the deficit transient, incomplete or complete? 4) Is there a fracture or dislocation or both?

Abdomen

- ▶ Serosal tear is coded as a partial thickness injury.
- ▶ Colon: These codes include injuries to the cecum
- ▶ Bladder/urinary injuries: Lacerations to the bladder wall that occur outside the peritoneal cavity (extraperitoneal) are commonly associated with a fracture of the pelvis. Lacerations to the bladder wall that occur within the peritoneal cavity (intraperitoneal) usually involve the dome of the bladder and the injury generally follows a blow to the abdomen.

Thorax

- ▶ Flail chest with additional but separate rib fractures on the same side is coded to the more severe injury, the flail chest, and the additional rib fractures on the same side are not coded.
- ▶ The 1,000cc blood loss descriptor is meant to indicate blood loss of 20% in the individual. When coding pediatric or other individuals with smaller blood volumes, use 20% blood loss parameter instead of 1,000cc.
- ▶ Hemomediastinum includes mediastinal contusion
- ▶ Lung contusions/lacerations: "Scattered" lung contusions or lacerations should be coded to the unilateral or bilateral NFS code.

Extremities

- ▶ Extra-Articular refers to a fracture with NO joint involvement.
- ▶ Humeral neck fractures: The surgical neck of the humerus is located at the junction of the proximal section and the shaft. It should be coded as 751151.2 Proximal Humerus - Extra-Articular.
- ▶ Partial Articular (Intra-Articular) refers to at least one fracture through the joint surface and part of the articular surface is still in continuity with the diaphysis.
- ▶ "Hip Fracture" simply stated with no other description is coded as a proximal femur fracture NFS.
- ▶ Ligament injuries to named ligaments in the upper extremity should be coded as a sprain in the associated joint.
- ▶ Gunshot wounds resulting in bony fractures or with the missile "lodged in" the bone are coded as open fractures.

Pelvic fractures

- ▶ Incomplete or Complete disruption with blood loss (p.159)
- ▶ Blood loss <20% by volume may be used for documented small/moderate pelvic hematoma
- ▶ Blood loss >20% by volume may be used for documented large/extensive pelvic hematoma.

Pelvic fractures

2013 - Pelvic Ring Fracture Stability and Medical Documentation / AIS Code Applicability

STABLE	PARTIALLY UNSTABLE	TOTALLY UNSTABLE
Isolated simple fracture of: Pubic ramus Ilium Ischium Sacral ala	Wide symphysis pubis Separation (>2.5cm)	Pubic ramus fracture with sacroiliac fracture/dislocation
Transverse fracture of sacrum and coccyx - with or without sacrococcygeal dislocation	Anterior compression fracture of sacrum	Fracture involving posterior arch with complete loss of posterior osteoligamentous integrity
Minor symphysis pubis separation (<2.5cm)	Fracture involving posterior arch with posterior ligamentous integrity partially maintained	Fracture involving posterior arch with pelvic floor disruption
Tile Classification - A	Fracture involving posterior arch, but pelvic floor intact	Tile Classification - C
OTA Classification - A	Bilateral fractures with posterior ligamentous integrity partially maintained	OTA Classification - C
Young/Burgess Classification - AP1	Tile Classification - B	Young/Burgess Classification - LC3, AP3 and VS
	OTA Classification - B	Vertical Shear Malgaigne Fracture
	Young/Burgess Classification - LC1, LC2, AP2	Sacroiliac joint with posterior disruption
	Sacroiliac joint with anterior disruption	
	"Open book" fracture <2.5cm	

Acetabular Fractures

2013 - Acetabular Fractures

PARTIAL ARTICULAR One Column	PARTIAL ARTICULAR Transverse	COMPLETE ARTICULAR Both Columns
Posterior Wall	Transverse	Both Columns
Posterior Column	T-Shpaed	
Anterior Column	Anterior Column, Posterior Hemitransverse	
Anterior Wall	Transverse with Posterior Wall	
Posterior Column with Posterior Wall	Transverse with Posterior Wall	



Mortality Determinations

Robbie Dumond

ACS Requirements

Mortality review (CD 16-6). All trauma-related mortalities must be systematically reviewed and those mortalities with opportunities for improvement identified for peer review.

CDPHE Requirements

All trauma deaths shall be systematically reviewed and categorized as preventable, non-preventable or potentially preventable.

State and ACS

- ▶ Preventable
- ▶ Non-preventable
- ▶ Possibly (Potentially) preventable

- ▶ Mortality with opportunity for improvement
- ▶ Mortality without opportunity for improvement
 - ▶ Unanticipated
 - ▶ Anticipated
- ▶ **Opportunity for Improvement:** A realization that conditions exist in structures and/or processes of care where modification could reduce the incidence of real or potential adverse events or ideally, improve outcome.

A Big
THANK
YOU!

A large, hand-drawn red heart outline is positioned to the left of the text. The heart is simple and has a slightly irregular, sketchy appearance. The text 'A Big THANK YOU!' is written in a white, bubbly, hand-drawn font with thick black outlines. 'A Big' is in a smaller font size at the top, 'THANK' is in the largest font size in the middle, and 'YOU!' is in a slightly smaller font size at the bottom. The entire graphic is set against a light gray background with a subtle gradient.