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A Year in Review: 2017 Registry Educational Visits

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The Plan

- The new Educational Visit Process (January 1, 2017)
- 2017 Educational Visit Hospital Breakdown
- Common issues found
- Diagnosis Coding
- Procedure Coding
- Penetrating Injuries

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- "Collector" refers the Trauma Registry software developed and maintained by Digital Innovation, Inc., PTSF's Technology Partner.
- The trauma registry software screen shots included in this presentation are from Digital Innovation, Inc.'s "Collector" product.

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Disclaimer

- All of the codes within this presentation were chosen by PTSF registry staff and reflect our opinion of the best code using standard ICD-10-CM/PCS guidelines, AIS 05 (Update 2008) and PTOS. As all good coders and trauma registrars do, you are more than welcome to disagree with any of the information contained in this presentation.
- Explanations of Digital Innovation, Inc. (DI) products (Collector, Tri-Code) within this presentation were produced by PTSF staff

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Policy TR-106

- Policy TR-106
- Workgroup – Spring 2016
- Changes approved by both Trauma Registry Committee and PTSF Board of Directors
- Changes implemented January 1, 2017

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The Educational Visit Process - Accredited

Prior to January 1, 2017:

- Once every 2 years
- 5 records reviewed
- Head, Penetrating, Burn, Pediatric, Death selected by trauma center registry staff
- No chart navigator

Present:

- Once every 5 years
- 10 Records Reviewed (potentially)
- PTSF staff selects records for review
- Chart navigator available

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The Educational Visit Process – Pursuing/Newly Accredited

- Once every year until accredited and one year after successful site survey
- 5 records reviewed
  - Head, Penetrating, Burn, Pediatric, Death selected by trauma center registry staff
- Chart navigator available

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Tips for a Successful Educational Visit

- Read the confirmation letter!
- Check to see if any confidentiality agreements need to be signed or if any documentation is needed for computer access prior to the day of the visit
- Have a quiet, designated space for PTSF staff and materials
- Have computer available and login information ready
- Have medical record numbers available
- Have entire medical record available for each chart pulled
- Have IT on standby

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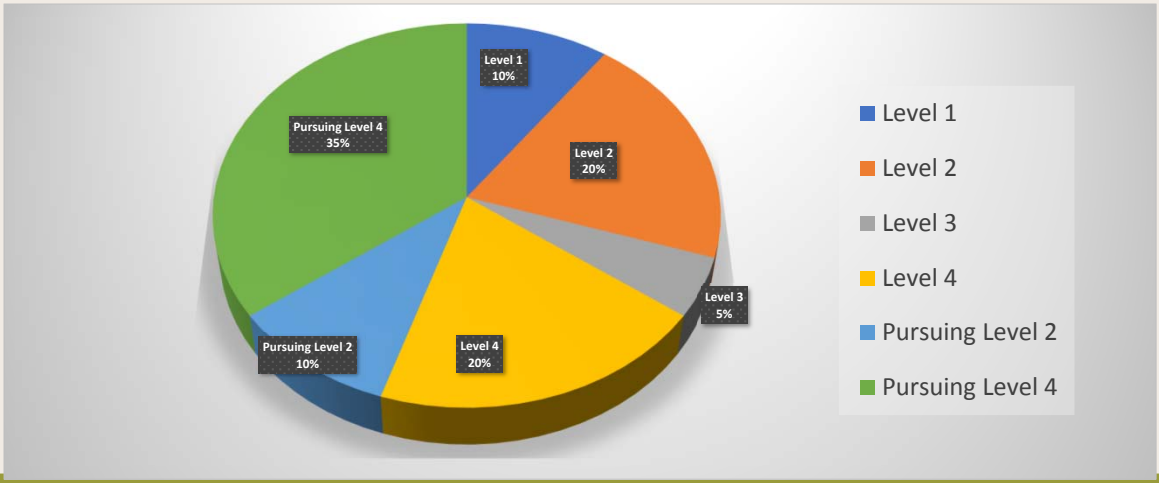
2017 Registry Educational Visits (as of 11/1/2017)



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Top Three Issues

- Protective Devices
- Extrication
- Pupillary Response and Midline Shift

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Protective Devices

PROTECTIVE DEVICES

Protective devices (safety equipment) in use or worn by the patient at the time of the injury

- 0 = None
- 1 = Seatbelt (lap, shoulder, combination)
- 2 = Car Seat
- 3 = Airbag (deployed)
- 4 = Helmet
- 5 = Seatbelt & Airbag (deployed)
- 6 = Sports Equipment (pads, chest protectors, shin guards, mouth piece, etc.)
- 7 = Industrial Equipment (fire suit, hard hat, goggles, steel-tip boots, bullet-proof vest, etc.)
- 8 = Booster Seat (A booster seat differs from a car seat in that a car seat is a restraint with a harness - infant seat, convertible, combination seat but must have a harness. A booster seat has no harness and the patient is restrained by a seatbelt.) It can be assumed, unless otherwise documented, that the patient was wearing their seatbelt if they were in a booster seat. A booster seat is only considered a protective device if it is used in conjunction with a seatbelt. Therefore, if the documentation states "booster seat" and there is no documentation regarding the seatbelt, an "8" should be recorded. However, if the documentation shows the patient was in a booster seat but not wearing a seatbelt, the choice of "0" (none) should be used.
- I = Inappropriate (i.e. a pedestrian struck by a car would not utilize protective devices)
- U = Unknown - an injured person involved in an activity where a protective device may or may not have been used, and there is no documentation in the medical record to state that a device was or was not used. (i.e. a 20 year old involved in a bicycle accident may or may not have used a helmet)

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Protective Devices

Additional Information

- Record up to three injury prevention devices used in sports, industry, non-motorized and motorized vehicles.
- Include protective devices used at home.
- If more than one device is used, record each corresponding number.
- Each number may be selected only once.
- Record "I" for inappropriate.
- Use "5" (seatbelt & airbag) as a priority instead of using both "1" (seatbelt) and "3" (airbag).
- If the first response is "0" "1" or "U" do not enter anything for the second and third entry.

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Extrication

WAS PATIENT EXTRICATED?

- Extrication is defined as any action that disentangles or frees from entrapment or delays in transport.
- NOTE: This element is not restricted to MVA's. (Ex. trapped under roof or paperwork to get a patient out of prison for treatment.) The primary intent of this element is to give a reason for delays in transport. However, a delay in transport does not necessarily have to occur in order for there to be an extrication and have a response of "1" (yes).
- 1 = Yes
- 2 = No

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Pupillary Response / Midline Shift

Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s)

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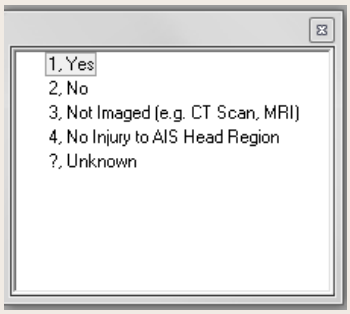
Midline Shift



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Preparing for 2018

- QA Focus – Head Injuries
- Extra Project – PTOS selection (accession) process
- Scheduling will begin in 2018

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Common Coding Issues

- Coding of LOC
- When can sequelae be coded?
- Procedure coding
  - Exploratory Laparotomy - Inspection
  - CT Head
- Penetrating Injuries (this year's QA focus)

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Loss of Consciousness (LOC)

- Default is positive LOC of unknown duration
- One of few injuries which requires negative terminology
  - "NO LOC"
- Code to injury which affects AIS severity
  - DAI, Concussion/concussive injury, other hemorrhagic injuries and Ischemic brain damage related to head trauma
    - Not coded to skeletal injuries
  - Duration may also affect severity
    - <30 minutes, >6 hours, >24 hours

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Loss of Consciousness (LOC) With or Without Concussion

- AIS Concussive Injury (AIS Dictionary p. 51)
- 2 codes for diagnosis of Concussion with no other intracranial injury
  - 161000.1 Cerebral Concussion, NFS
  - 161001.1 mild concussion; no loss of consciousness
- Additional "Concussive" for documented LOC with no diagnoses

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Loss of Consciousness (LOC) With or Without Concussion

- When LOC occurs prehospital
  - Convincing evidence of head injury
  - Must have physician documentation AND
  - Supported by EMS documentation
  - No bystander or self-reported LOC
  - GCS is never sole indicator
  - 161002.2, 161003.2, 161004.2, 161005.2, 161006.3
    - Code varies by duration of LOC

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Sequelae

- As a rule, **not** codable
- Few exceptions within strict rules:
  - Cerebral edema
  - Pneumothorax/hemothorax
  - Air embolus
  - Asphyxia
  - Blood loss
  - Compartment syndrome

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Sequelae

Sometimes an injury, usually a sequela

- Compartment syndrome of extremity
  - To code, ***must be present on arrival with no other identified injury to the body part***
    - ***Thigh, leg, foot, arm, forearm, hand***
      - Default code is NFS
      - Write "No muscle loss" or "Muscle loss" if known
  - Abdominal compartment syndrome is never coded

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Sequelae
Sometimes an injury, usually a sequela

- Retroperitoneum hemorrhage/hematoma
  - Only coded when known to be not associated with other injury
  - Injuries associated with bleeding into the retroperitoneal space:
    - Pancreas, duodenum, kidney
    - Aorta, vena cava, mesenteric vessel
    - Pelvic, vertebral fractures

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Injury Supported by Sequelae

- Basilar skull
  - If not seen on scan but
    - Clinically diagnosed AND
    - Signs present (raccoon eyes, mastoid hematoma, hemotympanum, presence of CSF, etc.)
      - You must enter “basilar/base skull fracture”.
      - Periorbital ecchymosis alone does not confirm, may be associated with other conditions
- Cranial nerve
  - Nerve palsy → code as contusion
  - Nerve paralysis → code as laceration

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Procedures

- Exploratory Laparotomy
  - Root operation – Inspection
  - With ICD-10 implementation, guidelines state:

  B3.1b
  - Components of a procedure specified in the root operation definition and explanation are not coded separately. Procedural steps necessary to reach the operative site and close the operative site, …are also not coded separately.
  - *Example*: …Laparotomy performed to reach the site of an open liver biopsy is not coded separately...

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Procedures

- Exploratory Laparotomy
  - Trauma centers wish to record both
    - Inspection (root operation for exploratory)
    - Procedure performed (resection, repair, etc.)
  - Prior to ICD-10 both were coded
  - July 2017 Registry Committee discussion
    - **May** code Inspection separately (not required)
    - **Must** still code the procedure performed

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Procedures

- CT Head
  - Initial scan code CT Head BW28XXX
  - CT Reports vary widely
    - Titles and descriptions are not consistent
  - Follow-up scans focused on specific injury may be coded
    - Brain, skull, face

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Penetrating Injuries

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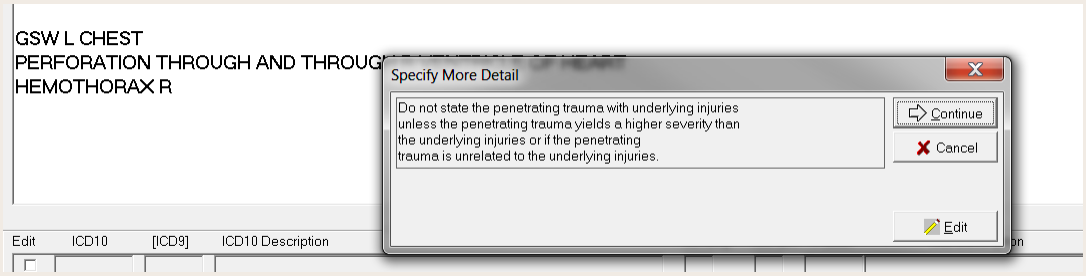
Penetrating Injuries
General rule

- Code underlying injuries ***only***
  - Associated injuries to external body region are not coded



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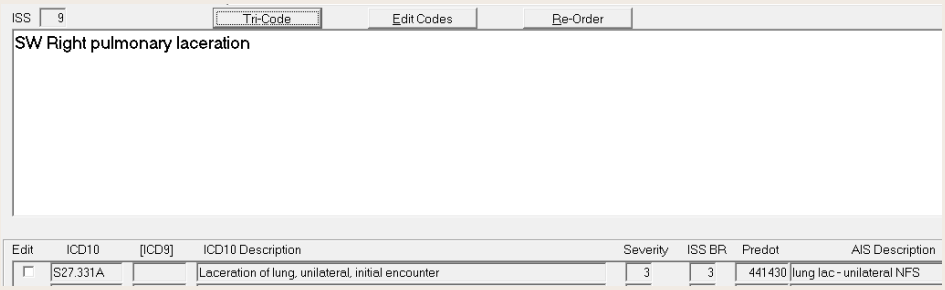
Penetrating injuries

- Example: code pulmonary laceration, not stab wound to chest



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Penetrating Injuries

ISS 26 | Tri-Code | Edit Codes | Re-Order

R MASSIVE HEMOTHORAX OPEN
L MASSIVE HEMOTHORAX OPEN
R ATRIUM ARTERY LACERATION OPEN TAMPONADE
POSTERIOR L LUNG UPPER LOBE LACERATION OPEN
GSW RLE
GSW L BUTTOCK

Edit	ICD10	[ICD9]	ICD10 Description	Severity	ISS BR	Predot	AIS Description
☐	S27.1XXA		Traumatic hemothorax, initial encounter	4	3	442201	hemothorax - major; w blood loss GT 20%
☐	S27.1XXA		Traumatic hemothorax, initial encounter	4	3	442201	hemothorax - major; w blood loss GT 20%
☐	S26.021A		Moderate laceration of heart with hemopericardium, initial encounter	5	3	441012	heart lac w atrial/ventricular perforation
☐	S27.331A		Laceration of lung, unilateral, initial encounter	4	3	441432	lung lac - unilateral - major; 1+ lobes; increased A-a gradient
☐	S81.811A		Laceration without foreign body, right lower leg, initial encounter	1	6	816000	LE penetrating inj - NFS
☐	S31.821A		Laceration without foreign body of left buttock, initial encounter	1	6	816010	penetrating inj hip/buttock NFS
☐							

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Penetrating injuries

ISS 75 | Tri-Code | Edit Codes | Re-Order

GSW L CHEST
PERFORATION THROUGH AND THROUGH R VENTRICLE OF HEART
HEMOTHORAX R

Edit	ICD10	[ICD9]	ICD10 Description	Severity	ISS BR	Predot	AIS Description
☐	S21.91XA		Laceration without foreign body of NOS part of thorax, initial encounter	1	6	416000	thorax penetrating inj NFS
☐	S26.022A		Major laceration of heart with hemopericardium, initial encounter	6	3	441016	heart lac w atrial/ventricular perforation - multiple lacs
☐	S27.1XXA		Traumatic hemothorax, initial encounter	3	3	442200	hemothorax NFS
☐							

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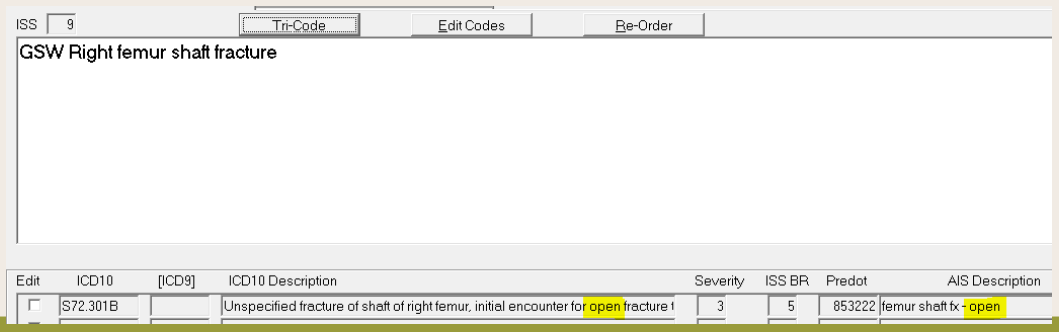
Penetrating Injuries

- Penetrating injuries involving bone are coded as open fracture
  - No skin/muscle injury coded
  - Tri-Code does assign Open fx to “GSW” and “SW”



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Penetrating Injuries

- When no documentation of internal injury (deaths/transfers)
  - Remember severity will increase if documented :
    - Tissue loss (varies by body region)
    - Blood loss (>20%)
- Include in description
  - Example: GSW thorax
    - Severity = 1, ISS = 1
  - Example: GSW thorax with blood loss > 20 %
    - Severity = 3, ISS = 9

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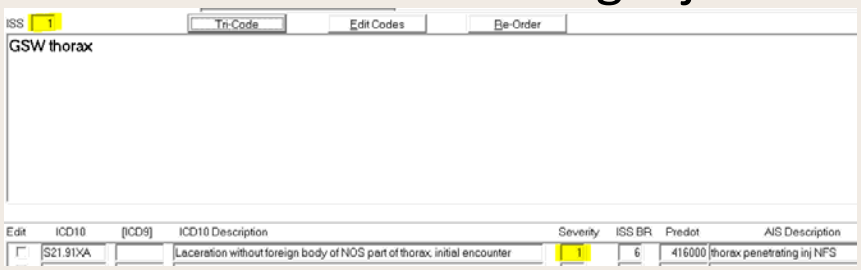
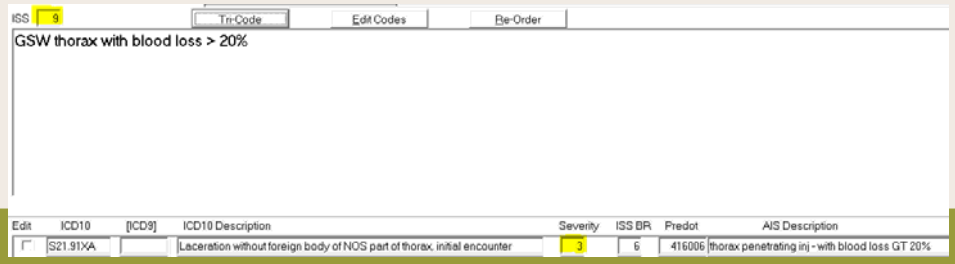
Penetrating Injuries





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Penetrating Injuries

Exception- The head

- Penetrating injury is coded to region when severity is higher
  - Cerebrum, Cerebellum, Brain Stem or Skull (unknown or combined)
    - Always code Brain stem injuries separately
  - "Major" = > 2 cm depth
    - Through and through, involving more than one region, or Brain matter visible
  - Underlying injuries to brain are not coded
    - Hemorrhages, contusions, etc.
    - May list with the @ symbol

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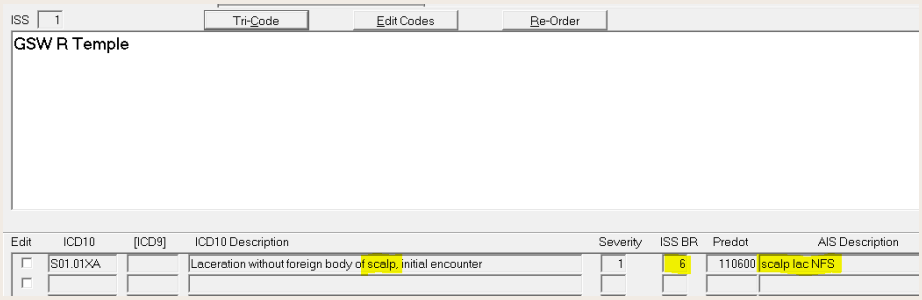
Penetrating Injuries
Head

- Without the brain region or skull noted, codes incorrectly



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Penetrating Injuries

- If skull is not penetrated, code as scalp laceration
  - Code underlying injuries
- GSW with entry and exit wounds is coded as a <u>single injury</u>

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Thank You!

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