The background features a large orange semi-circle on the left side, with a solid yellow circle (the sun) partially overlapping it. Three yellow curved lines above the sun suggest rays. The right side of the slide is white.

# CTN Registry Subcommittee Winter 2021 Quiz Review

Brittany Howland & Amber Nadeau

# CTN Registry Subcommittee

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- Lori Kennard
- Jennifer Landis
- Melissa Sorensen
- Christopher Provost
- Pam Vanderberg
- Stephanie Vega

# CTN Registry Subcommittee: Who are We?



Group of registrars and registry-minded individuals from across the state of CO who meet roughly every quarter



Discuss current challenges and coding questions



Write & share a semi-annual registry related quiz to address hot coding topics



Work on coordinating Trauma Registry-specific educational opportunities with the CTN to foster professional development & encourage continuing education (upcoming scholarship opportunity April 2022!)



What we are not: a reference for State & NTDB rules or AIS specific coding rules/questions - Please direct these to appropriate entity.

# Speaking of Registry Education Opportunities...

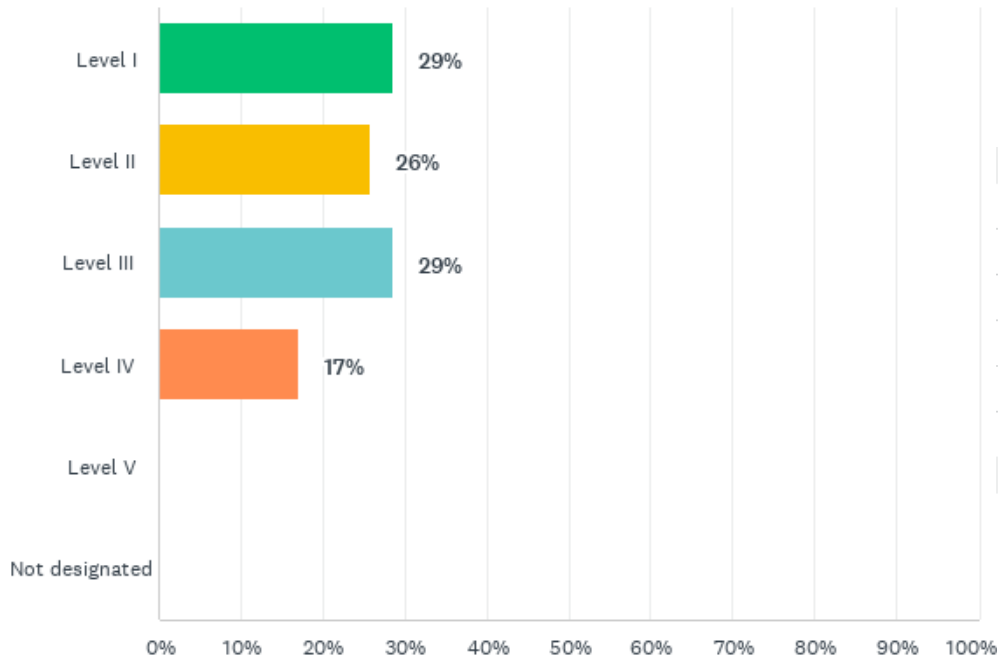
|                                 |  |
|---------------------------------|--|
| <b>Quick Points</b>             | <b>Introduction to ICD-10 Trauma Injury Coding</b>   |
| Host                            | American Trauma Society  |
| Date Offered                    | 4/14/2022 – 4/15/2022  |
| Class Size                      | Up to 25 people  |
| Length of class - hours per day | 8:00am – 5:30pm MST (9.5hrs/day)   |
| Cost per person                 | \$540 (ATS member), \$600 (non-ATS member)   |
| Discounts                       | <b>Yes!</b> If we get 20 people to register from CO, all will receive member pricing (\$540), no matter individual's member status               |
| Extras offered by Hosts         | Yes - access to class roster for support & conversation via Trauma Analytics, 1yr free subscription to AHIMA Vlab & 3M Encoder (online resource) |
| <b>CTN SCHOLARSHIPS!!!!</b>     | <b>\$150/person (max 2 per facility)</b>   |
| <b>Keep an eye out:</b>         | <b>Email will follow soon for registration details and form</b>  |

# Demographics of Winter Quiz Participants



# Q1: What is the State-Designation Level for your Trauma Center?

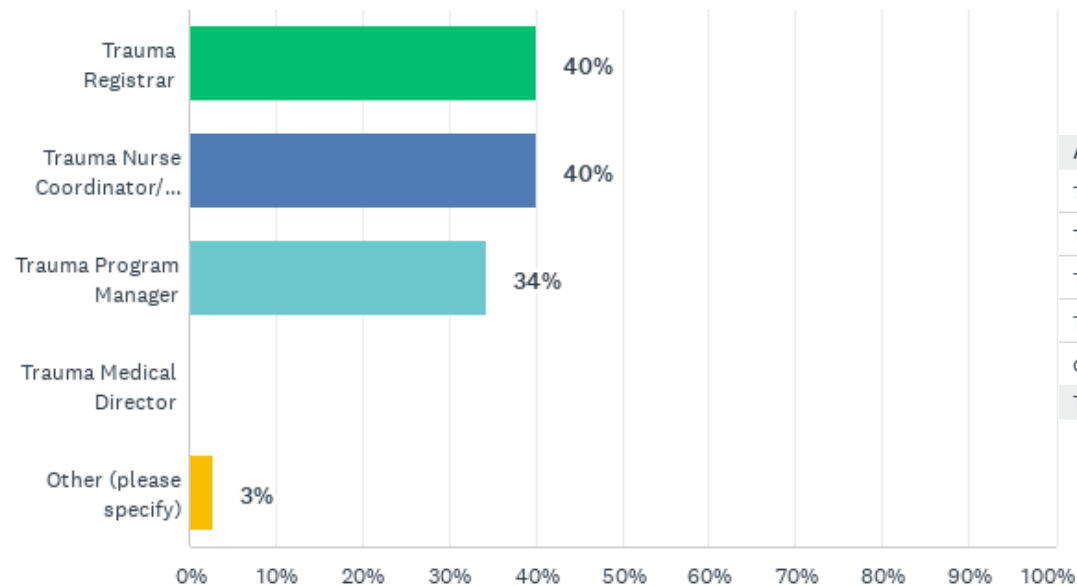
Answered: 35    Skipped: 0



| ANSWER CHOICES | RESPONSES |    |
|----------------|-----------|----|
| Level I        | 29%       | 10 |
| Level II       | 26%       | 9  |
| Level III      | 29%       | 10 |
| Level IV       | 17%       | 6  |
| Level V        | 0%        | 0  |
| Not designated | 0%        | 0  |
| TOTAL          |           | 35 |

## Q2: What is your role in your facility's trauma program? Select all that apply.

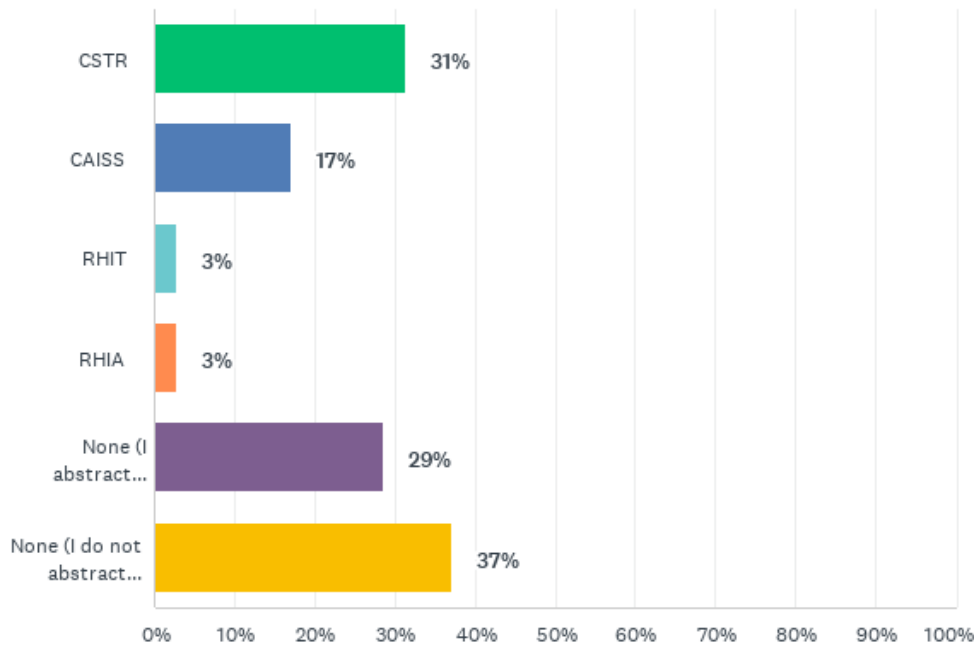
Answered: 35    Skipped: 0



| ANSWER CHOICES   | RESPONSES |    |
|--|-----------|----|
| Trauma Registrar   | 40%       | 14 |
| Trauma Nurse Coordinator/Quality Specialist/PI Coordinator | 40%       | 14 |
| Trauma Program Manager                                     | 34%       | 12 |
| Trauma Medical Director                                    | 0%        | 0  |
| Other (please specify)                                     | 3%        | 1  |
| Total Respondents: 35                                      |           |    |

### Q3: If you have registry certifications, what do you have? Select all that apply.

Answered: 35    Skipped: 0



| ANSWER CHOICES                         | RESPONSES |    |
|--|-----------|----|
| CSTR                                   | 31%       | 11 |
| CAISS                                  | 17%       | 6  |
| RHIT                                   | 3%        | 1  |
| RHIA                                   | 3%        | 1  |
| None (I abstract registry data)        | 29%       | 10 |
| None (I do not abstract registry data) | 37%       | 13 |
| Total Respondents: 35                  |           |    |





# Winter Quiz Questions/Rationale

## Q4: ICD-10 PCS Procedure Code Question

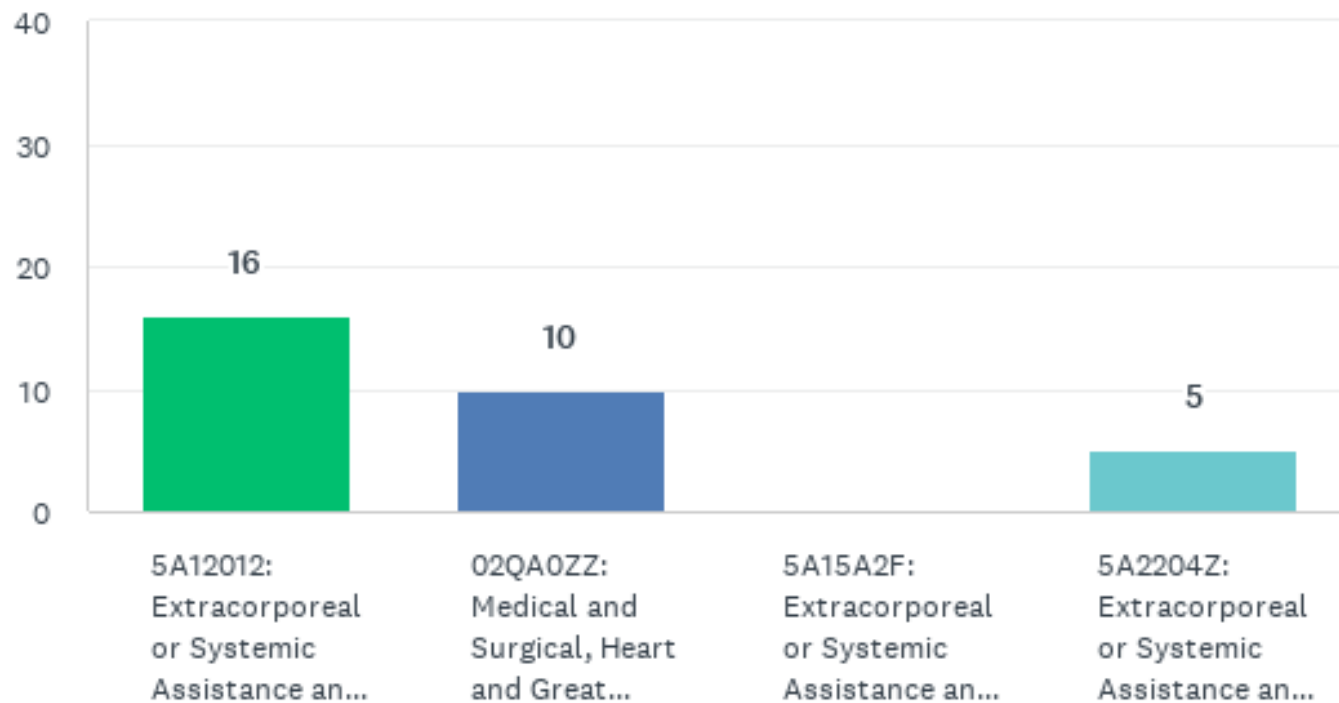
A 30YO male arrives by EMS after GSW to the right hip, with tachycardia and hypotension on arrival. The patient was unable to follow commands and thus was intubated for airway protection. Shortly after intubation, the patient lost pulses. CPR was initiated and an emergent thoracotomy was performed. There was no blood in the left chest, pericardial sac or concern for tamponade. The aorta was flat and subsequently cross clamped. Internal cardiac massage was performed. Following further blood resuscitation, the patient had return of spontaneous circulation. The patient was transported to the OR for definitive management.

What is the most appropriate ICD10 procedure code for Internal Cardiac Massage?

- A.** 5A12012 Extracorporeal or Systemic Assistance and Performance, Physiological Systems, Performance, Cardiac, Single, Output, Manual
- B.** 02QA0ZZ Medical and Surgical, Heart and Great Vessels, Repair, Heart, Open, No Device, No Qualifier
- C.** 5A15A2F Extracorporeal or Systemic Assistance and Performance, Physiological Systems, Performance, Circulatory, Intraoperative, Oxygenation, Membrane - Central
- D.** 5A2204Z Extracorporeal or Systemic Assistance and Performance, Physiological Systems, Restoration, Cardiac, Single, Rhythm, No Qualifier

# Q4: ICD-10 PCS Procedure Code Results

Answered: 31 Skipped: 4



# Q4: ICD-10 PCS Procedure Code Rationale

## CORRECT ANSWER:

**B “02QA0ZZ Medical and Surgical, Heart and Great Vessels, Repair, Heart, Open, No Device, No Qualifier”**

The AHIMA Book of Knowledge for ICD-10 PCS identifies that Repair functions as the Not Elsewhere Classified (NEC) root operation, to be used when the procedure performed does not meet the definition of one of the other root operations.

The table most fitting that allows proper assignment of all character values for this procedure is the 02Q \_\_\_\_ PCS table.

## RATIONALE:

**A. 5A12012 Extracorporeal or Systemic Assistance and Performance, Physiological Systems, Performance, Cardiac, Single, Output, Manual.** This is the appropriate code for CPR. It is the only available code that allows the qualifier of “manual” to identify that this is the manual performance of CPR

**C. 5A15A2F Extracorporeal or Systemic Assistance and Performance, Physiological Systems, Performance, Circulatory, Intraoperative, Oxygenation, Membrane – Central.** This is a code specifically for ECMO. “This is utilized for the intraoperative support from ECMO that is utilized as life support. Intraoperative ECMO may be used as temporary circulatory support for the duration of a procedure such as a lung transplant or a high-risk percutaneous coronary intervention (PCI).” In this code, the 7<sup>th</sup> digit qualifier may have 3 different choices based on the membrane. ICD-10-CM/PCS Coding Clinic, Fourth Quarter ICD-10 2019, Pages 39-41. (AHIMA)

**D. 5A2204Z Extracorporeal or Systemic Assistance and Performance, Physiological Systems, Restoration, Cardiac, Single, Rhythm, No Qualifier.** This is a procedure code that is most applicable to cardioversion-type procedures. See following slides for more information as to why it would not be the appropriate code to use for Internal Cardiac Massage.

## Q4: ICD-10 PCS Procedure Code Rationale (cont'd)

With the procedure of Open Cardiac Massage the section would not be appropriately coded to the section of (5) **Extracorporeal or Systemic Assistance and Performance, and body system of (A) Physiological Systems**, as we find that the only available root operations for assigning a code in this section and body system are (0) Assistance, (1) Performance, and (3) Restoration.

**Each of these root operations state by extracorporeal means and this procedure is an open procedure.**

ICD-10-PCS coding convention A9 directs that for coding that we must assign codes from the root operations in the same row. Therefore, we can't use repair as a root operation for the 5A\_\_\_\_ PCS code table.

Convention A9: "Within a PCS table, valid codes include all combinations of choices in characters 4 through 7 contained in the same row of the table."

In the example here, 0JHT3VZ is a valid code, and 0JHW3VZ is not a valid code

| <b>Section:</b> 0 Medical and Surgical   |                |                       |                |
|--|----------------|-----------------------|----------------|
| <b>Body System:</b> J Subcutaneous Tissue and Fascia   |                |                       |                |
| <b>Operation:</b> H Insertion: Putting in a nonbiological appliance that monitors, assists, performs, or prevents a physiological function but does not physically take the place of a body part |                |                       |                |
| Body Part  | Approach       | Device                | Qualifier      |
| S Subcutaneous Tissue and Fascia, Head and Neck  | 0 Open         | 1 Radioactive Element | Z No Qualifier |
| V Subcutaneous Tissue and Fascia, Upper Extremity  | 3 Percutaneous | 3 Infusion Device     |                |
| W Subcutaneous Tissue and Fascia, Lower Extremity  |                | Y Other Device        |                |
| T Subcutaneous Tissue and Fascia, Trunk  | 0 Open         | 1 Radioactive Element | Z No Qualifier |
|  | 3 Percutaneous | 3 Infusion Device     |                |
|  |                | Y Other Device        |                |

## Q4: ICD-10 PCS Code Rationale (cont'd)

Additionally, when choosing a root operation, in compliance with Coding guideline B3.1a we must choose the one whose full definition is aligned with the intent of the procedure described.

### *General guidelines B3.1a*

“In order to determine the appropriate root operation, the full definition of the root operation as contained in the PCS Tables must be applied.”

Since the 5A\_\_\_\_ PCS table, illustrated below, doesn't have a root operation and we can't break the coding convention A9, we must choose another PCS table that allows for coding the procedure to the most correct body system, root operation, body region (part), Approach (duration), Device (function), Qualifier characters values describing the procedure details.

Therefore, the table most fitting that allows proper assignment of all character values for this procedure is the 02Q\_\_\_\_ PCS table.

The screenshot shows the ICD-10 PCS coding interface. At the top, there is a 'Clear All' button and a text search box. Below this, the 'Section' is set to '5 Extracorporeal or Systemic Assistance and Performance' and the 'Body System' is set to 'A Physiological Systems'. The 'Operation' dropdown is currently set to '0 Assistance'. The 'Definitions' table is displayed, showing the definitions for 'Assistance', 'Performance', and 'Restoration'.

| Operation   | Definition  |
|-------------|---|
| Assistance  | Definition: Taking over a portion of a physiological function by extracorporeal means                                   |
| Performance | Definition: Completely taking over a physiological function by extracorporeal means                                     |
| Restoration | Definition: Returning, or attempting to return, a physiological function to its original state by extracorporeal means. |

## Q5: Level I & II Process Measure TQIP: TBI – Midline Shift Question

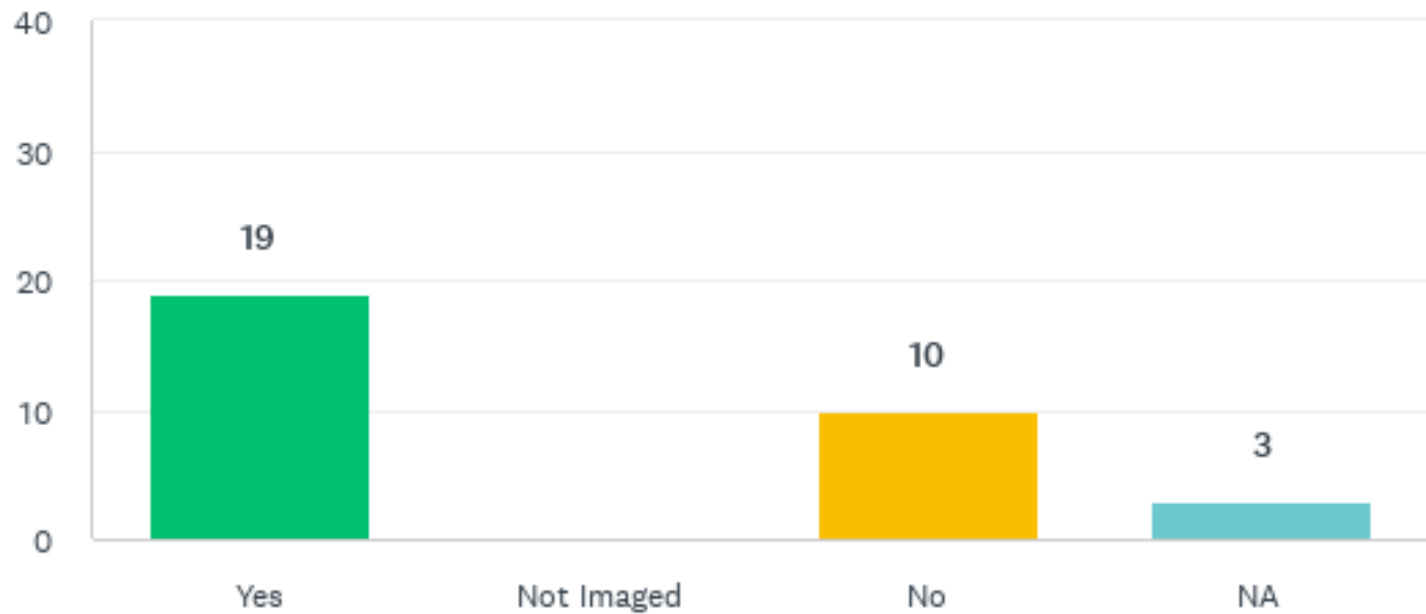
A 16YO M arrives to your facility after falling approx. 6ft out of a tree and hitting his head on the ground. +LOC for about 30 seconds. Pt is now GCS of 14 with some confusion but following commands. A CT scan of the head is ordered while the patient is in the ED. The results of the CT Head read: “R frontoparietal subdural hematoma up to 6mm thick. No mass effect. Leftward shift of 5mm.”

Based on the information provided, what answer would you choose to report to TQIP for the field “Midline Shift”?

- A. Yes
- B. Not imaged
- C. No
- D. NA

## Q5: Level I & II Process Measure TQIP: TBI – Midline Shift Question

Answered: 32 Skipped: 3





## Q5: Level I & II Process Measure TQIP: TBI – Midline Shift Rationale

**CORRECT ANSWER: C “No”.**

### **RATIONALE:**

- A.** Yes – Only answer yes if midline shift is greater than 5mm on CT scan within 24 hours from the time of injury. May also report value “yes” if radiology report states “massive midline shift” in lieu of >5mm shift measurement. NTDS 2021 page 147
- B.** Not imaged – Report this value if the patient was not imaged within 24 hours from the time of injury.
- C.** No – The midline shift is not greater than 5mm per information available.
- D.** NA – “Not Applicable” is reported for patients that do not meet the reporting criterion.

## Q6: Discharge Question

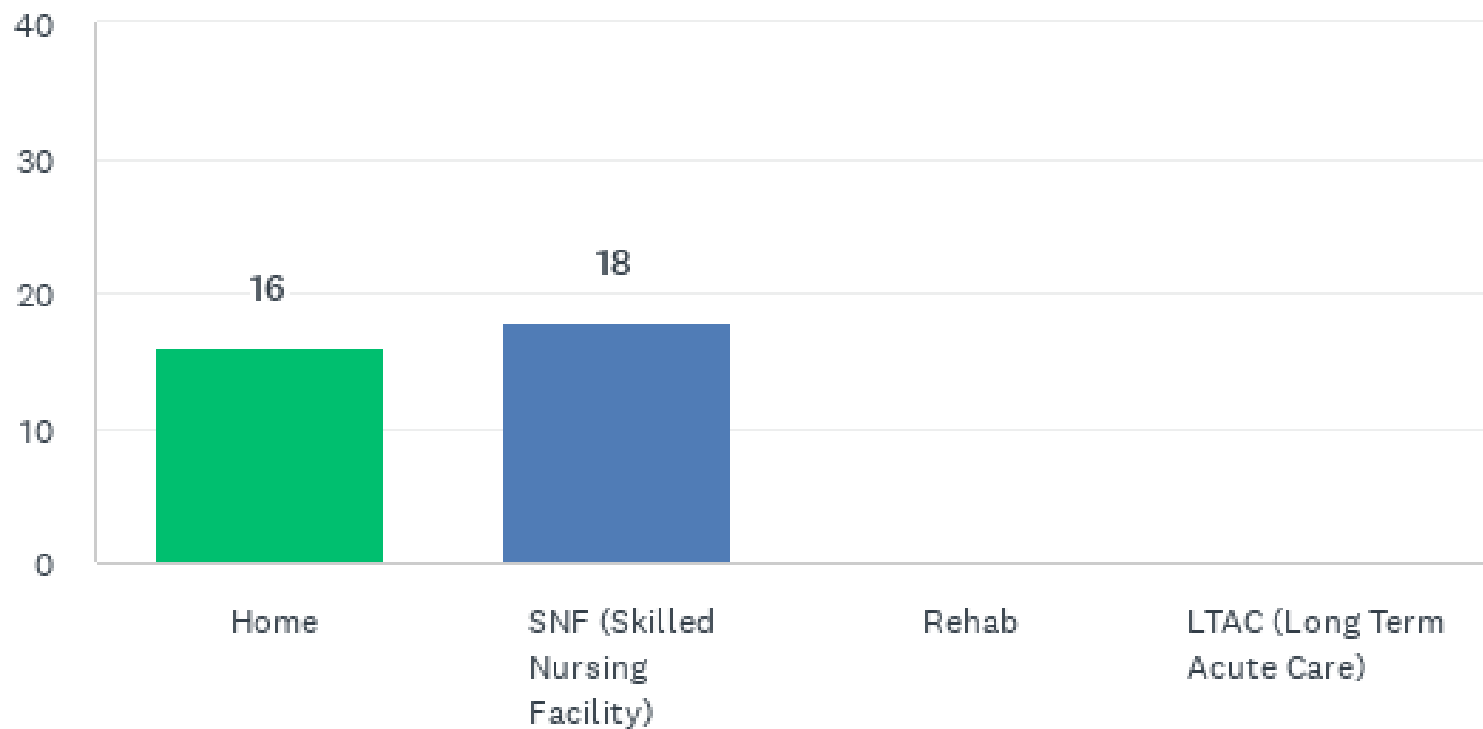
75YO M was staying in FAR AWAY SNF after a recent surgery and presents to the ED after a fall, requiring him to be admitted for further trauma workup and injury management. Approaching his time of discharge from the hospital, the case management note states: "Pt does not want to return to FAR AWAY SNF and prefers to discharge to CLOSE TO HOME SNF where his wife is currently admitted." Case management confirms CLOSE TO HOME SNF can manage the patient's injuries. The day of discharge, the attending physician writes the discharge order: "Discharge to CLOSE TO HOME SNF" and patient leaves the hospital with medical transport shortly after.

What is the Hospital Discharge Disposition?

- A. Home**
- B. SNF**
- C. Rehab**
- D. LTAC**

## Q6: Discharge Question

Answered: 34 Skipped: 1



## Q6: Discharge Answer/Rationale

**CORRECT ANSWER: B “SNF”.**

### **RATIONALE:**

- A. Home** – If the patient discharged to the same SNF as the one he was admitted from, the correct field would be “HOME/SELF CARE”.
- B. SNF** – The patient was discharged to a different SNF than the one he was admitted to the hospital from, so the appropriate discharge location would be SNF instead of HOME/SELF CARE.
- C. Rehab** – The patient did not discharge to a rehab facility.
- D. LTAC** – The patient did not discharge to a LTAC.

## Q7: ICD-10 E-Code Question: NAT/Abuse

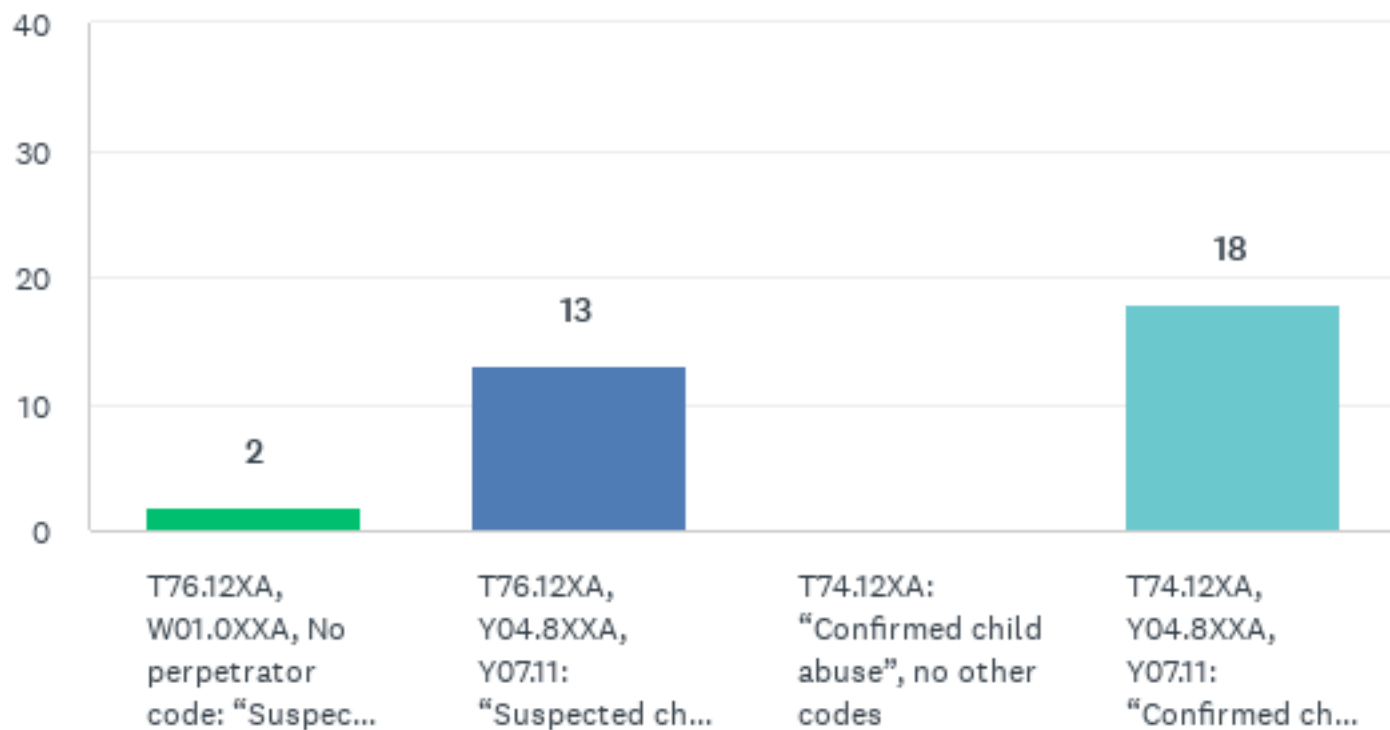
A 3YO F arrives to your facility with a spiral humerus fx and multiple bruises across her body in different stages of healing. The patient's father states she tripped & fell from standing height onto outstretched hands and that she falls frequently. An NAT workup is conducted d/t mechanism not matching injury. Later in the patient's stay, it is determined that the father of the patient grabbed her arm and yanked her across a room and has been hitting her regularly. The patient discharges after her treatment to a kinship placement with social services.

What ICD10 E-codes would you use to document this injury mechanism?

- A.** T76.12XA, W01.0XXA, No perpetrator code: "Suspected child abuse, fall on same level due to tripping and stumbling without subsequent striking against object, no perpetrator code"
- B.** T76.12XA, Y04.8XXA, Y07.11: "Suspected child abuse, assault by other bodily force, biological father - perpetrator of maltreatment and neglect"
- C.** T74.12XA: "Confirmed child abuse", no other codes
- D.** T74.12XA, Y04.8XXA, Y07.11: "Confirmed child abuse, assault by other bodily force, biological father - perpetrator of maltreatment and neglect"

## Q7: ICD-10 E-Code Question: NAT/Abuse

Answered: 33 Skipped: 2



## Q7: ICD-10 E-Code: NAT/Abuse Answer/Rationale

**CORRECT ANSWER:** D “T74.12XA, Y04.8XXA, Y07.11”: confirmed child abuse, assault by other bodily force, biological father, perpetrator of maltreatment and neglect

### **RATIONALE:**

#### **First Question: What is the definition of “confirmed abuse”**

There is no standard definition for confirmed abuse. Pediatric trauma hospitals across the country do not have a good answer to this definition.

“Confirmed Abuse” definition used by the Children’s Hospital Colorado System:

1. When DHS/DSS takes custody of the child
2. There are some cases in which one parent, a babysitter outside the home, or another caregiver is responsible for the abuse. In these instances, a child may return home with the perpetrator removed. This would also be considered an incident of confirmed abuse and could be coded as such.

It is essential to review all multidisciplinary notes to determine the use of “suspected abuse” or “confirmed abuse” (including Child Protection Team notes, social work notes, DHS documentation, and law enforcement information)

This definition is used by Children’s Hospital Colorado – Anschutz and Children’s Hospital Colorado – Colorado Springs, shared in this setting to provide a starting point for open conversation about how your facility defines and codes “confirmed” vs. “suspected” abuse.

## Q7: ICD-10 E-Code: NAT/Abuse Answer/Rationale

**CORRECT ANSWER: D “T74.12XA, Y04.8XXA, Y07.11”:** confirmed child abuse, assault by other bodily force, biological father, perpetrator of maltreatment and neglect

### **RATIONALE:**

**D. T74.12XA, Y04.8XXA, Y07.11 :** Confirmed abuse contains up to three E-Codes.

- 1) The 1<sup>st</sup> code listed is the type of abuse ex: child abuse confirmed. In this case T74.12XXA would be the appropriate abuse code because the child abuse is confirmed, evidenced by the patient’s discharge to social services & kinship placement. There is no standard definition for confirmed or suspected abuse. **A confession from the perpetrator is not required to code confirmed abuse. The key to choosing confirmed vs. suspected is the discharge disposition.**
- 2) The 2<sup>nd</sup> code listed is used to **identify the cause of the current injury** if it is applicable. In this case, the appropriate injury code would be Y04.8XXA. The patient was assaulted by known bodily force that does not fit into other Y04 code descriptions. This code is also appropriate if the bodily force is Not Otherwise Specified (NOS).
- 3) The 3<sup>rd</sup> code listed is the external cause code to **identify the perpetrator, if known**. In this example, there is documentation that the patient’s father was the perpetrator of assault. **This code is ONLY to be used in cases of confirmed abuse in which the perpetrator is identified.**



## Q7: ICD-10 E-Code: NAT/Abuse Answer/Rationale

**CORRECT ANSWER:** D “T74.12XA, Y04.8XXA, Y07.11”: confirmed child abuse, assault by other bodily force, biological father, perpetrator of maltreatment and neglect

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**A.** T76.12XA, W01.0XXA, No perpetrator code: “Suspected child abuse, fall on same level due to tripping and stumbling without subsequent striking against object, no perpetrator code” – This would be an appropriate answer if information available at this facility did not support confirmed abuse, but abuse was suspected and worked up.

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**B.** T76.12XA, Y04.8XXA, Y07.11: “Suspected child abuse, assault by other bodily force, biological father - perpetrator of maltreatment and neglect” – This would not be an appropriate answer based on the directions above: the assault and perpetrator codes would not be used with suspected child abuse.

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**C.** T74.12XA: “Confirmed child abuse”, no other codes. – This would not be an appropriate answer as any confirmed abuse code also requires an identification of the cause of injury & perpetrator (if available) as well.

## Q8: Risk-Adjusted Measures: Pre-existing Conditions Question

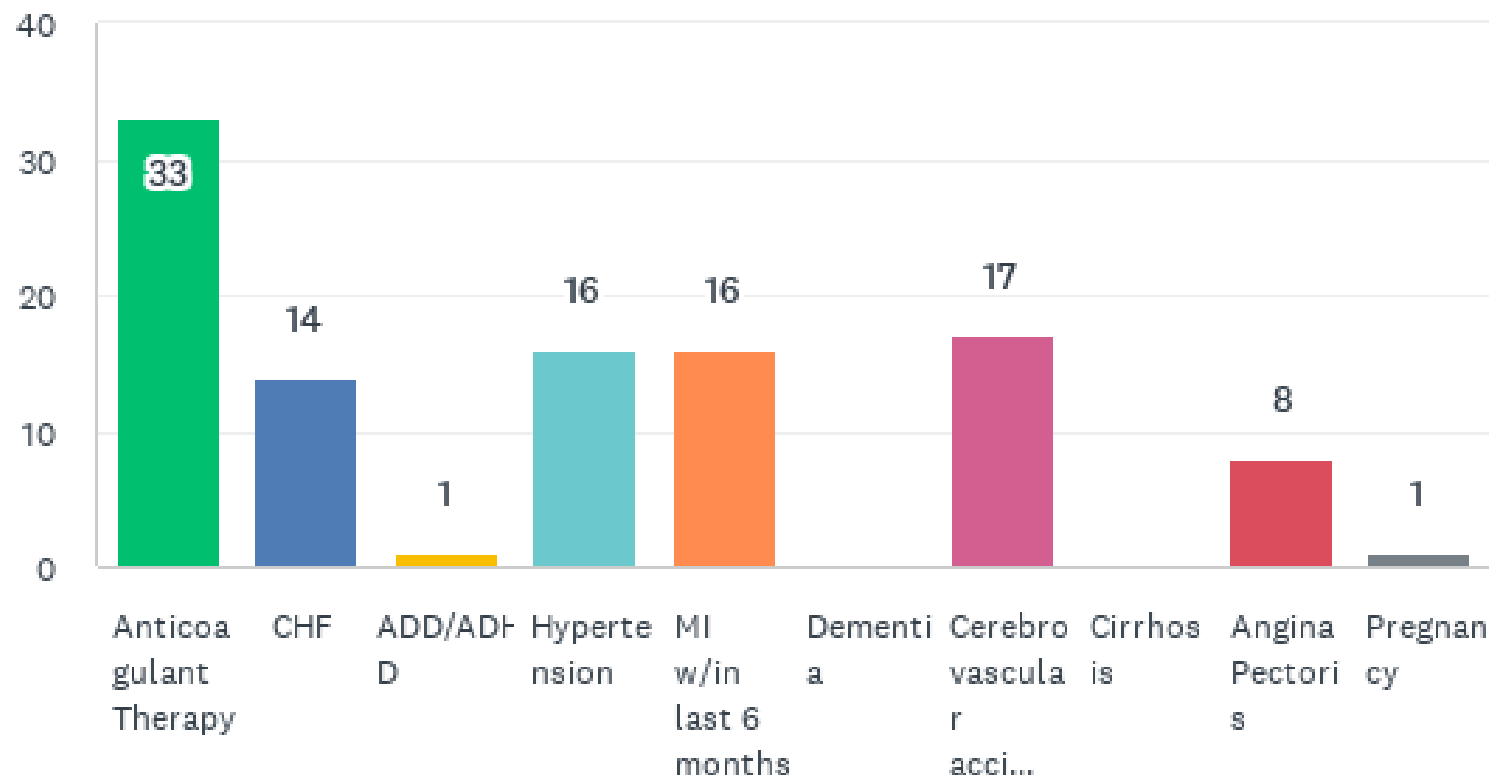
A patient with a femur fracture arrives to your facility and is admitted for operative management scheduled for the next morning. She has a past medical history of a-fib documented in her medical record. The incredible registrar assigned this patient's chart would be aware that a history of a-fib could coincide with other pre-existing conditions that are reportable to the State and NTDB, based on definition criteria.

If the patient has documented a-fib, what other pre-existing conditions may also be identified, related to the a-fib, upon chart review? Select all that apply.

- A. Anticoagulant therapy
- B. CHF
- C. ADD/ADHD
- D. Hypertension
- E. MI w/in last 6 months (confirm in rules)
- F. Dementia
- G. Cerebrovascular accident (CVA)
- H. Cirrhosis
- I. Angina pectoris
- J. Pregnancy

# Q8: Risk-Adjusted Measures: Pre-existing Conditions Question

Answered: 34 Skipped: 1



## Q8: Risk-Adjusted Measures: Pre-existing Conditions Rationale

**CORRECT ANSWER: A, B, D, E, G, I**

**RATIONALE:** The registrar can develop strong critical thinking skills when having an awareness that the documentation of one pre-existing condition in the patient's medical record merits a search in the record for documentation of other pre-existing conditions that may coincide in a patient. It is imperative the registrar confirms the presence of other pre-existing conditions with proper documentation in the chart based on the state & NTDB definitions of each pre-existing condition.

The purpose of this question is to encourage a thought process among registrars to consider all areas in a chart where pre-existing conditions may be documented separately. Just because a patient is diagnosed with a-fib, does not mean the registrar can assume and include other pre-existing conditions in the registry data without confirming. However, the diagnosis of a-fib would be a flag in the registrar's head to consider the possibility of other cardiovascular conditions, and research/review the patient's chart to confirm. The integrity of each facility's data is affected by the inclusion of all confirmed pre-existing conditions for a patient. Data integrity impacts multiple purposes for the facility, the state, the NTDB, and research.

## Q8: Risk-Adjusted Measures: Pre-existing Conditions Rationale (cont'd)

- A. Anticoagulant therapy: Patients diagnosed with a-fib can often be prescribed anti-coagulant therapy as a treatment. Anticoagulant therapy may not be documented in the patient's H&P but may be documented in the patient's list of home medications with dates last taken. It is still important for the registrar to confirm the use of anticoagulants in the patient's EMR as well as per the NTD definition.
- B. CHF is another cardiovascular condition to consider if a patient is diagnosed with a-fib.
- C. ADD/ADHD is not directly associated with a-fib.
- D. Hypertension is another cardiovascular condition that can be related to or coincide with a-fib.
- E. MI w/in last 6months – a-fib can cause clots to develop and travel to the heart vessels causing an MI, so would be something to consider, especially if the patient has a recent diagnosis of new-onset a-fib and/or is non-compliant with taking anticoagulants.
- F. Dementia is not directly associated with a-fib.
- G. CVA – a-fib can cause clots to develop and travel to the brain vessels, causing a CVA, so this is another disease event that can relate to a-fib.
- H. Cirrhosis is not directly associated with a-fib.
- I. Angina pectoris is another cardiovascular condition that can be related to or coincide with a-fib.
- J. Pregnancy is not directly associated with a-fib.

# Thank you! Questions? Please reach out!

All slides will be uploaded to the CTN website for future reference.

<https://cotrauma.org/trauma-registry/>

Any suggestions or ideas for future trauma registry education topics? Please email us and share!

**CTN Registry Subcommittee – New members are always welcome! Please email Amber and Brittany to share your interest receive more information. First meeting of 2022 coming soon!**

Co-Chair: Brittany Howland, BSN RN TNC/Registrar Children's Hospital Colorado - Colorado Springs

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Co-Chair: Amber Nadeau, CAISS, Trauma Registrar UCHealth Memorial Hospital Central

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# Resources

- CTN: <https://cotrauma.org/>
- NTDB: <https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb>
- ACS: <https://www.facs.org/quality-programs/trauma>
- American Trauma Society (ATS): <https://www.amtrauma.org/default.aspx>
- ICD-10: [www.cms.gov/ICD10](http://www.cms.gov/ICD10)
- AAAM & AIS: <https://www.aaam.org/abbreviated-injury-scale-ais/>
- CDPHE: <https://cdphe.colorado.gov/emergency-care/trauma>
- SEMTAC: <https://cdphe.colorado.gov/emergency-care/engage-with-us/councils-boards-and-task-forces/state-emergency-medical-and-trauma>