

# NATIONAL TRAUMA DATA STANDARD

DATA DICTIONARY  
2023 ADMISSIONS



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## INTRODUCTION

Traumatic injury, both unintentional and intentional, is the leading cause of death in the first four decades of life, according to the National Center for Health Statistics.<sup>1</sup> Trauma typically involves young adults and results in the loss of more productive work years than both cancer and heart disease combined.<sup>2</sup> Each year, more than 140,000 Americans die and approximately 80,000 are permanently disabled as a result of injury.<sup>3</sup> The loss of productivity and health care costs account for 100 billion dollars annually.<sup>4</sup>

Research provides evidence of the effectiveness of trauma and EMS systems in reducing mortality, morbidity, and lost productivity from traumatic injuries. Almost three decades of research consistently suggests that in-hospital (and post-discharge) mortality rates are reduced by 20 to 25% among severely injured patients treated in trauma centers organized into a regional or statewide trauma system.<sup>5-9</sup> Nevertheless, much of the work investigating the effectiveness of trauma system (center) development has been hampered by the lack of consistent, quality data to demonstrate differences in mortality over time or between hospitals, regions, or states.

Hospital-based trauma registries are the basis for much of the research and quality assessment work that has informed clinicians and policy makers about methods to optimize the care of injured patients. Yet, the actual data points contained in independent hospital registries are often so different in content and structure that comparison across registries is nearly impossible.<sup>10</sup> Database construction for trauma registries is often completed in isolation with no nationally recognized standard data dictionary to ensure consistency across registries. Efforts to standardize hospital registry content have been published<sup>11,12</sup>, yet studies continue to document serious variation and misclassification between hospital-based registries.<sup>13,14</sup>

Recently, federal agencies have made investments to fortify the establishment of a national trauma registry.<sup>15,16</sup> Much of this funding has focused on the National Trauma Data Standard™ (NTDS), which represents a concerted and sustained effort by the American College of Surgeons Committee on Trauma (ACSCOT) to provide an extensive collection of trauma registry data provided primarily by accredited/designated trauma centers across the U.S.<sup>17</sup> Members of ACSCOT and staff associated with the NTDB have long recognized that the NTDB inherits the individual weaknesses of each contributing registry.<sup>18</sup>

During 2004 through 2006, the ACSCOT Subcommittee on Trauma Registry Programs was supported by the U.S. Health Resources and Services Administration (HRSA) to devise a uniform set of trauma registry variables and associated variable definitions. The ACSCOT Subcommittee also characterized a core set of trauma registry inclusion criteria that would maximize participation by all state, regional and local trauma registries. This data dictionary represents the culmination of this work. Institutionalizing the basic standards provided in this document will greatly increase the likelihood that a national trauma registry would provide clinical information beneficial in characterizing traumatic injury and enhancing our ability to improve trauma care in the United States.

To realize this objective, it is important that this subset of uniform registry variables are incorporated into all trauma registries, regardless of trauma center accreditation/designation (or lack thereof). Local, regional or state registries are then encouraged to provide a yearly download of these uniform variables to the NTDB for all patients satisfying the inclusion criteria described in this document. This subset of variables, for all registries, will represent the contents of the new National Trauma Data Bank (NTDB) in the future.

## TECHNICAL NOTES REGARDING NTDS IMPLEMENTATION

The NTDS Dictionary is designed to establish a national standard for the exchange of trauma registry data and to serve as the operational definitions for the National Trauma Data Bank (NTDB). It is expected (and encouraged) that local and state trauma registry committees will move towards extending and/or modifying their registries to adopt NTDS-based definitions. However, it is also recognized that many local and state trauma registry data sets will contain additional data points as well as additional response codes beyond those captured in NTDS. It is important to note that systems that deviate from NTDS can be fully compliant with NTDS via the development of a “mapping” process provided by their vendor which maps each variable (and response code) in the registry to the appropriate NTDS variable (and response code).

There are numerous ways in which mapping may allow variations in hospital or state data sets to conform to the NTDS data fields:

1. Additional response codes for a variable (for example, source of payment) may be collected, but then collapsed (i.e., mapped) into existing NTDS response codes when data are submitted to the NTDB.
2. A local or state registry may collect both a “patient’s home city” and “patient’s home ZIP code,” but the NTDS requires one or the other. A mapping program may ensure only one variable is submitted to the NTDB.

In sum, the NTDS Data Dictionary provides the exact standard for submission of trauma registry data to the NTDB. This standard may be accomplished through abstraction precisely as described in this document, or through mapping provided by a vendor. If variables are mapped, trauma managers/registrars should consult with their vendor to ensure that the mapping is accurate. In addition, if variables are mapped, it is important that a registrar abstract data as described by the vendor to ensure the vendor-supplied NTDS mapping works properly to enforce the exact rules outlined in the NTDS data dictionary.

The benefits of having a national trauma registry standard that can support comparative analyses across all facilities are enormous. The combination of having the NTDS standard as well as vendor-supplied mappings (to support that standard) will allow local and state registry data sets to include individualized detail while still maintaining compatibility with the NTDS national standard.



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# NATIONAL TRAUMA DATA STANDARD (NTDS) PATIENT INCLUSION CRITERIA

**DESCRIPTION:** To ensure consistent data collection across States into the National Trauma Data Standard, a trauma patient is defined as a patient sustaining a traumatic injury within 14 days of initial hospital encounter and meeting the following criteria\*:

**At least ONE** of the following injury diagnostic codes defined as follows:

***International Classification of Diseases, Tenth Revision (ICD-10-CM):***

- S00-S99 with 7th character modifiers of A, B, or C ONLY. (Injuries to specific body parts—initial encounter)
- T07 (unspecified multiple injuries)
- T14 (injury of unspecified body region)
- T79.A1-T79.A9 with 7th character modifier of A ONLY (Traumatic Compartment Syndrome—initial encounter)

**EXCLUDING the following isolated injuries:**

***ICD-10-CM:***

- S00 (Superficial injuries of the head)
- S10 (Superficial injuries of the neck)
- S20 (Superficial injuries of the thorax)
- S30 (Superficial injuries of the abdomen, pelvis, lower back and external genitals)
- S40 (Superficial injuries of shoulder and upper arm)
- S50 (Superficial injuries of elbow and forearm)
- S60 (Superficial injuries of wrist, hand and fingers)
- S70 (Superficial injuries of hip and thigh)
- S80 (Superficial injuries of knee and lower leg)
- S90 (Superficial injuries of ankle, foot and toes)

**Late effect codes, which are represented using the same range of injury diagnosis codes but with the 7th digit modifier code of D through S, are also excluded.**

**AND MUST INCLUDE ONE OF THE FOLLOWING IN ADDITION TO (ICD-10-CM S00-S99, T07, T14, and T79.A1-T79.A9):**

- Death resulting from the traumatic injury (independent of hospital admission or hospital transfer status);

**OR**

- Patient transfer from one acute care hospital\*\* to another acute care hospital;

**OR**

- Patients directly admitted to your hospital (exclude patients with isolated injuries admitted for elective and/or planned surgical intervention);

**OR**

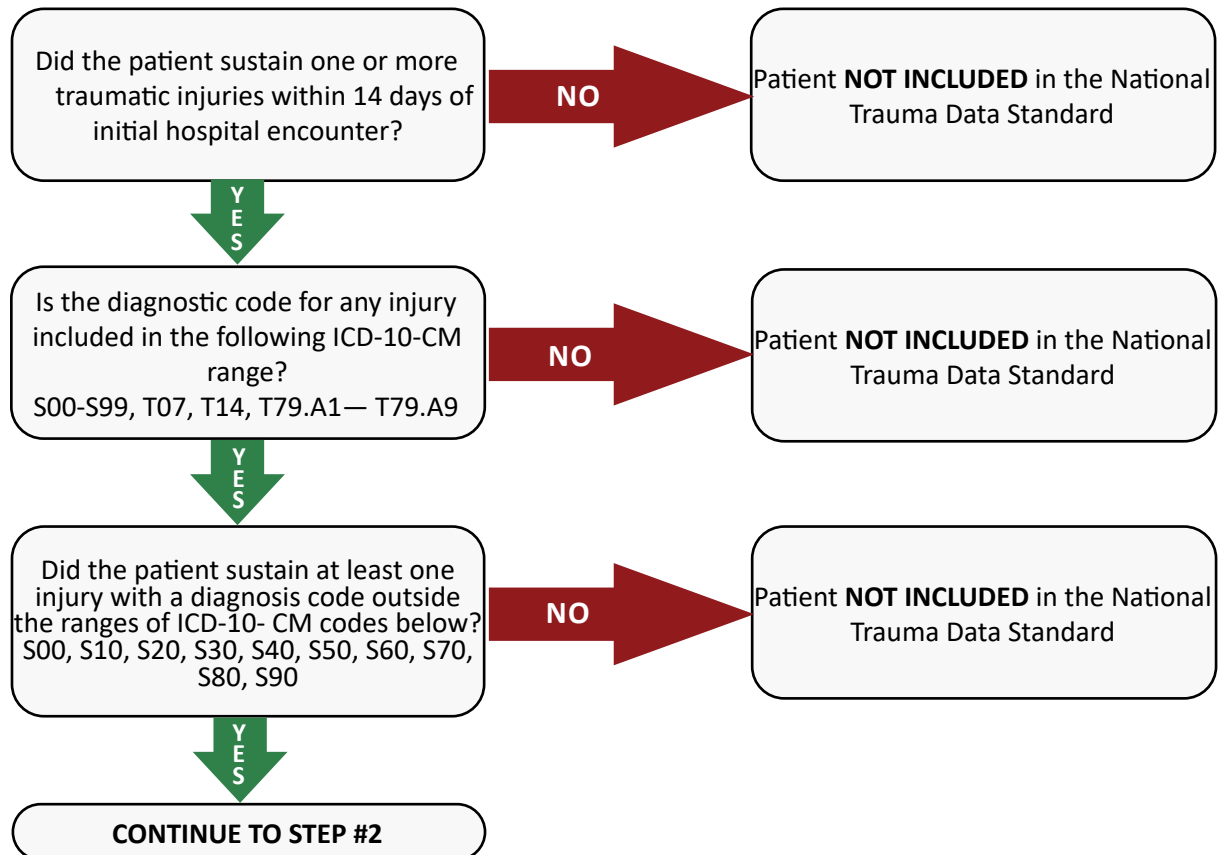
- Patients who were an in-patient admission and/or observed.

\*In-house traumatic injuries sustained after initial ED/Hospital arrival and before hospital discharge at the index hospital (the hospital reporting data), and all data associated with that injury event, are excluded.

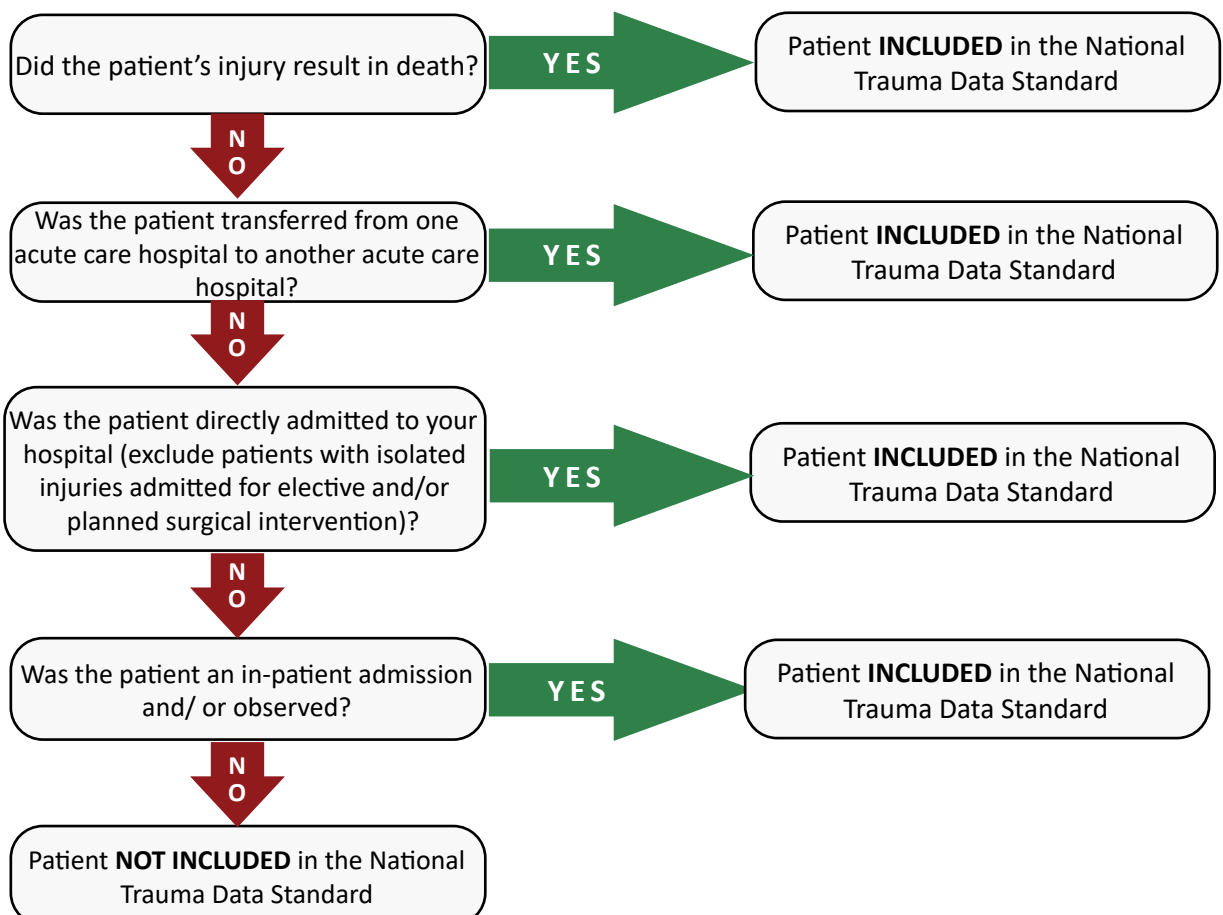
\*\*Acute Care Hospital is defined as a hospital that provides inpatient medical care and other related services for surgery, acute medical conditions or injuries (usually for a short-term illness or condition). “CMS Data Navigator Glossary of Terms” [https://www.cms.gov/Research-Statistics-Data-and-systems/Research/ResearchGenInfo/Downloads/DataNav\\_Glossary\\_Alpha.pdf](https://www.cms.gov/Research-Statistics-Data-and-systems/Research/ResearchGenInfo/Downloads/DataNav_Glossary_Alpha.pdf) (accessed January 15, 2019).

## NTDS PATIENT INCLUSION CRITERIA (ALGORITHM)

### STEP #1:



### STEP #2:



## COMMON NULL VALUES

### DESCRIPTION

Values used with each of the National Trauma Data Standard Data Elements described in this document that have been defined to accept null values.

### ELEMENT VALUES

1. Not Applicable (NA)
2. Not Known/Not Recorded (NK/NR)

### ADDITIONAL INFORMATION

- For data collection to be of value and reliably represent what was intended, a strong commitment must be made to ensure the correct reporting of incomplete data. When incomplete data elements associated with the National Trauma Data Standard are submitted electronically using XML, the indicated null values must be reported to ensure each data element has been addressed.
- Not Applicable (NA): Applies when the information requested was not applicable at the time of the patient care event. For example, the common null value "NA" is reported in the data element **Other Transport Mode** if a patient had a single mode of transport.
- Not Known/Not Recorded (NK/NR): Applies when the information is unknown (to the patient, family, health care provider) or not recorded at the time of the patient care event. For example, the common null value "NK/NR" is reported in the data element **Injury Incident Date** if it was documented as "Unknown" in the patient's medical record. Another example, the common null value "NK/NR" is reported when documentation was expected, but none was provided i.e., **Initial ED/Hospital Temperature** was not documented in the patient's medical record.

### REFERENCES TO OTHER DATABASES

- Compare with NHTSA V.2.10 - E00

## DATA ELEMENT LEGEND

|                             |  |
|-----------------------------|--|
| Definition                  | Consists of the 5 sections of each data element's page(s): description, element values, additional information, data source hierarchy guide, and associated edit checks. |
| Description                 | General meaning of the data element.   |
| Element Values              | Values that must be reported for the data element.   |
| Additional Information      | Instructions for reporting the data element.   |
| Data Source Hierarchy Guide | Sources where information can be obtained in the medical record. [This is simply a guide; centers should use the most reliable source at their center.]                  |
| Associated Edit Checks      | Validation rules. [See "Appendix 2" for additional information]  |

## DEMOGRAPHIC INFORMATION

## PATIENT'S HOME ZIP/POSTAL CODE

### DESCRIPTION

The patient's home ZIP/postal code of primary residence.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Can be stored as a 5 or 9-digit code (XXXXX-XXXX) for US, or can be stored in the postal code format of the applicable country.
- May require adherence to HIPAA regulations.
- If **Patient's Home ZIP/Postal Code** is "Not Applicable," report data element **Alternate Home Residence**.
- If **Patient's Home ZIP/Postal Code** is "Not Known/Not Recorded," report: **Patient's Home Country**, **Patient's Home State** (US only), **Patient's Home County** (US only) and **Patient's Home City** (US only).
- If **Patient's Home ZIP/Postal Code** is reported, must also report **Patient's Home Country**.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                   |
|---------|-------|---------------------------|
| 0001    | 1     | Invalid value             |
| 0002    | 2     | Element cannot be blank   |
| 0040    | 1     | Single Entry Max exceeded |



## PATIENT'S HOME COUNTRY

### DESCRIPTION

The country where the patient resides.

### ELEMENT VALUES

- Relevant value for data element (two-digit alpha country code)

### ADDITIONAL INFORMATION

- Values are two-character FIPS codes representing the country (e.g., US).
- If **Patient's Home Country** is not US, then the null value "Not Applicable" is reported for **Patient's Home State**, **Patient's Home County**, and **Patient's Home City**.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0101    | 1     | Invalid value   |
| 0102    | 2     | Element cannot be blank   |
| 0104    | 2     | Element cannot be "Not Applicable"  |
| 0105    | 2     | Element cannot be "Not Known/Not Recorded" when <b>Patient's Home ZIP/Postal Code</b> is any response other than "Not Applicable" or "Not Known/Not Recorded" |
| 0140    | 1     | Single Entry Max exceeded   |

## PATIENT'S HOME STATE

### DESCRIPTION

The state (territory, province, or District of Columbia) where the patient resides.

### ELEMENT VALUES

- Relevant value for data element (two-digit numeric FIPS code)

### ADDITIONAL INFORMATION

- Only reported when *Patient's Home ZIP/Postal Code* is "Not Known/Not Recorded" and country is US.
- Used to calculate FIPS code.
- The null value "Not Applicable" is reported if *Patient's Home ZIP/Postal Code* is reported.
- The null value "Not Applicable" is reported for non-US hospitals.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0201    | 1     | Invalid value   |
| 0202    | 2     | Element cannot be blank   |
| 0204    | 2     | Element must be "Not Applicable" (Non-US hospitals only)                                |
| 0205    | 2     | Element must be "Not Applicable" when <i>Patient's Home ZIP/Postal Code</i> is reported |
| 0240    | 1     | Single Entry Max exceeded   |

## PATIENT'S HOME COUNTY

### DESCRIPTION

The patient's county (or parish) of residence.

### ELEMENT VALUES

- Relevant value for data element (three-digit numeric FIPS code)

### ADDITIONAL INFORMATION

- Only reported when *Patient's Home ZIP/Postal Code* is "Not Known/Not Recorded" and the country is the US.
- Used to calculate the FIPS code.
- The null value "Not Applicable" is reported if *Patient's Home ZIP/Postal Code* is reported.
- The null value "Not Applicable" is reported for non-US hospitals.

### DATA SOURCE HIERARCHY GUIDE

- Face Sheet
- Billing Sheet
- Admission Form

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0301    | 1     | Invalid value   |
| 0302    | 2     | Element cannot be blank   |
| 0304    | 2     | Element must be "Not Applicable" (Non-US hospitals only)                                |
| 0305    | 2     | Element must be "Not Applicable" when <i>Patient's Home ZIP/Postal Code</i> is reported |
| 0340    | 1     | Single Entry Max exceeded   |

## PATIENT'S HOME CITY

### DESCRIPTION

The patient's city (or township, or village) of residence.

### ELEMENT VALUES

- Relevant value for data element (five-digit numeric FIPS code)

### ADDITIONAL INFORMATION

- Only reported when *Patient's Home ZIP/Postal Code* is "Not Known/Not Recorded" and country is the US.
- Used to calculate the FIPS code.
- The null value "Not Applicable" is reported if *Patient's Home ZIP/Postal Code* is reported.
- The null value "Not Applicable" is reported for non-US hospitals.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0401    | 1     | Invalid value   |
| 0402    | 2     | Element cannot be blank   |
| 0404    | 2     | Element must be "Not Applicable" (Non-US hospitals only)                                |
| 0405    | 2     | Element must be "Not Applicable" when <i>Patient's Home ZIP/Postal Code</i> is reported |
| 0440    | 1     | Single Entry Max exceeded   |

## ALTERNATE HOME RESIDENCE

### DESCRIPTION

Documentation of the type of patient without a home ZIP/postal code.

### ELEMENT VALUES

1. Homeless
2. Undocumented Citizen
3. Migrant Worker

### ADDITIONAL INFORMATION

- Only reported when *Patient's Home ZIP/Postal Code* is "Not Applicable."
- Report all that apply.
- Homeless is defined as a person who lacks housing and includes a person living in transitional housing or a supervised public or private facility providing temporary living quarters.
- Undocumented Citizen is defined as a national of another country who has entered or stayed in another country without permission.
- Migrant Worker is defined as a person who temporarily leaves his/her principal place of residence within a country to accept seasonal employment in the same or different country.
- The null value "Not Applicable" is reported if *Patient's Home ZIP/Postal Code* is reported.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0501    | 1     | Value is not a valid menu option  |
| 0502    | 2     | Element cannot be blank   |
| 0503    | 2     | Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other value |
| 0540    | 1     | Multiple Entry Max exceeded   |

## DATE OF BIRTH

### DESCRIPTION

The patient's date of birth.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- If **Date of Birth** is "Not Known/Not Recorded," report **Age** and **Age Units**.
- If **Date of Birth** is the same as the **Injury Incident Date**, then the **Age** and **Age Units** data elements must be reported.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form
4. Triage/Trauma Flow Sheet
5. EMS Run Report

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0601    | 1     | Invalid value   |
| 0602    | 1     | Date out of range   |
| 0603    | 2     | Element cannot be blank   |
| 0612    | 2     | Date of Birth + 120 years must be less than <b>Injury Incident Date</b> |
| 0613    | 2     | Element cannot be "Not Applicable"                                      |
| 0640    | 1     | Single Entry Max exceeded   |



## AGE

### DESCRIPTION

The patient's age at the time of injury (best approximation).

### ELEMENT VALUE

- Relevant value for data element

### ADDITIONAL INFORMATION

- Must also report **Age Units**.
- Report **Age** and **Age Units** if **Date of Birth** is reported as "Not Known/Not Recorded."
- Report **Age** and **Age Units** if **Date of Birth** is reported the same as the **ED/Hospital Arrival Date**.
- The null value "Not Applicable" is reported if **Date of Birth** is reported.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form
4. Triage/Trauma Flow Sheet
5. EMS Run Report

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0701    | 1     | Age is outside the valid range of 0 - 120   |
| 0703    | 2     | Element cannot be blank   |
| 0705    | 3     | Age is greater than expected for the <b>Age Units</b> specified. Age should not exceed 60 minutes, 24 hours, 30 days, 24 months, or 120 years. Please verify this is correct. |
| 0708    | 2     | Element must be "Not Known/Not Recorded" when <b>Age Units</b> is "Not Known/Not Recorded"  |
| 0709    | 2     | Element must be and can only be "Not Applicable" if <b>Date of Birth</b> is reported unless <b>Date of Birth</b> is the same as <b>ED/Hospital Arrival Date</b>               |
| 0740    | 1     | Single Entry Max exceeded   |

## AGE UNITS

### DESCRIPTION

The units used to report the patient's age.

### ELEMENT VALUES

- |           |            |
|-----------|------------|
| 1. Hours  | 4. Years   |
| 2. Days   | 5. Minutes |
| 3. Months | 6. Weeks   |

### ADDITIONAL INFORMATION

- Must also report **Age**.
- Report **Age Units** and **Age** if **Date of Birth** is "Not Known/Not Recorded."
- Report **Age Units** and **Age** if **Date of Birth** if **Date of Birth** is the same as the **ED/Hospital Arrival Date**.
- The null value "Not Applicable" is reported if **Date of Birth** is reported.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form
4. Triage/Trauma Flow Sheet
5. EMS Run Report

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 0801    | 1     | Value is not a valid menu option   |
| 0803    | 2     | Element cannot be blank  |
| 0806    | 2     | Element must be "Not Known/Not Recorded" when <b>Age</b> is "Not Known/Not Recorded" |
| 0810    | 2     | Element must be and can only be "Not Applicable" if <b>Age</b> is "Not Applicable"   |
| 0840    | 1     | Single Entry Max exceeded  |

## RACE

### DESCRIPTION

The patient's race.

### ELEMENT VALUES

1. Asian
2. Native Hawaiian or Other Pacific Islander
3. Other Race
4. American Indian
5. Black or African American
6. White

### ADDITIONAL INFORMATION

- Report all that apply.
- Patient race should be based upon self-report or identified by a family member.
- Based on the 2010 US Census Bureau.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form
4. Triage/Trauma Flow Sheet
5. EMS Run Report
6. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 0901    | 1     | Value is not a valid menu option  |
| 0902    | 2     | Element cannot be blank   |
| 0903    | 2     | Element cannot be "Not Applicable" (excluding Canadian hospitals)                         |
| 0905    | 2     | Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other value |
| 0950    | 1     | Multiple Entry Max exceeded   |

## ETHNICITY

### DESCRIPTION

The patient's ethnicity.

### ELEMENT VALUES

1. Hispanic or Latino
2. Not Hispanic or Latino

### ADDITIONAL INFORMATION

- Patient ethnicity should be based upon self-report or identified by a family member.
- The maximum number of ethnicities that may be reported for an individual patient is 1.
- Based on the 2010 US Census Bureau.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form
4. Triage/Trauma Flow Sheet
5. History and Physical
6. EMS Run Report

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 1001    | 1     | Value is not a valid menu option                                  |
| 1002    | 2     | Element cannot be blank   |
| 1003    | 2     | Element cannot be "Not Applicable" (excluding Canadian hospitals) |
| 1040    | 1     | Single Entry Max exceeded   |

## SEX

### DESCRIPTION

The patient's sex.

### ELEMENT VALUES

1. Male
2. Female
3. Non-binary

### ADDITIONAL INFORMATION

- Patients who have undergone a surgical and/or hormonal sex reassignment must be reported using their current assignment.

### DATA SOURCE HIERARCHY GUIDE

1. Face Sheet
2. Billing Sheet
3. Admission Form
4. Triage/Trauma Flow Sheet
5. EMS Run Report
6. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 1101    | 1     | Value is not a valid menu option   |
| 1102    | 2     | Element cannot be blank            |
| 1103    | 2     | Element cannot be "Not Applicable" |
| 1140    | 1     | Single Entry Max exceeded          |

## INJURY INFORMATION



## INJURY INCIDENT DATE

### DESCRIPTION

The date the injury occurred.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- Estimated injury date must be based on patient, witness, family, or healthcare provider report. Other proxy measures (e.g., 911 call times) must not be reported.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. History and Physical
4. Face Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 1201    | 1     | Date is not valid  |
| 1202    | 1     | Date out of range  |
| 1203    | 2     | Element cannot be blank  |
| 1204    | 2     | <b><i>Injury Incident Date</i></b> is earlier than <b><i>Date of Birth</i></b>                                 |
| 1211    | 2     | Element cannot be "Not Applicable"   |
| 1212    | 3     | <b><i>Injury Incident Date</i></b> is greater than 14 days earlier than <b><i>ED/Hospital Arrival Date</i></b> |
| 1240    | 1     | Single Entry Max exceeded  |

## INJURY INCIDENT TIME

### DESCRIPTION

The time the injury occurred.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- Estimated injury time must be based on patient, witness, family, or healthcare provider report. Other proxy measures (e.g., 911 call times) must not be reported.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. History and Physical
4. Face Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 1301    | 1     | Time is not valid                  |
| 1302    | 1     | Time out of range                  |
| 1303    | 2     | Element cannot be blank            |
| 1310    | 2     | Element cannot be "Not Applicable" |
| 1340    | 1     | Single Entry Max exceeded          |

## WORK-RELATED

### DESCRIPTION

Indication of whether the injury occurred during paid employment.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- If work-related, *Patient's Occupational Industry* and *Patient's Occupation* must be reported.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. History and Physical
4. Face Sheet
5. Billing Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 1401    | 1     | Value is not a valid menu option   |
| 1402    | 2     | Element cannot be blank            |
| 1407    | 2     | Element cannot be "Not Applicable" |
| 1440    | 1     | Single Entry Max exceeded          |

## PATIENT'S OCCUPATIONAL INDUSTRY

### DESCRIPTION

The occupational industry associated with the patient's work environment.

### ELEMENT VALUES

- |  |                                  |
|--|----------------------------------|
| 1. Finance, Insurance, and Real Estate | 8. Construction                  |
| 2. Manufacturing                       | 9. Government                    |
| 3. Retail Trade                        | 10. Natural Resources and Mining |
| 4. Transportation and Public Utilities | 11. Information Services         |
| 5. Agriculture, Forestry, Fishing      | 12. Wholesale Trade              |
| 6. Professional and Business Services  | 13. Leisure and Hospitality      |
| 7. Education and Health Services       | 14. Other Services               |

### ADDITIONAL INFORMATION

- If work-related, *Patient's Occupation* must be reported.
- The null value "Not Applicable" is reported if *Work-Related* is *Element Value* "2. No."
- Based upon US Bureau of Labor Statistics Industry Classification.

### DATA SOURCE HIERARCHY GUIDE

1. Billing Sheet
2. Face Sheet
3. Case Management/Social Services Notes
4. EMS Run Report
5. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 1501    | 1     | Value is not a valid menu option   |
| 1504    | 2     | Element cannot be blank  |
| 1505    | 2     | If <i>Work-Related</i> is <i>Element Value</i> "1. Yes," <i>Patient's Occupational Industry</i> cannot be "Not Applicable" |
| 1506    | 2     | "Not Applicable" must be reported if <i>Work-Related</i> is <i>Element Value</i> "2. No"                                   |
| 1540    | 1     | Single Entry Max exceeded  |

## PATIENT'S OCCUPATION

### DESCRIPTION

The occupation of the patient.

### ELEMENT VALUES

- |   |  |
|---|--|
| 1. Business and Financial Operations Occupations      | 13. Computer and Mathematical Occupations          |
| 2. Architecture and Engineering Occupations           | 14. Life, Physical, and Social Science Occupations |
| 3. Community and Social Services Occupations          | 15. Legal Occupations                              |
| 4. Education, Training, and Library Occupations       | 16. Arts, Design, Entertainment, Sports, and Media |
| 5. Healthcare Practitioners and Technical Occupations | 17. Healthcare Support Occupations                 |
| 6. Protective Service Occupations                     | 18. Food Preparation and Serving Related           |
| 7. Building and Grounds Cleaning and Maintenance      | 19. Personal Care and Service Occupations          |
| 8. Sales and Related Occupations                      | 20. Office and Administrative Support Occupations  |
| 9. Farming, Fishing, and Forestry Occupations         | 21. Construction and Extraction Occupations        |
| 10. Installation, Maintenance, and Repair Occupations | 22. Production Occupations                         |
| 11. Transportation and Material Moving Occupations    | 23. Military Specific Occupations                  |
| 12. Management Occupations                            |  |

### ADDITIONAL INFORMATION

- Only reported if injury is work-related.
- If work-related, **Patient's Occupational Industry** must also be reported.
- The null value "Not Applicable" is reported if **Work-Related** is *Element Value "2. No."*
- Based upon 1999 US Bureau of Labor Statistics Standard Occupational Classification (SOC).

### DATA SOURCE HIERARCHY GUIDE

1. Billing Sheet
2. Face Sheet
3. Case Management/Social Services Notes
4. EMS Run Report
5. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 1601    | 1     | Value is not a valid menu option   |
| 1604    | 2     | Element cannot be blank  |
| 1605    | 2     | If <b>Work-Related</b> is <i>Element Value "1. Yes," Patient's Occupation</i> cannot be "Not Applicable" |
| 1606    | 2     | "Not Applicable" must be reported if <b>Work-Related</b> is <i>Element Value "2. No"</i>                 |
| 1640    | 1     | Single Entry Max exceeded  |

## ICD-10 PRIMARY EXTERNAL CAUSE CODE

### DESCRIPTION

External cause code used to describe the mechanism (or external factor) that caused the injury event.

### ELEMENT VALUES

- Relevant ICD-10-CM or ICD-10 CA code value for injury event

### ADDITIONAL INFORMATION

- The primary external cause code should describe the main reason a patient is admitted to the hospital.
- ICD-10-CM or ICD-10-CA codes are accepted for this data element.
- Activity codes are not reported under the NTDS.
- Multiple Cause Coding Hierarchy: If two or more events cause separate injuries, an external cause code must be reported for each cause. The first-listed external cause code will be selected in the following order:
  - External cause codes for child and adult abuse take priority over all other external cause codes.
  - External cause codes for terrorism events take priority over all other external cause codes except child and adult abuse.
  - External cause codes for cataclysmic events take priority over all other external cause codes except child and adult abuse, and terrorism.
  - External cause codes for transport accidents take priority over all other external cause codes except cataclysmic events, and child and adult abuse, and terrorism.
  - The first listed external cause code must correspond to the cause of the most serious diagnosis due to an assault, accident or self-harm, following the order of hierarchy listed above.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. Nursing Notes/Flow Sheet
4. History and Physical
5. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 8901    | 1     | E-Code is not a valid ICD-10-CM code (ICD-10-CM only)  |
| 8902    | 2     | Element cannot be blank  |
| 8904    | 2     | Must not be Y92.X/Y92.XX/Y92.XXX (where X is A-Z or 0-9) (ICD-10-CM only)                    |
| 8905    | 3     | ICD-10 External Cause Code must not be Y93.X/Y93.XX (where X is A-Z or 0-9) (ICD-10 CM only) |
| 8906    | 1     | E-Code is not a valid ICD-10-CA code (ICD-10-CA only)  |
| 8907    | 2     | Element cannot be "Not Applicable"   |
| 8940    | 1     | Single Entry Max exceeded  |



## ICD-10 PLACE OF OCCURRENCE EXTERNAL CAUSE CODE

### DESCRIPTION

Place of occurrence external cause code used to describe the place/site/location of the injury event (Y92.X).

### ELEMENT VALUES

- Relevant ICD-10-CM or ICD-10-CA code value for injury event

### ADDITIONAL INFORMATION

- Only ICD-10-CM or ICD-10-CA codes are accepted.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. Nursing Notes/Flow Sheet
4. History and Physical
5. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 9001    | 1     | Invalid value (ICD-10-CM only)   |
| 9002    | 2     | Element cannot be blank  |
| 9003    | 3     | Place of Injury code must be Y92.X/Y92.XX/Y92.XXX (where X is A-Z [excluding I,O] or 0-9) (ICD-10-CM only) |
| 9004    | 1     | Invalid value (ICD-10-CA only)   |
| 9005    | 3     | Place of Injury code must be U98X (where X is 0-9) (ICD-10-CA only)  |
| 9006    | 2     | Element cannot be "Not Applicable"   |
| 9040    | 1     | Single Entry Max exceeded  |

## ICD-10 ADDITIONAL EXTERNAL CAUSE CODE

### DESCRIPTION

Additional external cause code used in conjunction with the *ICD-10 Primary External Cause Code* if multiple external cause codes are required to describe the injury event.

### ELEMENT VALUES

- Relevant ICD 10-CM or ICD-10-CA code value for injury event

### ADDITIONAL INFORMATION

- Report all that apply (maximum 2).
- Only ICD-10-CM or ICD-10-CA codes are accepted.
- Activity codes are not reported under the NTDS and should not be reported for this data element.
- The null value “Not Applicable” is reported if no additional external cause codes are reported.
- Multiple Cause Coding Hierarchy: If two or more events cause separate injuries, an external cause code must be assigned for each cause. The first-listed external cause code will be selected in the following order:
  - External cause codes for child and adult abuse take priority over all other external cause codes.
  - External cause codes for terrorism events take priority over all other external cause codes except child and adult abuse.
  - External cause codes for cataclysmic events take priority over all other external cause codes except child and adult abuse, and terrorism.
  - External cause codes for transport accidents take priority over all other external cause codes except cataclysmic events, and child and adult abuse, and terrorism.
  - The first listed external cause code must correspond to the cause of the most serious diagnosis due to an assault, accident or self-harm, following the order of hierarchy listed above.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. Nursing Notes/Flow Sheet
4. History and Physical
5. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 9101    | 1     | E-Code is not a valid ICD-10-CM code (ICD-10-CM only)                               |
| 9102    | 3     | Additional External Cause Code ICD-10 must not be equal to Primary External         |
| 9103    | 2     | Element cannot be blank   |
| 9104    | 1     | E-Code is not a valid ICD-10-CA code (ICD-10-CA only)                               |
| 9105    | 2     | ICD-10-CM T74 and T76 codes cannot be submitted as Additional External Cause Codes  |
| 9106    | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any value |
| 9140    | 1     | Multiple Entry Max exceeded   |

## INCIDENT LOCATION ZIP/POSTAL CODE

### DESCRIPTION

The ZIP/postal code of the incident location.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Can be stored as a 5 or 9-digit code (XXXXX-XXXX) for US and Canada or can be stored in the postal code format of the applicable country.
- If **Incident Location ZIP/Postal Code** is reported, report **Incident Country**.
- If “Not Known/Not Recorded,” report **Incident Country**, **Incident State** (US Only), **Incident County** (US Only) and **Incident City** (US Only).
- May require adherence to HIPAA regulations.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 2001    | 1     | Invalid value                      |
| 2002    | 2     | Element cannot be blank            |
| 2006    | 2     | Element cannot be “Not Applicable” |
| 2040    | 1     | Single entry max exceeded          |

## INCIDENT COUNTRY

### DESCRIPTION

The country where the patient was found or to which the unit responded (or best approximation).

### ELEMENT VALUES

- Relevant value for data element (two-digit alpha country code)

### ADDITIONAL INFORMATION

- Values are two-character FIPS codes representing the country (e.g., US).
- If **Incident Country** is not US, then the null value “Not Applicable” is reported for **Incident State**, **Incident County**, and **Incident City**.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 2101    | 1     | Invalid value  |
| 2102    | 2     | Element cannot be blank  |
| 2104    | 2     | Element cannot be “Not Applicable”   |
| 2105    | 2     | Element cannot be “Not Known/Not Recorded” when <b>Incident Location ZIP/Postal Code</b> is any response other than “Not Known/Not Recorded” |
| 2140    | 1     | Single Entry Max exceeded  |

## INCIDENT STATE

### DESCRIPTION

The state, territory, or province where the patient was found or to which the unit responded (or best approximation).

### ELEMENT VALUES

- Relevant value for data element (two-digit numeric FIPS code)

### ADDITIONAL INFORMATION

- Only reported when *Incident Location ZIP/Postal Code* is “Not Known/Not Recorded” and the country is the US.
- The null value “Not Applicable” is reported if *Incident Location ZIP/Postal Code* is reported.
- The null value "Not Applicable" is reported if *Incident Country* is not the US.
- Used to calculate the FIPS code.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 2201    | 1     | Invalid value  |
| 2203    | 2     | Element cannot be blank  |
| 2204    | 2     | Element must be “Not Applicable” (Non-US hospitals)  |
| 2205    | 2     | Element must be “Not Applicable” when <i>Incident Location ZIP/Postal Code</i> is reported |
| 2240    | 1     | Single Entry Max exceeded  |

## INCIDENT COUNTY

### DESCRIPTION

The county or parish where the patient was found or to which the unit responded (or best approximation).

### ELEMENT VALUES

- Relevant value for data element (three-digit numeric FIPS code)

### ADDITIONAL INFORMATION

- Only reported when *Incident Location ZIP/Postal Code* is “Not Known/Not Recorded” and country is the US.
- The null value “Not Applicable” is reported if *Incident Location ZIP/Postal Code* is reported.
- The null value "Not Applicable" is reported if *Incident Country* is not the US.
- Used to calculate the FIPS code.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 2301    | 1     | Invalid value (US only)  |
| 2303    | 2     | Element cannot be blank  |
| 2304    | 2     | Element must be “Not Applicable” (Non-US hospitals)  |
| 2305    | 2     | Element must be “Not Applicable” when <i>Incident Location ZIP/Postal Code</i> is reported |
| 2340    | 1     | Single Entry Max exceeded  |

## INCIDENT CITY

### DESCRIPTION

The city or township where the patient was found or to which the unit responded.

### ELEMENT VALUES

- Relevant value for data element (five-digit numeric FIPS code)

### ADDITIONAL INFORMATION

- Only reported when *Incident Location ZIP/Postal Code* is “Not Known/Not Recorded” and country is the US.
- If incident location resides outside of formal city boundaries, report nearest city/town.
- The null value “Not Applicable” is reported if *Incident Location ZIP/Postal Code* is reported.
- The null value "Not Applicable" is reported if *Incident Country* is not the US.
- Used to calculate the FIPS code.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 2401    | 1     | Invalid value  |
| 2403    | 2     | Element cannot be blank  |
| 2404    | 2     | Element must be “Not Applicable” (Non-US hospitals)  |
| 2405    | 2     | Element must be “Not Applicable” when <i>Incident Location ZIP/Postal Code</i> is reported |
| 2440    | 1     | Single Entry Max exceeded  |

## PROTECTIVE DEVICES

### DESCRIPTION

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

### ELEMENT VALUES

- |   |   |
|---|---|
| 1. None   | 7. Helmet (e.g., bicycle, skiing, motorcycle)       |
| 2. Lap Belt   | 8. Airbag Present                                   |
| 3. Personal Floatation Device                       | 9. Protective Clothing (e.g., padded leather pants) |
| 4. Protective Non-Clothing Gear (e.g., shin guard)  | 10. Shoulder Belt                                   |
| 5. Eye Protection                                   | 11. Other   |
| 6. Child Restraint (booster seat or child car seat) |   |

### ADDITIONAL INFORMATION

- Report all that apply.
- Evidence of the use of safety equipment may be reported or observed.
- If *Element Value* "6. Child Restraint" is reported, report ***Child Specific Restraint***.
- If *Element Value* "8. Airbag" is reported, report ***Airbag Deployment***.
- Lap Belt should be reported to include those patients that are restrained but not further specified.
- If the documentation indicates "3-point-restraint," report *Element Values* "2. Lap Belt" and "10. Shoulder Belt."
- If documented that a "Child Restraint (booster seat or child/infant car seat)" was used or worn, but not properly fastened, either on the child or in the car, report *Element Value* "1. None."

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. Nursing Notes/Flow Sheet
4. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 2501    | 1     | Value is not a valid menu option  |
| 2502    | 2     | Element cannot be blank   |
| 2507    | 2     | Element cannot be "Not Applicable"  |
| 2508    | 2     | Element cannot be "Not Known/Not Recorded" or <i>Element Value</i> "1. None" along with <i>Element Values</i> 2, 3, 4, 5, 6, 7, 8, 9, 10, and/or 11 |
| 2550    | 1     | Multiple Entry Max exceeded   |



## CHILD SPECIFIC RESTRAINT

### DESCRIPTION

Protective child restraint devices used by patient at the time of injury.

### ELEMENT VALUES

1. Child Car Seat
2. Infant Car Seat
3. Child Booster Seat

### ADDITIONAL INFORMATION

- Evidence of the use of a child restraint may be reported or observed.
- Only reported when **Protective Devices** include “6. Child Restraint (booster seat or child car seat).”
- The null value “Not Applicable” is reported if *Element Value* “6. Child Restraint” is NOT reported for **Protective Devices**.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. Nursing Notes/Flow Sheet
4. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 2601    | 1     | Value is not a valid menu option  |
| 2603    | 2     | Element cannot be blank   |
| 2604    | 2     | Element cannot be “Not Applicable” when <b>Protective Devices</b> is “6. Child Restraint” |
| 2640    | 1     | Single Entry Max exceeded   |

## AIRBAG DEPLOYMENT

### DESCRIPTION

Indication of airbag deployment during a motor vehicle crash.

### ELEMENT VALUES

1. Airbag Not Deployed
2. Airbag Deployed Front
3. Airbag Deployed Side
4. Airbag Deployed Other (knee, airbelt, curtain, etc.)

### ADDITIONAL INFORMATION

- Report all that apply.
- Evidence of airbag deployment may be reported or observed.
- Only report when *Protective Devices* include "8. Airbag Present."
- Report *Element Value* "2. Airbag Deployed Front" for patients with documented airbag deployments but are not further specified.
- Report the null value "Not Applicable" if *Element Value* "8. Airbag Present" is NOT reported for *Protective Devices*.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. Nursing Notes/Flow Sheet
4. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 2701    | 1     | Value is not a valid menu option  |
| 2703    | 2     | Element cannot be blank   |
| 2704    | 2     | Element cannot be "Not Applicable" when <i>Protective Devices</i> is "8. Airbag Present"  |
| 2705    | 2     | Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other value |
| 2750    | 1     | Multiple Entry Max exceeded   |

## PRE-HOSPITAL INFORMATION

## TRANSPORT MODE

### DESCRIPTION

The mode of transport delivering the patient to your hospital.

### ELEMENT VALUES

- |                         |                                   |
|-------------------------|-----------------------------------|
| 1. Ground Ambulance     | 4. Private/Public Vehicle/Walk-in |
| 2. Helicopter Ambulance | 5. Police                         |
| 3. Fixed-wing Ambulance | 6. Other                          |

### ADDITIONAL INFORMATION

None

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 3401    | 1     | Value is not a valid menu option   |
| 3402    | 2     | Element cannot be blank            |
| 3404    | 2     | Element cannot be "Not Applicable" |
| 3440    | 1     | Single Entry Max exceeded          |

## OTHER TRANSPORT MODE

### DESCRIPTION

All other modes of transport used during the patient care event (prior to arrival at your hospital), except the mode delivering the patient to your hospital.

### ELEMENT VALUES

- |                         |                                   |
|-------------------------|-----------------------------------|
| 1. Ground Ambulance     | 4. Private/Public Vehicle/Walk-in |
| 2. Helicopter Ambulance | 5. Police                         |
| 3. Fixed-wing Ambulance | 6. Other                          |

### ADDITIONAL INFORMATION

- Report all that apply (maximum of 5).
- Report *Element Value* “6. Other” for unspecified modes of transport.
- The null value “Not Applicable” is reported to indicate that the patient had a single mode of transport.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 3501    | 1     | Value is not a valid menu option  |
| 3502    | 2     | Element cannot be blank   |
| 3503    | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value |
| 3550    | 1     | Multiple Entry Max exceeded   |

## EMS PATIENT CARE REPORT UNIVERSALLY UNIQUE IDENTIFIER (UUID)

### DESCRIPTION

The universally unique identifier (UUID) of the patient care report (PCR) of each emergency service (EMS) unit treating the patient from the time of injury to arrival at your ED/hospital.

### ELEMENT VALUES

- Relevant value for data element
- Must be represented in canonical form, matching the following regular expression:  
[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[1-5][a-fA-F0-9]{3}-[89abAB][a-fA-F0-9]{3}-[a-fA-F0-9]{12}

### ADDITIONAL INFORMATION

- Report all that apply (maximum 20).
- A sample UUID is: e48cd734-01cc-4da4-ae6a-915b0b1290f6
- Automated abstraction technology provided by registry product providers/vendors must be used for this data element. In the absence of automated technology, report the null value "Not Known/Not Recorded."
- Consistent with NEMSIS v3.5.0.
- The null value "Not Known/Not Recorded" must be reported if the UUID is not documented on the EMS Run Report. The UUID will not be documented on EMS Run Reports in NEMSIS versions lower than 3.5.0. In collaboration with NEMSIS, the ACS will communicate when NEMSIS 3.5.0 is widely implemented.
- The null value "Not Applicable" must be reported if the patient was never transported via EMS prior to arrival at your hospital.
- Assigned by any applicable transporting EMS agency in accordance with the IETF RFC 4122 standard.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 90000   | 1     | Invalid value   |
| 90001   | 2     | Element cannot be blank   |
| 90002   | 2     | Element cannot be "Not Known/Not Recorded" along with any other value |
| 9940    | 1     | Multiple Entry Max exceeded   |

## INTER-FACILITY TRANSFER

### DESCRIPTION

Was the patient transferred to your facility from another acute care facility?

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Patients transferred from a private doctor's office or stand-alone ambulatory surgery center are not inter-facility transfers.
- Outlying facilities purporting to provide emergency care services or utilized to stabilize a patient are considered acute care facilities.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Triage/Trauma Flow Sheet
3. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 4401    | 2     | Element cannot be blank            |
| 4402    | 1     | Value is not a valid menu option   |
| 4405    | 2     | Element cannot be "Not Applicable" |
| 4440    | 1     | Single Entry Max exceeded          |

## PRE-HOSPITAL CARDIAC ARREST

### DESCRIPTION

Indication of whether the patient experienced cardiac arrest prior to ED/hospital arrival.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- A patient who experienced a sudden cessation of cardiac activity. The patient was unresponsive with no normal breathing and no signs of circulation.
- The event must have occurred outside of the index hospital.
- Pre-hospital cardiac arrest could occur at a transferring institution.
- Any component of basic and/or advanced cardiac life support must have been initiated.

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report
2. Nursing Notes/Flow Sheet
3. History and Physical
4. Transfer Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 9701    | 1     | Value is not a valid menu option   |
| 9702    | 2     | Element cannot be blank            |
| 9703    | 2     | Element cannot be "Not Applicable" |
| 9740    | 1     | Single Entry Max exceeded          |



## EMERGENCY DEPARTMENT INFORMATION

## HIGHEST ACTIVATION

### DESCRIPTION

Patient received the highest level of trauma activation at your hospital.

#### INCLUDE:

- Patients who received the highest level of trauma activation initiated by emergency medical services (EMS) or by emergency department (ED) personnel at your hospital.
- Patients who received the highest level of trauma activation initiated by EMS or by ED personnel at your hospital and were downgraded after arrival to your center.
- Patients who received a lower level of trauma activation initiated by EMS or by ED personnel at your hospital and were upgraded to the highest level of trauma activation.

#### EXCLUDE:

- Patients who received the highest level of trauma activation after ED discharge.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Highest level of activation is defined by your hospital's criteria.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma Flow Sheet
2. ED Record
3. History and Physical
4. Physician Notes/Flow Sheet
5. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                          |
|---------|-------|----------------------------------|
| 14201   | 1     | Value is not a valid menu option |
| 14202   | 2     | Element cannot be blank          |
| 14240   | 1     | Single Entry Max exceeded        |

## TRAUMA SURGEON ARRIVAL DATE

### DESCRIPTION

The date the first trauma surgeon arrived at the patient's bedside.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Collected as YYYY-MM-DD.
- Limit reporting to the 24 hours after ED/hospital arrival.
- The trauma surgeon leads the trauma team and is responsible for the overall care of trauma patient, including coordinating care with other specialties and maintaining continuity of care.
- The null value "Not Applicable" is reported for those patients who were not evaluated by a trauma surgeon within 24 hours of ED/hospital arrival.
- The null value "Not Applicable" is reported if *Element Value* "2. No" is reported for *Highest Activation*.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma Flow Sheet
2. History and Physical
3. Physician Notes/Flow Sheet
4. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 14301   | 1     | Date is not valid  |
| 14302   | 1     | Date out of range  |
| 14303   | 2     | Element cannot be blank  |
| 14304   | 3     | <b><i>Trauma Surgeon Arrival Date</i></b> is earlier than <b><i>Injury Incident Date</i></b> |
| 14340   | 1     | Single Entry Max exceeded  |

## TRAUMA SURGEON ARRIVAL TIME

### DESCRIPTION

The time the first trauma surgeon arrived at the patient's bedside.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Collected as HHMM military time.
- Limit reporting to the 24 hours after ED/hospital arrival.
- The trauma surgeon leads the trauma team and is responsible for the overall care of trauma patient, including coordinating care with other specialties and maintaining continuity of care.
- The null value "Not Applicable" is reported for those patients who were not evaluated by a trauma surgeon within 24 hours of ED/hospital arrival.
- The null value "Not Applicable" is reported if *Element Value* "2. No" is reported for *Highest Activation*.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma Flow Sheet
2. History and Physical
3. Physician Notes/Flow Sheet
4. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 14401   | 1     | Time is not valid   |
| 14402   | 1     | Time out of range   |
| 14403   | 2     | Element cannot be blank   |
| 14404   | 3     | <b><i>Trauma Surgeon Arrival Time</i></b> is earlier than <i>Injury Incident Time</i> |
| 14440   | 1     | Single Entry Max exceeded   |

## ED/HOSPITAL ARRIVAL DATE

### DESCRIPTION

The date the patient arrived at the ED/hospital.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- If the patient was brought to the ED, report the date the patient arrived at the ED. If the patient was directly admitted to the hospital, report the date the patient was admitted to the hospital.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma Flow Sheet
2. ED Record
3. Face Sheet
4. Billing Sheet
5. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 4501    | 1     | Date is not valid  |
| 4502    | 1     | Date out of range  |
| 4503    | 2     | Element cannot be blank  |
| 4505    | 2     | Element cannot be "Not Known/Not Recorded"   |
| 4511    | 3     | <b>ED/Hospital Arrival Date</b> is earlier than <b>Date of Birth</b>                       |
| 4513    | 3     | <b>ED/Hospital Arrival Date</b> occurs more than 14 days after <b>Injury Incident Date</b> |
| 4515    | 2     | Element cannot be "Not Applicable"   |
| 4516    | 3     | <b>ED/Hospital Arrival Date</b> is earlier than <b>Injury Incident Date</b>                |
| 4540    | 1     | Single Entry Max exceeded  |

## ED/HOSPITAL ARRIVAL TIME

### DESCRIPTION

The time the patient arrived at the ED/hospital.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- If the patient was brought to the ED, report the time the patient arrived at the ED. If the patient was directly admitted to the hospital, report the time the patient was admitted to the hospital.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma Flow Sheet
2. ED Record
3. Face Sheet
4. Billing Sheet
5. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 4601    | 1     | Time is not valid   |
| 4602    | 1     | Time out of range   |
| 4603    | 2     | Element cannot be blank   |
| 4609    | 2     | Element cannot be "Not Applicable"  |
| 4610    | 3     | <b>ED/Hospital Arrival Time</b> is earlier than <i>Injury Incident Time</i> |
| 4640    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL SYSTOLIC BLOOD PRESSURE

### DESCRIPTION

First recorded systolic blood pressure in the ED/hospital within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Please note the first recorded hospital vitals do not need to be from the same assessment.
- Measurement reported must be without the assistance of CPR or any type of mechanical chest compression device. For those patients who received CPR or any type of mechanical chest compressions, report the value obtained while compressions were paused.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes
4. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 4701    | 1     | Invalid value  |
| 4702    | 2     | Element cannot be blank                                    |
| 4704    | 3     | The value is above 220                                     |
| 4705    | 2     | Element cannot be "Not Applicable"                         |
| 4706    | 2     | The value submitted falls outside the valid range of 0-380 |
| 4707    | 3     | The value is below 30                                      |
| 4740    | 1     | Single Entry Max exceeded                                  |

## INITIAL ED/HOSPITAL PULSE RATE

### DESCRIPTION

First recorded pulse in the ED/hospital (palpated or auscultated) within 30 minutes of ED/hospital arrival (expressed as a number per minute).

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Please note the first recorded hospital vitals do not need to be from the same assessment.
- Measurement reported must be without the assistance of CPR or any type of mechanical chest compression device. For those patients who received CPR or any type of mechanical chest compressions, report the value obtained while compressions were paused.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 4801    | 1     | Invalid value  |
| 4802    | 2     | Element cannot be blank                                    |
| 4804    | 3     | The value is above 220                                     |
| 4805    | 2     | Element cannot be "Not Applicable"                         |
| 4806    | 2     | The value submitted falls outside the valid range of 0-300 |
| 4807    | 3     | The value is below 30                                      |
| 4840    | 1     | Single Entry Max exceeded                                  |



## INITIAL ED/HOSPITAL TEMPERATURE

### DESCRIPTION

First recorded temperature (in degrees Celsius [centigrade]) in the ED/hospital within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Please note the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 4901    | 1     | Invalid value  |
| 4902    | 2     | Element cannot be blank  |
| 4903    | 3     | The value is above 42.0  |
| 4904    | 2     | Element cannot be "Not Applicable"                             |
| 4905    | 2     | The value submitted falls outside the valid range of 10.0-45.0 |
| 4906    | 3     | The value is below 20.0  |
| 4940    | 1     | Single Entry Max exceeded                                      |

## INITIAL ED/HOSPITAL RESPIRATORY RATE

### DESCRIPTION

First recorded respiratory rate in the ED/hospital within 30 minutes of ED/hospital arrival (expressed as a number per minute).

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- If reported, report *Initial ED/Hospital Respiratory Assistance*.
- Please note the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Respiratory Therapy Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 5001    | 1     | Invalid value  |
| 5002    | 2     | Element cannot be blank                                    |
| 5005    | 2     | The value submitted falls outside the valid range of 0-100 |
| 5006    | 2     | Element cannot be "Not Applicable"                         |
| 5007    | 3     | The value is below 5                                       |
| 5008    | 3     | The value is above 75                                      |
| 5040    | 1     | Single Entry Max exceeded                                  |

## INITIAL ED/HOSPITAL RESPIRATORY ASSISTANCE

### DESCRIPTION

Determination of respiratory assistance associated with the *Initial ED/Hospital Respiratory Rate* within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

1. Unassisted Respiratory Rate
2. Assisted Respiratory Rate

### ADDITIONAL INFORMATION

- Only reported if *Initial ED/Hospital Respiratory Rate* is reported.
- Respiratory assistance is defined as mechanical and/or external support of respiration.
- The null value “Not Applicable” is reported if *Initial ED/Hospital Respiratory Rate* is “Not Known/Not Recorded.”
- Please note the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Respiratory Therapy Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 5101    | 1     | Value is not a valid menu option  |
| 5102    | 2     | Element cannot be blank   |
| 5103    | 2     | Element must be “Not Applicable” when <i>Initial ED/Hospital Respiratory Rate</i> is “Not Known/Not Recorded” |
| 5140    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL OXYGEN SATURATION

### DESCRIPTION

First recorded oxygen saturation in the ED/hospital within 30 minutes of ED/hospital arrival (expressed as a percentage).

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- If reported, report *Initial ED/Hospital Supplemental Oxygen*.
- Please note the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Respiratory Therapy Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 5201    | 1     | Invalid value  |
| 5202    | 2     | Element cannot be blank                                    |
| 5205    | 2     | Element cannot be "Not Applicable"                         |
| 5206    | 2     | The value submitted falls outside the valid range of 0-100 |
| 5207    | 3     | The value is below 40                                      |
| 5240    | 1     | Single Entry Max exceeded                                  |

## INITIAL ED/HOSPITAL SUPPLEMENTAL OXYGEN

### DESCRIPTION

Determination of the presence of supplemental oxygen during assessment of *Initial ED/Hospital Oxygen Saturation* level within 30 minutes or less of ED/hospital arrival.

### ELEMENT VALUES

1. No Supplemental Oxygen
2. Supplemental Oxygen

### ADDITIONAL INFORMATION

- The null value “Not Applicable” is reported if *Initial ED/Hospital Oxygen Saturation* is “Not Known/Not Recorded.”
- Please note the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 5301    | 1     | Value is not a valid menu option   |
| 5303    | 2     | Element cannot be blank  |
| 5304    | 2     | Element must be “Not Applicable” when <i>Initial ED/Hospital Oxygen Saturation</i> is “Not Known/Not Recorded” |
| 5340    | 1     | Single Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS-EYES

### DESCRIPTION

First recorded Glasgow Coma Scale (GCS) Eyes in the ED/hospital within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

1. No eye movement when assessed
2. Opens eyes in response to painful stimulation
3. Opens eyes in response to verbal stimulation
4. Opens eyes spontaneously

### ADDITIONAL INFORMATION

- If a patient does not have a numeric GCS documented, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS, the appropriate numeric score may be reported. (e.g. the chart indicates “patient’s pupils are PERRL,” a GCS Eyes of 4 may be reported, IF there is no other contradicting documentation).
- The null value “Not Known/Not Recorded” is reported if *Initial ED/Hospital GCS-40 Eyes* is documented.
- The null value “Not Known/Not Recorded” is reported if the patient’s *Initial ED/Hospital GCS - Eyes* was not measured within 30 minutes of ED/hospital arrival.
- Please note that the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 5401    | 1     | Value is not a valid menu option  |
| 5403    | 2     | Element cannot be blank   |
| 5404    | 2     | Element cannot be “Not Applicable”  |
| 5405    | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS-40 Eyes</i> is reported. |
| 5440    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL GCS-VERBAL

### DESCRIPTION

First recorded Glasgow Coma Scale (GCS) Verbal within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

#### Pediatric (≤2 years):

- |                                       |  |
|---------------------------------------|--|
| 1. No vocal response                  | 4. Cries but is consolable, inappropriate interactions   |
| 2. Inconsolable, agitated             |  |
| 3. Inconsistently consolable, moaning | 5. Smiles, oriented to sounds, follow objects, interacts |

#### Adult:

- |                            |             |
|----------------------------|-------------|
| 1. No verbal response      | 4. Confused |
| 2. Incomprehensible sounds | 5. Oriented |
| 3. Inappropriate words     |             |

### ADDITIONAL INFORMATION

- If the patient is intubated, the GCS Verbal is equal to 1.
- If a patient does not have a numeric GCS recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS, the appropriate numeric score may be reported. (e.g. the chart indicates: “patient is oriented to person place and time,” a GCS Verbal of 5 may be reported, IF there is no other contradicting documentation).
- The null value “Not Known/Not Recorded” is reported if **Initial ED/Hospital GCS-40 Verbal** is reported.
- The null value “Not Known/Not Recorded” is reported if the patient’s **Initial ED/Hospital GCS – Verbal** was not measured within 30 minutes of ED/hospital arrival.
- Please note that the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 5501    | 1     | Value is not a valid menu option  |
| 5503    | 2     | Element cannot be blank   |
| 5504    | 2     | Element cannot be “Not Applicable”  |
| 5505    | 2     | Element must be “Not Known/Not Recorded” when <b>Initial ED/Hospital GCS-40 Verbal</b> is reported. |
| 5540    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL GCS-MOTOR

### DESCRIPTION

First recorded Glasgow Coma Scale (GCS) Motor within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

#### Pediatric (≤2 years):

- |                      |  |
|----------------------|--|
| 1. No motor response | 4. Withdrawal from pain                |
| 2. Extension to pain | 5. Localizing pain                     |
| 3. Flexion to pain   | 6. Appropriate response to stimulation |

#### Adult:

- |                      |                         |
|----------------------|-------------------------|
| 1. No motor response | 4. Withdrawal from pain |
| 2. Extension to pain | 5. Localizing pain      |
| 3. Flexion to pain   | 6. Obeys commands       |

### ADDITIONAL INFORMATION

- If a patient does not have a numeric GCS recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS, the appropriate numeric score may be reported. (e.g. the chart indicates: “patient withdraws from a painful stimulus,” a GCS Motor of 4 may be reported, IF there is no other contradicting documentation).
- The null value “Not Known/Not Recorded” is reported if **Initial ED/Hospital GCS-40 Motor** is reported.
- The null value “Not Known/Not Recorded” is reported if the patient’s **Initial ED/Hospital GCS– Motor** was not measured within 30 minutes of ED/hospital arrival.
- Please note that the first record ED/hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 5601    | 1     | Value is not a valid menu option  |
| 5603    | 2     | Element cannot be blank   |
| 5604    | 2     | Element cannot be “Not Applicable”  |
| 5605    | 2     | Element must be “Not Known/Not Recorded” when <b>Initial ED/Hospital GCS-40 Motor</b> is reported |
| 5640    | 1     | Single Entry Max exceeded   |



## INITIAL ED/HOSPITAL GCS-TOTAL

### DESCRIPTION

First recorded Glasgow Coma Scale (GCS) Total Score within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- If a patient does not have a numeric GCS score recorded, but there is documentation related to their level of consciousness such as “AAOx3,” “awake alert and oriented,” or “patient with normal mental status,” report this as GCS score of 15 IF there is no other contradicting documentation.
- The null value “Not Known/Not Recorded” is reported if Initial ED/hospital GCS-40 is reported.
- The null value “Not Known/Not Recorded” is reported if *Initial ED/Hospital GCS – Eyes*, *Initial ED/Hospital GCS – Motor*, *Initial ED/Hospital GCS – Verbal* were not measured within 30 minutes of ED/hospital arrival.
- Please note that the first record ED/hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 5701    | 1     | GCS Total is outside the valid range of 3 - 15  |
| 5703    | 3     | <i>Initial ED/Hospital GCS - Total</i> does not equal the sum of <i>Initial ED/Hospital GCS - Eyes</i> , <i>Initial ED/Hospital GCS - Verbal</i> , and <i>Initial ED/Hospital GCS - Motor</i> , unless any of these values are “Not Known/Not Recorded” |
| 5705    | 2     | Element cannot be blank   |
| 5706    | 2     | Element cannot be “Not Applicable”  |
| 5707    | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS 40 – Eyes</i> , <i>Initial ED/Hospital GCS 40 – Verbal</i> , or <i>Initial ED/Hospital GCS 40 – Motor</i> are reported.  |
| 5740    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL GCS-ASSESSMENT QUALIFIERS

### DESCRIPTION

Documentation of factors potentially affecting the first assessment of GCS within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

1. Patient Chemically Sedated or Paralyzed
2. Obstruction to the Patient's Eye
3. Patient Intubated
4. Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to the eye

### ADDITIONAL INFORMATION

- Report all that apply.
- Identifies treatments given to the patient that may affect the first GCS assessment. This element does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.).
- *Element Value* "1. Patient Chemically Sedated or Paralyzed" is reported if an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible.
- Neuromuscular blockade is typically induced following the administration of agent like succinylcholine, mivacurium, rocuronium, (cis)atracurium, vecuronium, or pancuronium. While these are the most common agents, please review what might be typically used in your center so it can be identified in the medical record.
- Each of these agents has a slightly different duration of action, so their effect on the GCS depends on when they were given. For example, succinylcholine's effects last for only 5-10 minutes.
- Please note that the first recorded hospital vitals do not need to be from the same assessment.
- The null value "Not Known/Not Recorded" is reported if *Initial ED/Hospital GCS-40* is reported.
- The null value "Not Known/Not Recorded" is reported if the *Initial ED/Hospital GCS Assessment Qualifiers* are not documented within 30 minutes of ED/hospital arrival.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 5801    | 1     | Value is not a valid menu option   |
| 5802    | 2     | Element cannot be blank  |
| 5803    | 2     | Element cannot be "Not Applicable"   |
| 5804    | 2     | Element must be "Not Known/Not Recorded" when <i>Initial ED/Hospital GCS-40 Eyes</i> , <i>Initial ED/Hospital GCS-40 Verbal</i> , or <i>Initial ED/Hospital GCS-40 Motor</i> are reported. |
| 5805    | 2     | Element cannot be "Not Known/Not Recorded" along with any other value  |
| 5850    | 1     | Multiple Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS-40 EYES

### DESCRIPTION

First recorded Glasgow Coma Scale 40 (GCS-40) Eyes score in the ED/hospital within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

#### Pediatric < 5 years:

- |                 |                |
|-----------------|----------------|
| 0. Not Testable |                |
| 1. None         | 3. To Sound    |
| 2. To Pain      | 4. Spontaneous |

#### Adult:

- |                 |                |
|-----------------|----------------|
| 0. Not Testable |                |
| 1. None         | 3. To Sound    |
| 2. To Pressure  | 4. Spontaneous |

### ADDITIONAL INFORMATION

- If a patient does not have a numeric GCS-40 score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS-40, the appropriate numeric score may be reported. (e.g. the chart indicates: “patient’s eyes open spontaneously,” a GCS-40 Eyes of 4 may be reported, IF there is no other contradicting documentation).
- Report *Element Value* “0. Not Testable” if unable to assess (e.g. swelling to eye(s)).
- The null value “Not Known/Not Recorded” is reported if **Initial ED/Hospital GCS – Eyes** is reported.
- The null value “Not Known/Not Recorded” is reported if the patient’s **Initial ED/Hospital GCS-40 Eyes** was not measured within 30 minutes or less of ED/hospital arrival.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 15301   | 1     | Value is not a valid menu option   |
| 15303   | 2     | Element cannot be blank  |
| 15304   | 2     | Element cannot be “Not Applicable”   |
| 15305   | 2     | Element must be “Not Known/Not Recorded” when <b>Initial ED/Hospital GCS – Eyes</b> is reported. |
| 15340   | 1     | Single Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS-40 VERBAL

### DESCRIPTION

First recorded Glasgow Coma Scale 40 (GCS-40) Verbal score within 30 minutes of ED/hospital arrival.

### ELEMENT VALUES

#### Pediatric < 5 years:

- |                 |                   |
|-----------------|-------------------|
| 0. Not Testable | 3. Vocal Sounds   |
| 1. None         | 4. Words          |
| 2. Cries        | 5. Talks Normally |

#### Adult:

- |                 |             |
|-----------------|-------------|
| 0. Not Testable | 3. Words    |
| 1. None         | 4. Confused |
| 2. Sounds       | 5. Oriented |

### ADDITIONAL INFORMATION

- If a patient does not have a numeric GCS-40 recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS-40 scale, the appropriate numeric score may be reported. (e.g. the chart indicates: “patient correctly gives name, place and date” a Verbal GCS-40 of 5 may be reported, IF there is no other contradicting documentation).
- Report *Element Value* “0. Not Testable” if unable to assess (e.g. patient is intubated).
- The null value “Not Known/Not Recorded” is reported if **Initial ED/Hospital GCS – Verbal** is reported.
- The null value “Not Known/Not Recorded” is reported if the patient’s **Initial ED/Hospital GCS-40 Verbal** was not measured within 30 minutes or less of ED/hospital arrival.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 15401   | 1     | Value is not a valid menu option   |
| 15403   | 2     | Element cannot be blank  |
| 15404   | 2     | Element cannot be “Not Applicable”   |
| 15405   | 2     | Element must be “Not Known/Not Recorded” when <b>Initial ED/Hospital GCS – Verbal</b> is reported. |
| 15440   | 1     | Single Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS-40 MOTOR

### DESCRIPTION

First recorded Glasgow Coma Scale 40 (GCS-40) Motor within 30 minutes or less of ED/hospital arrival.

### ELEMENT VALUES

#### Pediatric < 5 years:

- |                      |                    |
|----------------------|--------------------|
| 0. Not Testable      | 3. Flexion to Pain |
| 1. None              | 4. Localizes Pain  |
| 2. Extension to Pain | 5. Obeys Commands  |

#### Adult:

- |                     |                   |
|---------------------|-------------------|
| 0. Not Testable     | 4. Normal Flexion |
| 1. None             | 5. Localizing     |
| 2. Extension        | 6. Obeys Commands |
| 3. Abnormal Flexion |                   |

### ADDITIONAL INFORMATION

- If a patient does not have a numeric GCS-40 recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS-40, the appropriate numeric score may be reported. (e.g. the chart indicates: “patient opened mouth and stuck out tongue when asked” for adult patient’s, a GCS-40 Motor of 6 may be reported, IF there is no other contradicting documentation).
- Report *Element Value* “0. Not Testable” if unable to assess (e.g. neuromuscular blockade).
- The null value “Not Known/Not Recorded” is reported if **Initial ED/Hospital GCS – Motor** is reported.
- The null value “Not Known/Not Recorded” is reported if the patient’s **Initial ED/Hospital GCS-40 Motor** was not measured within 30 minutes or less of ED/hospital arrival.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 15501   | 1     | Value is not a valid menu option  |
| 15503   | 2     | Element cannot be blank   |
| 15504   | 2     | Element cannot be “Not Applicable”  |
| 15505   | 2     | Element must be “Not Known/Not Recorded” when <b>Initial ED/Hospital GCS – Motor</b> is reported. |
| 15506   | 2     | If patient age is less than 5, <i>Element Value</i> 6 is not a valid menu option                  |
| 15540   | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL HEIGHT

### DESCRIPTION

First recorded height after ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported in centimeters.
- May be based on family or self-report.
- Report the null value “Not Known/Not Recorded” if the patient’s **Initial ED/Hospital Height** was not recorded prior to discharge.
- Please note the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Pharmacy Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 8501    | 1     | Invalid value   |
| 8502    | 2     | Element cannot be blank                                     |
| 8503    | 3     | The value is above 215                                      |
| 8504    | 2     | Element cannot be “Not Applicable”                          |
| 8505    | 2     | The value submitted falls outside the valid range of 30-275 |
| 8506    | 3     | The value is below 50                                       |
| 8540    | 1     | Single Entry Max exceeded                                   |

## INITIAL ED/HOSPITAL WEIGHT

### DESCRIPTION

First recorded weight within 24 hours of ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Report in kilograms.
- May be based on family or self-report.
- Report the null value “Not Known/Not Recorded” if the patient’s **Initial ED/Hospital Weight** was not measured within 24 hours of ED/hospital arrival.
- Please note the first recorded hospital vitals do not need to be from the same assessment.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Pharmacy Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 8601    | 1     | Invalid value   |
| 8602    | 2     | Element cannot be blank                                 |
| 8603    | 3     | The value is above 200                                  |
| 8604    | 2     | Element cannot be “Not Applicable”                      |
| 8605    | 2     | The value submitted falls outside the valid range 1-650 |
| 8606    | 3     | The value is below 3                                    |
| 8640    | 1     | Single Entry Max exceeded                               |

## DRUG SCREEN

### DESCRIPTION

First recorded positive drug screen results within 24 hours after first hospital encounter.

### ELEMENT VALUES

- |                           |                                    |
|---------------------------|------------------------------------|
| 1. AMP (Amphetamine)      | 9. OXY (Oxycodone)                 |
| 2. BAR (Barbiturate)      | 10. PCP (Phencyclidine)            |
| 3. BZO (Benzodiazepines)  | 11. TCA (Tricyclic Antidepressant) |
| 4. COC (Cocaine)          | 12. THC (Cannabinoid)              |
| 5. mAMP (Methamphetamine) | 13. Other                          |
| 6. MDMA (Ecstasy)         | 14. None                           |
| 7. MTD (Methadone)        | 15. Not Tested                     |
| 8. OPI (Opioid)           |                                    |

### ADDITIONAL INFORMATION

- Report all that apply.
- Report positive drug screen results within 24 hours after the patient's first hospital encounter, at either your facility or the transferring facility.
- Report *Element Value* "14. None" for patients whose only positive results are due to drugs administered at any facility (or setting) treating this patient event or for patients who were tested and had no positive results.
- If multiple drugs are detected, only report drugs that were NOT administered at any facility (or setting) treating this patient event.

### DATA SOURCE HIERARCHY GUIDE

1. Lab Results
2. Transferring Facility Records

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 6011    | 1     | Value is not a valid menu option   |
| 6012    | 2     | Element cannot be blank  |
| 6013    | 2     | Element cannot be "Not Applicable"   |
| 6014    | 2     | Element cannot be "Not Known/Not Recorded," <i>Element Value</i> "14. None," or "15. Not Tested" along with <i>Element Values</i> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and/or 13 |
| 6050    | 1     | Multiple Entry Max exceeded  |



## ALCOHOL SCREEN

### DESCRIPTION

A blood alcohol concentration (BAC) test was performed on the patient within 24 hours after first hospital encounter.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Alcohol screen may be administered at any facility, unit, or setting treating this patient event.

### DATA SOURCE HIERARCHY GUIDE

1. Lab Results
2. Transferring Facility Records

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 5911    | 1     | Value is not a valid menu option   |
| 5912    | 2     | Element cannot be blank            |
| 5913    | 2     | Element cannot be "Not Applicable" |
| 5940    | 1     | Single Entry Max exceeded          |

## ALCOHOL SCREEN RESULTS

### DESCRIPTION

First recorded blood alcohol concentration (BAC) results within 24 hours after first hospital encounter.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as X.XX grams per deciliter (g/dl).
- Report BAC results within 24 hours after first hospital encounter, at either your facility or the transferring facility.
- Report the null value “Not Applicable” for those patients who were not tested.

### DATA SOURCE HIERARCHY GUIDE

1. Lab Results
2. Transferring Facility Records

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 5931    | 1     | Invalid value  |
| 5932    | 2     | Element cannot be blank  |
| 5933    | 2     | Element must be and can only be “Not Applicable” when <i>Alcohol Screen</i> is Element Value “2. No” |
| 5935    | 2     | The value submitted falls outside the valid range of 0.0-1.5   |
| 5936    | 3     | The value is above 0.4   |
| 5934    | 1     | Single Entry Max exceeded  |

## ED DISCHARGE DISPOSITION

### DESCRIPTION

The disposition unit the order was written for the patient to be discharged from the ED.

### ELEMENT VALUES

- |  |  |
|--|--|
| 1. Floor bed (general admission, non-specialty unit bed) | 6. Other (jail, institutional care, mental health, etc.) |
| 2. Observation unit                                      | 7. Operating Room  |
| 3. Telemetry/step-down unit (less acuity than ICU)       | 8. Intensive Care Unit (ICU)                             |
| 4. Home with services                                    | 9. Home without services                                 |
| 5. Deceased/expired                                      | 10. Left against medical advice                          |
|  | 11. Transferred to another hospital                      |

### ADDITIONAL INFORMATION

- If multiple orders were written, report the final disposition order.
- The null value "Not Applicable" is reported if the patient was directly admitted to the hospital.
- If **ED Discharge Disposition** is 4, 5, 6, 9, 10, or 11, then **Hospital Discharge Date**, **Hospital Discharge Time**, and **Hospital Discharge Disposition** must be "Not Applicable."

### DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. Discharge Summary
3. Nursing Notes/Flow Sheet
4. Case Management/Social Services Notes
5. ED Record
6. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                                    |
|---------|-------|--|
| 6101    | 1     | Value is not a valid menu option           |
| 6102    | 2     | Element cannot be blank                    |
| 6104    | 2     | Element cannot be "Not Known/Not Recorded" |
| 6140    | 1     | Single Entry Max exceeded                  |

## ED DISCHARGE DATE

### DESCRIPTION

The date the order was written for the patient to be discharged from the ED.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- The null value "Not Applicable" is reported if the patient was directly admitted to the hospital.
- If **ED Discharge Disposition** is *Element Value* "5. Deceased/Expired," then **ED Discharge Date** is the date of death as indicated on the patient's death certificate.

### DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. ED Record
3. Triage/Trauma/Hospital Flow Sheet
4. Nursing Notes/Flow Sheet
5. Discharge Summary
6. Billing Sheet
7. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 6301    | 1     | Date is not valid   |
| 6302    | 1     | Date out of range   |
| 6303    | 2     | Element cannot be blank   |
| 6307    | 2     | <b>ED Discharge Date</b> is earlier than <b>ED/Hospital Arrival Date</b>  |
| 6310    | 3     | <b>ED Discharge Date</b> occurs more than 365 days after <b>ED/Hospital Arrival Date</b>  |
| 6311    | 2     | Element must be and can only be "Not Applicable" when <b>ED Discharge Disposition</b> is "Not Applicable"   |
| 6312    | 3     | <b>ED Discharge Date</b> is earlier than <b>Injury Incident Date</b>  |
| 6313    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Date</b> cannot be earlier than <b>Hospital Procedure Start Date</b>                |
| 6314    | 3     | <b>Hospital Discharge Disposition</b> is "Not Applicable" and <b>ED Discharge Date</b> is earlier than <b>Cerebral Monitor Date</b>                                   |
| 6315    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Date</b> cannot be earlier than <b>Venous Thromboembolism Prophylaxis Date</b>      |
| 6316    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Date</b> cannot be earlier than <b>Angiography Date</b>                             |
| 6317    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Date</b> cannot be earlier than <b>Surgery For Hemorrhage Control Date</b>          |
| 6318    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Date</b> cannot be earlier than <b>Withdrawal of Life Supporting Treatment Date</b> |
| 6319    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Date</b> cannot be earlier than <b>Antibiotic Therapy Date</b>                      |
| 6340    | 1     | Single Entry Max exceeded   |

## ED DISCHARGE TIME

### DESCRIPTION

The time the order was written for the patient to be discharged from the ED.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- The null value "Not Applicable" is reported if the patient was directly admitted to the hospital.
- If **ED Discharge Disposition** is *Element Value* "5. Deceased/Expired," then **ED Discharge Time** is the time of death as indicated on the patient's death certificate.

### DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. ED Record
3. Triage/Trauma/Hospital Flow Sheet
4. Nursing Notes/Flow Sheet
5. Discharge Summary
6. Billing Sheet
7. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 6401    | 1     | Time is not valid   |
| 6402    | 1     | Time out of range   |
| 6403    | 2     | Element cannot be blank   |
| 6407    | 2     | <b>ED Discharge Time</b> is earlier than <b>ED/Hospital Arrival Time</b>  |
| 6409    | 2     | Element must be and can only be "Not Applicable" when <b>ED Discharge Date</b> is "Not Applicable"  |
| 6410    | 3     | Element must be "Not Known/Not Recorded" when <b>ED Discharge Date</b> is "Not Known/Not Recorded"  |
| 6411    | 3     | <b>ED Discharge Time</b> is earlier than <b>Injury Incident Time</b>  |
| 6412    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Time</b> cannot be earlier than <b>Hospital Procedure Start Time</b>                |
| 6413    | 3     | <b>Hospital Discharge Disposition</b> is "Not Applicable" and <b>ED Discharge Time</b> is earlier than <b>Cerebral Monitor Time</b>                                   |
| 6414    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Time</b> cannot be earlier than <b>Venous Thromboembolism Prophylaxis Time</b>      |
| 6415    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Time</b> cannot be earlier than <b>Angiography Time</b>                             |
| 6416    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Time</b> cannot be earlier than <b>Surgery For Hemorrhage Control Time</b>          |
| 6417    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Time</b> cannot be earlier than <b>Withdrawal of Life Supporting Treatment Time</b> |
| 6418    | 2     | If <b>Hospital Discharge Disposition</b> is "Not Applicable" then <b>ED Discharge Time</b> cannot be earlier than <b>Antibiotic Therapy Time</b>                      |
| 6440    | 1     | Single Entry Max exceeded   |

## PRIMARY TRAUMA SERVICE TYPE

### DESCRIPTION

The primary service type responsible for the care of this patient.

### ELEMENT VALUES

1. Adult
2. Pediatric

### ADDITIONAL INFORMATION

- The primary service type responsible for trauma evaluation and care of the patient.
- This element will be used to determine which eligible Trauma Quality Programs report [adult or pediatric] the patient will appear; report age criteria will still apply.
- Adult trauma centers that do not have a separate pediatric service must report *Element Value* "1. Adult."
- Pediatric trauma centers that do not have a separate adult service must report *Element Value* "2. Pediatric."

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma Flow Sheet
2. History and Physical
3. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                          |
|---------|-------|----------------------------------|
| 22501   | 1     | Value is not a valid menu option |
| 22502   | 2     | Element cannot be blank          |
| 22540   | 1     | Single Entry Max exceeded        |

# HOSPITAL PROCEDURE INFORMATION

## ICD-10 HOSPITAL PROCEDURES

### DESCRIPTION

Operative and selected non-operative procedures conducted during hospital stay. Operative and selected non-operative procedures are those that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or complications. The list of procedures below should be used as a guide to non-operative procedures that should be provided to NTDB.

### ELEMENT VALUES

- Major and minor procedure ICD-10 PCS or ICD-10 CA procedure codes
- The maximum number of procedures that may be reported for a patient is 200

### ADDITIONAL INFORMATION

- Only report procedures performed at your institution.
- Report all procedures performed in the operating room.
- Report all procedures in the ED, ICU, ward, or radiology department that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or their complications.
- Procedures with an asterisk have the potential to be performed multiple times during one episode of hospitalization. In this case, report only the first event. If there is no asterisk, report each event even if there is more than one.
- Note that the hospital may report additional procedures.
- Report the null value "Not Applicable" if the patient did not have procedures.

#### DIAGNOSTIC AND THERAPEUTIC IMAGING

Computerized tomographic Head \*

Computerized tomographic Chest \*

Computerized tomographic Abdomen \*

Computerized tomographic Pelvis \*

Computerized tomographic C-Spine \*

Computerized tomographic T-Spine \*

Computerized tomographic L-Spine \*

Doppler ultrasound of extremities \*

Diagnostic ultrasound (includes FAST) \*

Angioembolization

Angiography

IVC filter

REBOA

Diagnostic imaging interventions on the total body

Plain radiography of whole body

Plain radiography of whole skeleton

Plain radiography of infant whole body

#### CARDIOVASCULAR

Open cardiac massage

CPR

#### CNS

Insertion of ICP monitor \*

Ventriculostomy

Cerebral oxygen monitoring \*

#### GENITOURINARY

Ureteric catheterization (i.e. Ureteric stent)

Suprapubic cystostomy

#### MUSCULOSKELETAL

Soft tissue/bony debridement \*

Closed reduction of fractures

Skeletal and halo traction

Fasciotomy



**TRANSFUSION**

Transfusion of red cells \* (only report first 24 hours after hospital arrival)

Transfusion of platelets \* (only report first 24 hours after hospital arrival)

Transfusion of plasma \* (only report first 24 hours after hospital arrival)

**GASTROINTESTINAL**

Endoscopy (includes gastroscopy, sigmoidoscopy, colonoscopy)

Gastrostomy/jejunostomy (percutaneous or endoscopic)

Percutaneous (endoscopic) gastrojejunoscopy

**RESPIRATORY**

Insertion of endotracheal tube \* (exclude intubations performed in the OR)

Continuous mechanical ventilation \*

Chest tube \*

Bronchoscopy \*

Tracheostomy

**DATA SOURCE HIERARCHY GUIDE**

1. Operative Reports
2. Procedure Notes
3. Trauma Flow Sheet
4. ED Record
5. Nursing Notes/Flow Sheet
6. Radiology Reports
7. Discharge Summary

**ASSOCIATED EDIT CHECKS**

| Rule ID | Level | Message   |
|---------|-------|---|
| 8801    | 1     | Invalid Value (ICD-10 PCS only)   |
| 8803    | 2     | Element cannot be blank   |
| 8804    | 2     | Element must not be "Not Applicable" or "Not Known/Not Recorded" along with any other value |
| 8805    | 1     | Invalid value (ICD-10-CA only)  |
| 8850    | 1     | Multiple Entry Max exceeded   |

## HOSPITAL PROCEDURES START DATE

### DESCRIPTION

The date operative and selected non-operative procedures were performed.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Procedure Notes
3. Trauma Flow Sheet
4. ED Record
5. Nursing Notes/Flow Sheet
6. Radiology Reports
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 6601    | 1     | Date is not valid   |
| 6602    | 1     | Date out of range   |
| 6606    | 3     | <b>Hospital Procedure Start Date</b> is earlier than <b>ED/Hospital Arrival Date</b>                        |
| 6609    | 2     | Element cannot be blank   |
| 6610    | 2     | Element must be and can only be “Not Applicable” when <b>ICD-10 Hospital Procedures</b> is “Not Applicable” |
| 6611    | 2     | Element must be “Not Known/Not Recorded” when <b>ICD-10 Hospital Procedures</b> is “Not Known/Not Recorded” |
| 6650    | 1     | Multiple Entry Max exceeded   |

## HOSPITAL PROCEDURE START TIME

### DESCRIPTION

The time operative and selected non-operative procedures were performed.

### ELEMENT VALUES

- Relevant values for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- Procedure start time is defined as the time the incision was made (or the procedure started).

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Anesthesia Record
3. Procedure Notes
4. Trauma Flow Sheet
5. ED Record
6. Nursing Notes/Flow Sheet
7. Radiology Reports
8. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 6701    | 1     | Time is not valid  |
| 6702    | 1     | Time out of range  |
| 6706    | 3     | <b>Hospital Procedure Start Time</b> is earlier than <b>ED/Hospital Arrival Time</b>                           |
| 6708    | 2     | Element cannot be blank  |
| 6709    | 2     | Element must be and can only be "Not Applicable" when <b>Hospital Procedure Start Date</b> is "Not Applicable" |
| 6710    | 2     | Element must be "Not Known/Not Recorded" when <b>Hospital Procedure Start Date</b> is "Not Known/Not Recorded" |
| 6750    | 1     | Multiple Entry Max exceeded  |

## PRE-EXISTING CONDITIONS

## ADVANCE DIRECTIVE LIMITING CARE

### DESCRIPTION

The patient had a written request to limit life-sustaining treatment that restricted the scope of care for the patient during this patient care event.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- The written request was signed/dated by the patient and/or the patient's designee prior to arrival at your center.
- Life-sustaining treatments include but are not limited to intubation, ventilator support, CPR, transfusion of blood products, dialysis or other forms of renal support, institution of medications to support blood pressure or cardiac function, or a specific surgical, interventional or radiological procedure (e.g. decompressive craniectomy, operation for hemorrhage control, angiography). Life-sustaining treatments include but are not limited to intubation, ventilator support, CPR, transfusion of blood products, dialysis or other forms of renal support, institution of medications to support blood pressure or cardiac function, or a specific surgical, interventional or radiological procedure (e.g. decompressive craniectomy, operation for hemorrhage control, angiography).
- Report *Element Value* "2. No" for patients with Advance Directives that did not limit life-sustaining treatments during this patient care event.
- The null value "Not Known/Not Recorded" is reported only if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16001   | 1     | Value is not a valid menu option   |
| 16003   | 2     | Element cannot be blank            |
| 16004   | 2     | Element cannot be "Not Applicable" |
| 16040   | 1     | Single Entry Max exceeded          |

# ALCOHOL USE DISORDER

## DESCRIPTION

Descriptors documented in the medical record consistent with the diagnostic criteria of alcohol use disorder OR a diagnosis of alcohol use disorder documented in the patient's medical record.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients ≥15 years-of-age.
- The null value "Not Applicable" must be reported for patients <15 years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients ≥15 years-of-age.
- Consistent with American Psychiatric Association (APA) DSM 5, 2013.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 16101   | 1     | Value is not a valid menu option   |
| 16103   | 2     | Element cannot be blank  |
| 16104   | 2     | Element must be and can only be "Not Applicable" for patients <15 years-of-age |
| 16140   | 1     | Single Entry Max exceeded  |

## ANTICOAGULANT THERAPY

### DESCRIPTION

Documentation in the medical record of the administration of medication (anticoagulants, antiplatelet agents, thrombin inhibitors, thrombolytic agents) that interferes with blood clotting. EXCLUDE patients whose only anticoagulant therapy is chronic aspirin.

| ANTICOAGULANTS | ANTIPLATELET AGENTS | THROMBIN INHIBITORS | THROMBOLYTIC AGENTS |
|----------------|---------------------|---------------------|---------------------|
| Fondaparinux   | Tirofiban           | Bevalirudin         | Alteplase           |
| Warfarin       | Dipyridamole        | Argatroban          | Reteplase           |
| Dalteparin     | Anagrelide          | Lepirudin, Hirudin  | Tenecteplase        |
| Lovenox        | Eptifibatide        | Drotrecogin alpha   | Kabikinase          |
| Pentasaccaride | Dipyridamole        | Dabigatran          | tPA                 |
| APC            | Clopidogrel         |                     |                     |
| Ximelagatran   | Cilostazol          |                     |                     |
| Pentoxifylline | Abciximab           |                     |                     |
| Rivaroxaban    | Ticlopidine         |                     |                     |
| Apixaban       | Prasugrel           |                     |                     |
| Heparin        | Ticagrelor          |                     |                     |

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Anticoagulant must be part of the patient's active medication.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

- History and Physical
- Physician Notes/Flow Sheet
- Progress Notes
- Case Management/Social Services Notes
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16301   | 1     | Value is not a valid menu option   |
| 16303   | 2     | Element cannot be blank            |
| 16304   | 2     | Element cannot be "Not Applicable" |
| 16340   | 1     | Single Entry Max exceeded          |

## ATTENTION DEFICIT DISORDER/ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADD/ADHD)

### DESCRIPTION

A disorder involving inattention, hyperactivity, or impulsivity requiring medication for treatment.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of ADD/ADHD must be documented in the patient's medical record.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheets
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16401   | 1     | Value is not a valid menu option   |
| 16403   | 2     | Element cannot be blank            |
| 16404   | 2     | Element cannot be "Not Applicable" |
| 16440   | 1     | Single Entry Max exceeded          |



## BIPOLAR I/II DISORDER

### DESCRIPTION

A bipolar I/II disorder diagnosis documented in the medical record.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients  $\geq 15$  years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$  years-of-age.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 21901   | 1     | Value is not a valid menu option  |
| 21902   | 2     | Element cannot be blank   |
| 21903   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 21940   | 1     | Single Entry Max exceeded   |

## BLEEDING DISORDER

### DESCRIPTION

A group of conditions that result when the blood cannot clot properly.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A bleeding disorder diagnosis must be documented in the patient's medical record (e.g. Hemophilia, von Willenbrand Disease, Factor V Leiden).
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.
- Consistent with American Society of Hematology, 2015.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16501   | 1     | Value is not a valid menu option   |
| 16503   | 2     | Element cannot be blank            |
| 16504   | 2     | Element cannot be "Not Applicable" |
| 16540   | 1     | Single Entry Max exceeded          |

## CEREBRAL VASCULAR ACCIDENT (CVA)

### DESCRIPTION

A history prior to injury of a cerebrovascular accident (embolic, thrombotic, or hemorrhagic) with persistent residual motor sensory or cognitive dysfunction (e.g., hemiplegia, hemiparesis, aphasia, sensory deficit, impaired memory).

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of CVA must be documented in the patient's medical record.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16601   | 1     | Value is not a valid menu option   |
| 16603   | 2     | Element cannot be blank            |
| 16604   | 2     | Element cannot be "Not Applicable" |
| 16640   | 1     | Single Entry Max exceeded          |

# CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

## DESCRIPTION

Chronic obstructive pulmonary disease (COPD) is a lung disease characterized by chronic obstruction of lung airflow that interferes with normal breathing and is not fully reversible. The more familiar terms 'chronic bronchitis' and 'emphysema' are no longer used but are now included within the COPD diagnosis.

## EXCLUDE:

- Patients whose only pulmonary disease is asthma.
- Patients with diffuse interstitial fibrosis or sarcoidosis.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of COPD must be documented in the patient's medical record.
- Only report on patients  $\geq 15$ -years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$ -years-of-age.
- Consistent with World Health Organization (WHO), 2019.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 16701   | 1     | Value is not a valid menu option  |
| 16703   | 2     | Element cannot be blank   |
| 16704   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 16740   | 1     | Single Entry Max exceeded   |

## CHRONIC RENAL FAILURE

### DESCRIPTION

Chronic renal failure prior to injury that was requiring periodic peritoneal dialysis, hemodialysis, hemofiltration, or hemodiafiltration.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of chronic renal failure must be documented in the patient's medical record.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16801   | 1     | Value is not a valid menu option   |
| 16803   | 2     | Element cannot be blank            |
| 16804   | 2     | Element cannot be "Not Applicable" |
| 16840   | 1     | Single Entry Max exceeded          |

# CIRRHOSIS

## DESCRIPTION

Cirrhosis is the replacement of normal liver tissue with non-living scar tissue related to other liver diseases. Must have documentation in the medical record of cirrhosis, which might also be referred to as end-stage liver disease.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of cirrhosis, or documentation of cirrhosis by diagnostic imaging studies or a laparotomy/laparoscopy, must be in the patient's medical record.
- Documentation in the medical record may include CHILD or MELD scores that support evidence of cirrhosis.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16901   | 1     | Value is not a valid menu option   |
| 16903   | 2     | Element cannot be blank            |
| 16904   | 2     | Element cannot be "Not Applicable" |
| 16940   | 1     | Single Entry Max exceeded          |

## CONGENITAL ANOMALIES

### DESCRIPTION

Documentation of a cardiac, pulmonary, body wall, CNS/spinal, GI, renal, orthopedic, or metabolic anomaly.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of a congenital anomaly must be documented in the patient's medical record.
- Only report on patients <15 years-of-age.
- The null value "Not Applicable" must be reported for patients ≥15-years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients <15 years-of-age.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 17001   | 1     | Value is not a valid menu option  |
| 17003   | 2     | Element cannot be blank   |
| 17004   | 2     | Element must be and can only be "Not Applicable" for patients ≥15-years-of-age. |
| 17040   | 1     | Single Entry Max exceeded   |

## CONGESTIVE HEART FAILURE (CHF)

### DESCRIPTION

The inability of the heart to pump a sufficient quantity of blood to meet the metabolic needs of the body or can do so only at an increased ventricular filling pressure.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of CHF must be documented in the patient's medical record.
- To be included, this condition must be noted in the medical record as CHF, congestive heart failure, or pulmonary edema with onset of increasing symptoms within 30 days prior to injury.
- Common manifestations are:
  - Abnormal limitation in exercise tolerance due to dyspnea or fatigue
  - Orthopnea (dyspnea or lying supine)
  - Paroxysmal nocturnal dyspnea (awakening from sleep with dyspnea)
  - Increased jugular venous pressure
  - Pulmonary rales on physical examination
  - Cardiomegaly
  - Pulmonary vascular engorgement
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17101   | 1     | Value is not a valid menu option   |
| 17103   | 2     | Element cannot be blank            |
| 17104   | 2     | Element cannot be "Not Applicable" |
| 17140   | 1     | Single Entry Max exceeded          |



## CURRENT SMOKER

### DESCRIPTION

A patient who reports smoking cigarettes every day or some days within the last 12 months.

### EXCLUDE:

- Patients who smoke cigars or pipes or smokeless tobacco (chewing tobacco or snuff).

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17201   | 1     | Value is not a valid menu option   |
| 17203   | 2     | Element cannot be blank            |
| 17204   | 2     | Element cannot be "Not Applicable" |
| 17240   | 1     | Single Entry Max exceeded          |

## CURRENTLY RECEIVING CHEMOTHERAPY FOR CANCER

### DESCRIPTION

A patient who is currently receiving any chemotherapy treatment for cancer prior to injury.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Chemotherapy may include, but is not restricted to, oral and parenteral treatment with chemotherapeutic agents for malignancies such as colon, breast, lung, head and neck, and gastrointestinal solid tumors as well as lymphatic and hematopoietic malignancies such as lymphoma, leukemia, and multiple myeloma.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17301   | 1     | Value is not a valid menu option   |
| 17303   | 2     | Element cannot be blank            |
| 17304   | 2     | Element cannot be "Not Applicable" |
| 17340   | 1     | Single Entry Max exceeded          |

# DEMENTIA

## DESCRIPTION

Documentation in the patient's medical record of dementia including senile or vascular dementia (e.g., Alzheimer's).

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of dementia including Alzheimer's, Lewy Body Dementia, frontotemporal dementia (Pick's Disease) and vascular dementia must be documented in the patient's medical record.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.
- Consistent with the National Institute on Aging December 2017.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17401   | 1     | Value is not a valid menu option   |
| 17403   | 2     | Element cannot be blank            |
| 17404   | 2     | Element cannot be "Not Applicable" |
| 17440   | 1     | Single Entry Max exceeded          |

# DIABETES MELLITUS

## DESCRIPTION

Diabetes mellitus that requires exogenous parenteral insulin or an oral hypoglycemic agent.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of diabetes mellitus must be documented in the patient's medical record.
- Report *Element Value* "1. Yes" for patients who were non-compliant with their prescribed exogenous parenteral insulin or oral hypoglycemic agent.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17501   | 1     | Value is not a valid menu option   |
| 17503   | 2     | Element cannot be blank            |
| 17504   | 2     | Element cannot be "Not Applicable" |
| 17540   | 1     | Single Entry Max exceeded          |

## DISSEMINATED CANCER

### DESCRIPTION

Cancer that has spread to one or more sites in addition to the primary site AND in the presence of multiple metastases indicates the cancer is widespread, fulminant, or near terminal.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Another term describing disseminated cancer is "metastatic cancer."
- A diagnosis of cancer that has spread to one or more sites must be documented in the patient's medical record.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17601   | 1     | Value is not a valid menu option   |
| 17603   | 2     | Element cannot be blank            |
| 17604   | 2     | Element cannot be "Not Applicable" |
| 17640   | 1     | Single Entry Max exceeded          |

## FUNCTIONALLY DEPENDENT HEALTH STATUS

### DESCRIPTION

Pre-injury functional status may be represented by the ability of the patient to complete age-appropriate activities of daily living (ADL).

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Activities of daily living include: bathing, feeding, dressing, toileting, and walking.
- Include patients whom prior to injury, and as a result of cognitive or physical limitations relating to a pre-existing medical condition, were partially dependent or completely dependent upon equipment, devices or another person to complete some or all activities of daily living.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17701   | 1     | Value is not a valid menu option   |
| 17703   | 2     | Element cannot be blank            |
| 17704   | 2     | Element cannot be "Not Applicable" |
| 17740   | 1     | Single Entry Max exceeded          |

# HYPERTENSION

## DESCRIPTION

History of persistent elevated blood pressure requiring antihypertensive medication.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of hypertension must be documented in the patient's medical record.
- Report *Element Value* "1. Yes" for patients who were non-compliant with their prescribed antihypertensive medication.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17801   | 1     | Value is not a valid menu option   |
| 17803   | 2     | Element cannot be blank            |
| 17804   | 2     | Element cannot be "Not Applicable" |
| 17840   | 1     | Single Entry Max exceeded          |

## MAJOR DEPRESSIVE DISORDER

### DESCRIPTION

A major depressive disorder diagnosis documented in the medical record.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients  $\geq 15$  years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$  years-of-age.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 22001   | 1     | Value is not a valid menu option  |
| 22002   | 2     | Element cannot be blank   |
| 22003   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 22040   | 1     | Single Entry Max exceeded   |



## MYOCARDIAL INFARCTION (MI)

### DESCRIPTION

History of a myocardial infarction (MI) in the six months prior to injury.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of myocardial infarction must be documented in the patient's medical record.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18001   | 1     | Value is not a valid menu option   |
| 18003   | 2     | Element cannot be blank            |
| 18004   | 2     | Element cannot be "Not Applicable" |
| 18040   | 1     | Single Entry Max exceeded          |

## OTHER MENTAL/PERSONALITY DISORDERS

### DESCRIPTION

A diagnosis of any of the following documented in the medical record:

- Antisocial personality disorder
- Avoidant personality disorder
- Borderline personality disorder
- Dependent personality disorder
- Generalized anxiety disorder
- Histrionic personality disorder
- Narcissistic personality disorder
- Obsessive-compulsive disorder
- Obsessive-compulsive personality disorder
- Panic disorder
- Paranoid personality disorder
- Schizotypal personality disorder

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients  $\geq 15$  years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$  years-of-age.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 22101   | 1     | Value is not a valid menu option  |
| 22102   | 2     | Element cannot be blank   |
| 22103   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 22140   | 1     | Single Entry Max exceeded   |

## PERIPHERAL ARTERIAL DISEASE (PAD)

### DESCRIPTION

The narrowing or blockage of the vessels that carry blood from the heart to the legs. It is primarily caused by the buildup of fatty plaque in the arteries, which is called atherosclerosis. Peripheral Arterial Disease (PAD) can occur in any blood vessel, but it is more common in the legs than the arms.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- A diagnosis of Peripheral Arterial Disease must be documented in the patient's medical record.
- Only report on patients  $\geq 15$ -years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$ -years-of-age.
- Consistent with Centers for Disease Control, 2014 Fact Sheet.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 18101   | 1     | Value is not a valid menu option  |
| 18103   | 2     | Element cannot be blank   |
| 18104   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 18140   | 1     | Single Entry Max exceeded   |

## POST-TRAUMATIC STRESS DISORDER

### DESCRIPTION

A post-traumatic stress disorder diagnosis documented in the medical record.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients  $\geq 15$  years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$  years-of-age.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 22201   | 1     | Value is not a valid menu option  |
| 22202   | 2     | Element cannot be blank   |
| 22203   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 22240   | 1     | Single Entry Max exceeded   |

## PREGNANCY

### DESCRIPTION

Pregnancy confirmed by lab, ultrasound, or other diagnostic tool OR diagnosis of pregnancy documented in the patient's medical record.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to arrival at your center.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21501   | 1     | Value is not a valid menu option   |
| 21503   | 2     | Element cannot be blank            |
| 21504   | 2     | Element cannot be "Not Applicable" |
| 21540   | 1     | Single Entry Max exceeded          |

## PREMATURITY

### DESCRIPTION

Babies born before 37 weeks of pregnancy are completed.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients <15 years-of-age.
- A diagnosis of prematurity, or delivery before 37 weeks of pregnancy are completed, must be documented in the patient's medical record.
- The null value "Not Applicable" must be reported for patients ≥15-years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients <15 years-of-age.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 18201   | 1     | Value is not a valid menu option   |
| 18203   | 2     | Element cannot be blank  |
| 18204   | 2     | Element must be and can only be "Not Applicable" for patients ≥15-years-of-age |
| 18240   | 1     | Single Entry Max exceeded  |

# SCHIZOAFFECTIVE DISORDER

## DESCRIPTION

A schizoaffective disorder diagnosis documented in the medical record.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients  $\geq 15$  years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$  years-of-age.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 22301   | 1     | Value is not a valid menu option  |
| 22302   | 2     | Element cannot be blank   |
| 22303   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 22340   | 1     | Single Entry Max exceeded   |

# SCHIZOPHRENIA

## DESCRIPTION

A schizophrenia diagnosis documented in the medical record.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients  $\geq 15$  years-of-age.
- The null value "Not Applicable" must be reported for patients  $< 15$  years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients  $\geq 15$  years-of-age.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 22401   | 1     | Value is not a valid menu option  |
| 22402   | 2     | Element cannot be blank   |
| 22403   | 2     | Element must be and can only be "Not Applicable" for patients $< 15$ years-of-age |
| 22440   | 1     | Single Entry Max exceeded   |



## STEROID USE

### DESCRIPTION

Regular administration of oral or parenteral corticosteroid medications within 30 days prior to injury for a chronic medical condition.

### EXCLUDE:

- Topical corticosteroids applied to the skin, and corticosteroids administered by inhalation or rectally.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Examples of oral or parenteral corticosteroid medications are prednisone and dexamethasone.
- Examples of chronic medical conditions are Chronic Obstructive Pulmonary Disease (COPD), asthma, rheumatologic disease, rheumatoid arthritis, and inflammatory bowel disease.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18301   | 1     | Value is not a valid menu option   |
| 18303   | 2     | Element cannot be blank            |
| 18304   | 2     | Element cannot be "Not Applicable" |
| 18340   | 1     | Single Entry Max exceeded          |

## SUBSTANCE USE DISORDER

### DESCRIPTION

Descriptors documented in the patient's medical record consistent with the diagnostic criteria of substance use disorders specifically cannabis, hallucinogens, inhalants, opioids, sedative/hypnotics, and stimulants (e.g. patient has a history of drug use; patient has a history of opioid use) OR diagnosis of any of the following documented in the patient's medical record:

- Cannabis Use Disorder; Other Cannabis-Induced Disorder; Unspecified Cannabis-Related Disorder
- Phencyclidine Use Disorder; Other Hallucinogen Use Disorder; Hallucinogen Persisting Perception Disorder; Other Phencyclidine-Induced Disorder; Other Hallucinogen-Induced Disorder; Unspecified Phencyclidine-Related Disorder; Unspecified Hallucinogen-Related Disorder
- Inhalant Use Disorder; Other Inhalant-Induced Disorder; Unspecified Inhalant-Related Disorder
- Opioid Use Disorder; Other Opioid-Induced Disorder; Unspecified Opioid-Related Disorder
- Sedative, Hypnotic, or Anxiolytic Use Disorder; Other Sedative, Hypnotic, or Anxiolytic-Induced Disorder; Unspecified Sedative, Hypnotic, or Anxiolytic-Related Disorder
- Stimulant Use Disorder; Other Stimulant-Induced Disorder; Unspecified Stimulant-Related Disorder

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Present prior to injury.
- Only report on patients ≥15-years-of-age.
- The null value "Not Applicable" must be reported for patients <15 years-of-age.
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available for patients ≥15-years-of-age.
- Consistent with the American Psychiatric Association (APA) DSM 5, 2013.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 18401   | 1     | Value is not a valid menu option   |
| 18403   | 2     | Element cannot be blank  |
| 18404   | 2     | Element must be and can only be "Not Applicable" for patients <15 years-of-age |
| 18440   | 1     | Single Entry Max exceeded  |

### PRE-EXISTING CONDITIONS

## DIAGNOSIS INFORMATION

## ICD-10 INJURY DIAGNOSES

### DESCRIPTION

Diagnoses related to all identified injuries.

### ELEMENT VALUES

- Injury diagnoses as defined by ICD-10-CM code range S00-S99, T07, T14, T79.A1-T79.A9 OR compatible ICD-10-CA code range
- The maximum number of diagnoses that may be reported for an individual patient is 50

### ADDITIONAL INFORMATION

- ICD-10-CM codes pertaining to other medical conditions (e.g., CVA, MI, co-morbidities, etc.) may also be included in this element.

### DATA SOURCE HIERARCHY GUIDE

1. Autopsy/Medical Examiner Report
2. Operative Reports
3. Radiology Reports
4. Physician Notes/Flow Sheet
5. Trauma Flow Sheet
6. History and Physical
7. Nursing Notes/Flow Sheet
8. Progress Notes
9. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 8701    | 1     | Invalid value (ICD-10-CM only)  |
| 8702    | 2     | Element cannot be blank   |
| 8703    | 2     | At least one diagnosis must be provided and meet inclusion criteria. (ICD-10-CM only)     |
| 8705    | 1     | Invalid value (ICD-10-CA only)  |
| 8706    | 2     | At least one diagnosis must be provided and meet inclusion criteria. (ICD-10-CA only)     |
| 8707    | 2     | Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other value |
| 8750    | 1     | Multiple Entry Max exceeded   |

## AIS CODE

### DESCRIPTION

The Abbreviated Injury Scale (AIS) code(s) that reflect the patient's injuries.

### ELEMENT VALUES

- The code is the 8-digit AIS code

### ADDITIONAL INFORMATION

None

### DATA SOURCE HIERARCHY GUIDE

- AIS Coding Manual

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 21001   | 1     | Invalid value  |
| 21004   | 2     | AIS codes submitted are not valid AIS 05, Update 08, or AIS 2015 codes |
| 21007   | 2     | Element cannot be blank  |
| 21008   | 2     | Element cannot be "Not Applicable"                                     |
| 21009   | 2     | Element cannot be "Not Known/Not Recorded" along with any other value  |
| 21050   | 1     | Multiple Entry Max exceeded  |

## AIS VERSION

### DESCRIPTION

The software (and version) used to calculate Abbreviated Injury Scale (AIS) severity codes.

### ELEMENT VALUES

6. AIS 05, Update 08

16. AIS 2015

### ADDITIONAL INFORMATION

None

### DATA SOURCE HIERARCHY GUIDE

1. AIS Coding Manual

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 7301    | 1     | Value is not a valid menu option   |
| 7302    | 2     | Element cannot be blank            |
| 7303    | 2     | Element cannot be "Not Applicable" |
| 7340    | 1     | Single Entry Max exceeded          |

# HOSPITAL EVENTS

## ACUTE KIDNEY INJURY (AKI)

### DESCRIPTION

Acute Kidney Injury, AKI (stage 3), is an abrupt decrease in kidney function.

#### EXCLUDE:

- Patients with renal failure that were requiring chronic renal replacement therapy such as periodic peritoneal dialysis, hemodialysis, hemofiltration, or hemodiafiltration prior to injury.

#### KDIGO Staging of AKI Table:

| STAGE | SERUM CREATININE   | URINE OUTPUT   |
|-------|--|--|
| 3     | 3.0 times baseline<br>OR<br>Increase in serum creatinine to $\geq 4.0\text{mg/dl}$ ( $\geq 353.6\mu\text{mol/l}$ )<br>OR<br>Initiation of renal replacement therapy OR, in patients $< 18$ years, decrease in eGFR to $< 35\text{ml/min per } 1.73\text{ m}^2$ | $< 0.3\text{ ml/kg/h}$ for $\geq 24$ hours<br>OR<br>Anuria for $\geq 12$ hours |

### ELEMENT VALUES

- Yes
- No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of acute kidney injury (AKI) must be documented in the patient's medical record.
- If the patient or family refuses treatment (e.g., dialysis,) the condition is still considered to be present if a combination of oliguria and creatinine are present.
- Consistent with the March 2012 Kidney Disease Improving Global Outcome (KDIGO) Guideline.

### DATA SOURCE HIERARCHY GUIDE

- History and Physical
- Physician Notes/Flow Sheet
- Progress Notes
- Case Management/Social Services Notes
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18501   | 1     | Value is not a valid menu option   |
| 18503   | 2     | Element cannot be blank            |
| 18504   | 2     | Element cannot be "Not Applicable" |
| 18540   | 1     | Single Entry Max exceeded          |

### HOSPITAL EVENTS



## ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS)

### DESCRIPTION

|                  |   |
|------------------|---|
| Timing:          | Within 1 week of known clinical insult or new or worsening respiratory symptoms   |
| Chest imaging:   | Bilateral opacities – not fully explained by effusions, lobar/lung collapse, or nodules   |
| Origin of edema: | Respiratory failure not fully explained by cardiac failure or fluid overload. Need objective assessment (e.g., echocardiography) to exclude hydrostatic edema if no risk factor present |
| Oxygenation:     |   |
| Mild             | $200 \text{ mm Hg} < \text{PaO}_2/\text{FIO}_2 < 300 \text{ mm Hg}$ With PEEP or CPAP $\geq 5 \text{ cm H}_2\text{O}$   |
| Moderate         | $100 \text{ mm Hg} < \text{PaO}_2/\text{FIO}_2 < 200 \text{ mm Hg}$ With PEEP $> 5 \text{ cm H}_2\text{O}$  |
| Severe           | $\text{PaO}_2/\text{FIO}_2 < 100 \text{ mm Hg}$ With PEEP or CPAP $\geq 5 \text{ cm H}_2\text{O}$   |

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of ARDS must be documented in the patient's medical record.
- Consistent with the 2012 New Berlin Definition.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18601   | 1     | Value is not a valid menu option   |
| 18603   | 2     | Element cannot be blank            |
| 18604   | 2     | Element cannot be "Not Applicable" |
| 18640   | 1     | Single Entry Max exceeded          |

# ALCOHOL WITHDRAWAL SYNDROME

## DESCRIPTION

Characterized by tremor, sweating, anxiety, agitation, depression, nausea, and malaise. It occurs 6-48 hours after cessation of alcohol consumption and, when uncomplicated, abates after 2-5 days. It may be complicated by grand mal seizures and may progress to delirium (known as delirium tremens).

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- Documentation of alcohol withdrawal must be in the patient's medical record.
- Consistent with the 2019 World Health Organization (WHO) definition of Alcohol Withdrawal Syndrome.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18701   | 1     | Value is not a valid menu option   |
| 18703   | 2     | Element cannot be blank            |
| 18704   | 2     | Element cannot be "Not Applicable" |
| 18740   | 1     | Single Entry Max exceeded          |

## CARDIAC ARREST WITH CPR

### DESCRIPTION

Cardiac arrest is the sudden cessation of cardiac activity after hospital arrival. The patient becomes unresponsive with no normal breathing and no signs of circulation. If corrective measures are not taken rapidly, this condition progresses to sudden death.

#### INCLUDE:

- Patients who, after arrival at your hospital, have had an episode of cardiac arrest evaluated by hospital personnel, and received compressions or defibrillation or cardioversion or cardiac pacing to restore circulation.

#### EXCLUDE:

- Patients whose ONLY episode of cardiac arrest with CPR was on arrival to your hospital.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- Cardiac arrest must be documented in the patient's medical record.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18801   | 1     | Value is not a valid menu option   |
| 18803   | 2     | Element cannot be blank            |
| 18804   | 2     | Element cannot be "Not Applicable" |
| 18840   | 1     | Single Entry Max exceeded          |

## CATHETER-ASSOCIATED URINARY TRACT INFECTION (CAUTI)

### DESCRIPTION

A urinary tract infection (UTI) where an indwelling urinary catheter was in place for > 2 calendar days on the date of event, with day of device placement being Day 1,

### AND

An indwelling urinary catheter was in place on the date of event or the day before. If an indwelling urinary catheter was in place for more than 2 consecutive days in an inpatient location and then removed, the date of event for the UTI must be the day of device discontinuation or the next day for the UTI to be catheter-associated.

### *January 2019 CDC CAUTI Criterion SUTI 1a:*

Patient must meet 1, 2, **and** 3 below:

1. Patient had an indwelling urinary catheter that had been in place for more than 2 consecutive days in an inpatient location on the date of event AND was either:
  - Present for any portion of the calendar day on the date of event,
  - OR**
  - Removed the day before the date of event
2. Patient has at least one of the following signs or symptoms:
  - Fever (>38°C): Reminder: To use fever in a patient >65 years of age, the IUC needs to be in place for more than 2 consecutive days in an inpatient location on date of event and is either still in place OR was removed the day before the DOE.
  - Suprapubic tenderness
  - Costovertebral angle pain or tenderness
  - Urinary urgency
  - Urinary frequency
  - Dysuria
3. Patient has a urine culture with no more than two species of organisms identified, at least one of which is a bacterium >10<sup>5</sup> CFU/ml.

### *January 2019 CDC CAUTI Criterion SUTI 2:*

Patient must meet 1, 2 **and** 3 below:

1. Patient is ≤1 year of age
2. Patient has at least one of the following signs or symptoms:
  - fever (>38.0°C)
  - hypothermia (<36.0°C)
  - apnea
  - bradycardia
  - lethargy
  - vomiting
  - suprapubic tenderness
3. Patient has a urine culture with no more than two species of organisms, at least one of which is a bacterium of ≥10<sup>5</sup> CFU/ml.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of UTI must be documented in the patient's medical record.
- Consistent with the January 2019 CDC defined CAUTI.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18901   | 1     | Value is not a valid menu option   |
| 18903   | 2     | Element cannot be blank            |
| 18904   | 2     | Element cannot be "Not Applicable" |
| 18940   | 1     | Single Entry Max exceeded          |

## CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTION (CLABSI)

### DESCRIPTION

A laboratory-confirmed bloodstream infection (LCBI) where central line (CL) or umbilical catheter (UC) was in place for > 2 calendar days on the date of event, with day of device placement being Day 1,

#### AND

The line was also in place on the date of event or the day before. If a CL or UC was in place for > 2 calendar days and then removed, the date of event of the LCBI must be the day of discontinuation or the next day to be a CLABSI. If the patient is admitted or transferred into a facility with an implanted central line (port) in place, and that is the patient's only central line, day of first access in an inpatient location is considered Day 1. "Access" is defined as line placement, infusion or withdrawal through the line. Such lines continue to be eligible for CLABSI once they are accessed until they are either discontinued or the day after patient discharge (as per the Transfer Rule.) Note that the "de-access" of a port does not result in the patient's removal from CLABSI surveillance.

### January 2016 CDC Criterion LCBI 1:

Patient has a recognized pathogen identified from one or more blood specimens by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST).

#### AND

Organism(s) identified in blood is not related to an infection at another site.

#### OR

### January 2016 CDC Criterion LCBI 2:

Patient has at least one of the following signs or symptoms: fever ( $>38^{\circ}\text{C}$ ), chills, or hypotension.

#### AND

Organism(s) identified from blood is not related to an infection at another site.

#### AND

The same common commensal (i.e., diphtheroids [*Corynebacterium* spp. not *C. diphtheriae*], *Bacillus* spp. [not *B. anthracis*], *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp., and *Micrococcus* spp.) is identified from two or more blood specimens drawn on separate occasions, by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST). Criterion elements must occur within the Infection Window Period, the 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 calendar days after.

#### OR

## January 2016 CDC Criterion LCBI 3:

Patient  $\leq 1$  year of age has at least one of the following signs or symptoms: fever ( $>38^{\circ}\text{C}$ ), hypothermia ( $<36^{\circ}\text{C}$ ), apnea, or bradycardia

**AND**

Organism(s) identified from blood is not related to an infection at another site

**AND**

The same common commensal (i.e., diphtheroids [*Corynebacterium* spp. not *C. diphtheriae*], *Bacillus* spp. [not *B. anthracis*], *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridans group streptococci, *Aerococcus* spp., *Micrococcus* spp.) is identified from two or more blood specimens drawn on separate occasions, by a culture or non-culture base microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST). Criterion elements must occur within the Infection Window Period, the 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 calendar days after.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of CLABSI must be documented in the patient's medical record.
- Consistent with the January 2016 CDC defined CLABSI.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19001   | 1     | Value is not a valid menu option   |
| 19003   | 2     | Element cannot be blank            |
| 19004   | 2     | Element cannot be "Not Applicable" |
| 19040   | 1     | Single Entry Max exceeded          |

## DEEP SURGICAL SITE INFECTION

### DESCRIPTION

Must meet the following criteria:

Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) According to list in Table 2

### AND

Involves deep soft tissues of the incision (e.g., fascial and muscle layers)

### AND

Patient has at least *one* of the following:

- a. Purulent drainage from the deep incision.
- b. A deep incision that spontaneously dehisces, or is deliberately opened or aspirated by a surgeon, attending physician\*\* or other designee and organism is identified by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST) or culture or non-culture based microbiologic testing method is not performed.

### AND

Organism(s) identified from the deep soft tissues of the incision by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST) or culture or non-culture based microbiologic testing method is not performed. A culture or non-culture based test from the deep soft tissues of the incision that has a negative finding does not meet this criterion.

### AND

Patient has at least one of the following signs or symptoms: fever ( $>38^{\circ}\text{C}$ ); localized pain or tenderness. A culture or non-culture based test that has a negative finding does not meet this criterion.

- c. An abscess or other evidence of infection involving the deep incision that is detected on gross anatomical or histopathologic exam, or imaging test

\* The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician's designee (nurse practitioner or physician's assistant).

COMMENTS: There are two specific types of deep incisional SSIs:

1. Deep Incisional Primary (DIP) – a deep incisional SSI that is identified in a primary incision in a patient that has had an operation with one or more incisions (e.g., C-section incision or chest incision for CBGB).
2. Deep Incisional Secondary (DIS) – a deep incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site incision for CBGB).



**Table 2. Surveillance Period for Deep Incisional or Organ/Space SSI Following Selected NHSN Operative Procedure Categories. Day 1 = the date of the procedure.**

| 30 DAY SURVEILLANCE |  |      |                                    |
|---------------------|--|------|------------------------------------|
| Code                | Operative Procedure                    | Code | Operative Procedure                |
| AAA                 | Abdominal aortic aneurysm repair       | LAM  | Laminectomy                        |
| AMP                 | Limb amputation                        | LTP  | Liver transplant                   |
| APPY                | Appendix surgery                       | NECK | Neck surgery                       |
| AVSD                | Shunt for dialysis                     | NEPH | Kidney surgery                     |
| BILI                | Bile duct, liver or pancreatic surgery | OVRY | Ovarian surgery                    |
| CEA                 | Carotid endarterectomy                 | PRST | Prostate surgery                   |
| CHOL                | Gallbladder surgery                    | REC  | Rectal surgery                     |
| COLO                | Colon surgery                          | SB   | Small bowel surgery                |
| CSEC                | Cesarean section                       | SPLE | Spleen surgery                     |
| GAST                | Gastric surgery                        | THOR | Thoracic surgery                   |
| HTP                 | Heart transplant                       | THUR | Thyroid and/or parathyroid surgery |
| HYST                | Abdominal hysterectomy                 | VHYS | Vaginal hysterectomy               |
| KTP                 | Kidney transplant                      | XLAP | Exploratory Laparotomy             |

| 90 DAY SURVEILLANCE |   |
|---------------------|---|
| Code                | Operative Procedure   |
| BRST                | Breast surgery  |
| CARD                | Cardiac surgery   |
| CBGB                | Coronary artery bypass graft with both chest and donor site incisions |
| CBGC                | Coronary artery bypass graft with chest incision only                 |
| CRAN                | Craniotomy  |
| FUSN                | Spinal fusion   |
| FX                  | Open reduction of fracture  |
| HER                 | Herniorrhaphy   |
| HPRO                | Hip prosthesis  |
| KPRO                | Knee prosthesis   |
| PACE                | Pacemaker surgery   |
| PVBY                | Peripheral vascular bypass surgery                                    |
| VSHN                | Ventricular shunt   |

#### ELEMENT VALUES

1. Yes
2. No

#### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of SSI must be documented in the patient's medical record.
- Consistent with the CDC January 2019 defined SSI.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19101   | 1     | Value is not a valid menu option   |
| 19103   | 2     | Element cannot be blank            |
| 19104   | 2     | Element cannot be “Not Applicable” |
| 19140   | 1     | Single Entry Max exceeded          |

## DEEP VEIN THROMBOSIS (DVT)

### DESCRIPTION

The formation, development, or existence of a blood clot or thrombus within the venous system, which may be coupled with inflammation.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of deep vein thrombosis (DVT) must be documented in the patient's medical record, which may be confirmed by venogram, ultrasound, or CT.
- The patient must be treated with anticoagulation therapy and/or placement of a vena cava filter or clipping of the vena cava.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19201   | 1     | Value is not a valid menu option   |
| 19203   | 2     | Element cannot be blank            |
| 19204   | 2     | Element cannot be "Not Applicable" |
| 19240   | 1     | Single Entry Max exceeded          |

# DELIRIUM

## DESCRIPTION

Acute onset of behaviors characterized by restlessness, illusions, and incoherence of thought and speech. Delirium can often be traced to one or more contributing factors, such as a severe or chronic medical illness, changes in your metabolic balance (such as low sodium), medication, infection, surgery, or alcohol or drug withdrawal.

## OR

Patient tests positive after using an objective screening tool like the Confusion Assessment Method (CAM) or the Intensive Care Delirium Screening Checklist (ICDSC).

## OR

A diagnosis of delirium documented in the patient's medical record.

## EXCLUDE:

- Patients whose delirium is due to alcohol withdrawal.

## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21601   | 1     | Value is not a valid menu option   |
| 21603   | 2     | Element cannot be blank            |
| 21604   | 2     | Element cannot be "Not Applicable" |
| 21640   | 1     | Single Entry Max exceeded          |

## MYOCARDIAL INFARCTION (MI)

### DESCRIPTION

An acute myocardial infarction (MI) must be noted with documentation of ECG changes indicative of an acute MI

### AND

New elevation in troponin greater than three times upper level of the reference range in the setting of suspected myocardial ischemia

### AND

Physician diagnosis of an acute myocardial infarction that occurred subsequent to arrival at your center

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19401   | 1     | Value is not a valid menu option   |
| 19403   | 2     | Element cannot be blank            |
| 19404   | 2     | Element cannot be "Not Applicable" |
| 19440   | 1     | Single Entry Max exceeded          |

## ORGAN/SPACE SURGICAL SITE INFECTION

### DESCRIPTION

Must meet the following criteria:

Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2

### AND

Infection involves any part of the body deeper than the fascial/muscle layers, that is opened or manipulated during the operative procedure

### AND

Patient has at least *one* of the following:

- Purulent drainage from a drain that is placed into the organ/space (e.g., closed suction drainage system, open drain, T-tube drain, CT guided drainage).
- Organisms are identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST)).
- An abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test evidence suggestive of infection.

### AND

Meets at least one criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections chapter.

**Table 2. Surveillance Period for Deep Incisional or Organ/Space SSI Following Selected NHSN**

**Operative Procedure Categories. Day 1 = the date of the procedure.**

| 30 DAY SURVEILLANCE |  |      |                                    |
|---------------------|--|------|------------------------------------|
| Code                | Operative Procedure                    | Code | Operative Procedure                |
| AAA                 | Abdominal aortic aneurysm repair       | LAM  | Laminectomy                        |
| AMP                 | Limb amputation                        | LTP  | Liver transplant                   |
| APPY                | Appendix surgery                       | NECK | Neck surgery                       |
| AVSD                | Shunt for dialysis                     | NEPH | Kidney surgery                     |
| BILI                | Bile duct, liver or pancreatic surgery | OVRY | Ovarian surgery                    |
| CEA                 | Carotid endarterectomy                 | PRST | Prostate surgery                   |
| CHOL                | Gallbladder surgery                    | REC  | Rectal surgery                     |
| COLO                | Colon surgery                          | SB   | Small bowel surgery                |
| CSEC                | Cesarean section                       | SPLE | Spleen surgery                     |
| GAST                | Gastric surgery                        | THOR | Thoracic surgery                   |
| HTP                 | Heart transplant                       | THUR | Thyroid and/or parathyroid surgery |
| HYST                | Abdominal hysterectomy                 | VHYS | Vaginal hysterectomy               |
| KTP                 | Kidney transplant                      | XLAP | Exploratory Laparotomy             |

| 90 DAY SURVEILLANCE |   |
|---------------------|---|
| Code                | Operative Procedure   |
| BRST                | Breast surgery  |
| CARD                | Cardiac surgery   |
| CBGB                | Coronary artery bypass graft with both chest and donor site incisions |
| CBGC                | Coronary artery bypass graft with chest incision only                 |
| CRAN                | Craniotomy  |
| FUSN                | Spinal fusion   |
| FX                  | Open reduction of fracture  |
| HER                 | Herniorrhaphy   |
| HPRO                | Hip prosthesis  |
| KPRO                | Knee prosthesis   |
| PACE                | Pacemaker surgery   |
| PVBY                | Peripheral vascular bypass surgery                                    |
| VSHN                | Ventricular shunt   |

**Table 3. Specific Sites of an Organ/Space SSI.**

| Code | SITE  | Code | SITE   |
|------|---|------|--|
| BONE | Osteomyelitis                                     | MED  | Mediastinitis  |
| BRST | Breast abscess or mastitis                        | MEN  | Meningitis or ventriculitis  |
| CARD | Myocarditis or pericarditis                       | ORAL | Oral cavity infection (mouth, tongue, or gums)   |
| DISC | Disc space infection                              | OREP | Deep pelvic tissue infection or other infection of the male or female reproductive tract |
| EAR  | Ear, mastoid infection                            | PJI  | Periprosthetic Joint Infection   |
| EMET | Endometritis                                      | SA   | Spinal abscess/infection   |
| ENDO | Endocarditis                                      | SINU | Sinusitis  |
| GIT  | Gastrointestinal (GI) tract infection             | UR   | Upper respiratory tract, pharyngitis, laryngitis, epiglottitis                           |
| IAB  | Intraabdominal infection, not specified elsewhere | USI  | Urinary System Infection   |
| IC   | Intracranial infection                            | VASC | Arterial or venous infection   |
| JNT  | Joint or bursa infection                          | VCUF | Vaginal cuff infection   |
| LUNG | Other infection of the lower respiratory tract    |      |  |

## ELEMENT VALUES

1. Yes

2. No

## ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of SSI must be documented in the patient's medical record.
- Consistent with the CDC January 2019 defined SSI.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19501   | 1     | Value is not a valid menu option   |
| 19503   | 2     | Element cannot be blank            |
| 19504   | 2     | Element cannot be "Not Applicable" |
| 19540   | 1     | Single Entry Max exceeded          |



# OSTEOMYELITIS

## DESCRIPTION

Osteomyelitis must meet at least one of the following criteria:

1. Patient has organism(s) identified from bone by culture or non-culture based microbiologic testing method, which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST).
2. Patient has evidence of osteomyelitis on gross anatomic or histopathologic exam.
3. Patient has at least two of the following localized signs or symptoms:
  - Fever ( $>38.0^{\circ}\text{C}$ )
  - Swelling\*
  - Pain or tenderness\*
  - Heat\*
  - Drainage\*

### AND at least one of the following:

- a. Organisms identified from blood by culture or non-culture based microbiologic testing method, which is performed for purposes of clinical diagnosis and treatment, for example, not Active Surveillance Culture/Testing (ASC/AST) AND Imaging test evidence suggestive of infection (for example, x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc.]), which if equivocal is supported by clinical correlation, specifically, physician documentation of antimicrobial treatment for osteomyelitis.
- b. Imaging test evidence suggestive of infection (for example, x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc.]), which if equivocal is supported by clinical correlation, specifically, physician documentation of antimicrobial treatment for osteomyelitis).

\*With no other recognized cause

## ELEMENT VALUES

- |        |       |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|

## ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of osteomyelitis must be documented in the patient's medical record.
- Consistent with the January 2020 CDC definition of Bone and Joint Infection.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## HOSPITAL EVENTS

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19601   | 1     | Value is not a valid menu option   |
| 19603   | 2     | Element cannot be blank            |
| 19604   | 2     | Element cannot be “Not Applicable” |
| 19640   | 1     | Single Entry Max exceeded          |

## PRESSURE ULCER

### DESCRIPTION

A localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated. Equivalent to NPUAP Stages II-IV, Unstageable/Unclassified, and Suspected Deep Tissue Injury.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- Pressure ulcer documentation must be in the patient's medical record.
- Consistent with the NPUAP 2014.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19801   | 1     | Value is not a valid menu option   |
| 19803   | 2     | Element cannot be blank            |
| 19804   | 2     | Element cannot be "Not Applicable" |
| 19840   | 1     | Single Entry Max exceeded          |

## PULMONARY EMBOLISM (PE)

### DESCRIPTION

A lodging of a blood clot in a pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma. The blood clots usually originate from the deep leg veins or the pelvic venous system.

### EXCLUDE:

- Subsegmental PEs.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- Consider the condition present if the patient has a VQ scan interpreted as high probability of pulmonary embolism or a positive pulmonary arteriogram or positive CT angiogram and/or a diagnosis of PE is documented in the patient's medical record.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19701   | 1     | Value is not a valid menu option   |
| 19703   | 2     | Element cannot be blank            |
| 19704   | 2     | Element cannot be "Not Applicable" |
| 19740   | 1     | Single Entry Max exceeded          |

## SEVERE SEPSIS

### DESCRIPTION

Severe sepsis: sepsis plus organ dysfunction, hypotension (low blood pressure), or hypoperfusion (insufficient blood flow) to 1 or more organs.

Septic shock: sepsis with persisting arterial hypotension or hypoperfusion despite adequate fluid resuscitation.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of sepsis must be documented in the patient's medical record.
- Consistent with the American College of Chest Physicians and the Society of Critical Care Medicine October 2010.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19901   | 1     | Value is not a valid menu option   |
| 19903   | 2     | Element cannot be blank            |
| 19904   | 2     | Element cannot be "Not Applicable" |
| 19940   | 1     | Single Entry Max exceeded          |

## STROKE/CVA

### DESCRIPTION

A focal or global neurological deficit of rapid onset and NOT present on admission caused by a clot obstructing the flow of blood flow to the brain (ischemic stroke). Or by a blood vessel rupturing and preventing blood flow to the brain (hemorrhagic stroke). Or a transient ischemic attack which is temporary caused by a temporary clot. The patient must have at least one of the following symptoms:

- Change in level of consciousness
- Hemiplegia
- Hemiparesis
- Numbness or sensory loss affecting on side of the body
- Dysphasia or aphasia
- Hemianopia
- Amaurosis fugax
- Other neurological signs or symptoms consistent with stroke

#### AND

- Duration of neurological deficit  $\geq 24$  h

#### OR

- Duration of deficit  $< 24$  h, if neuroimaging (MR, CT, or cerebral angiography) documents a new hemorrhage or infarct consistent with stroke, or therapeutic intervention(s) were performed for stroke, or the neurological deficit results in death

#### AND

- No other readily identifiable non-stroke cause, e.g., progression of existing traumatic brain injury, seizure, tumor, metabolic or pharmacologic etiologies, is identified

#### AND

- Diagnosis is confirmed by neurology or neurosurgical specialist or neuroimaging procedure (MR, CT, angiography) or lumbar puncture (CSF demonstrating intracranial hemorrhage that was not present on admission)

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of stroke/CVA must be documented in the patient's medical record.
- Although the neurologic deficit must not present on admission, risk factors predisposing to stroke (e.g., blunt cerebrovascular injury, dysrhythmia) may be present on admission.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20001   | 1     | Value is not a valid menu option   |
| 20003   | 2     | Element cannot be blank            |
| 20004   | 2     | Element cannot be “Not Applicable” |
| 20040   | 1     | Single Entry Max exceeded          |

## SUPERFICIAL INCISIONAL SURGICAL SITE INFECTION

### DESCRIPTION

Must meet the following criteria:

Infection occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date)

**AND**

Involves only skin and subcutaneous tissue of the incision

**AND**

Patient has at least one of the following:

- a. Purulent drainage from the superficial incision.
- b. Organisms identified from an aseptically-obtained specimen from the superficial incision or sub cutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST)).
- c. Superficial incision that is deliberately opened by a surgeon, attending physician\*\* or other designee and culture or non-culture based testing is not performed.

**AND**

Patient has at least one of the following signs or symptoms: pain or tenderness; localized swelling; erythema; or heat. A culture or non-culture based test that has a negative finding does not meet this criterion.

- d. Diagnosis of a superficial incisional SSI by the surgeon or attending physician\*\* or other designee.

\*The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician's designee (nurse practitioner or physician's assistant).

COMMENTS: There are two specific types of superficial incisional SSIs:

1. Superficial Incisional Primary (SIP) – a superficial incisional SSI that is identified in the primary incision in a patient that has had an operation with one or more incisions (e.g., C- section incision or chest incision for CBGB)
2. Superficial Incisional Secondary (SIS) – a superficial incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site incision for CBGB)

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of SSI must be documented in the patient's medical record.
- Consistent with the January 2019 CDC defined SSI.



## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20101   | 1     | Value is not a valid menu option   |
| 20103   | 2     | Element cannot be blank            |
| 20104   | 2     | Element cannot be "Not Applicable" |
| 20140   | 1     | Single Entry Max exceeded          |

## UNPLANNED ADMISSION TO THE ICU

### DESCRIPTION

Patients admitted to the ICU after initial transfer to the floor, and/or patients with an unplanned return to the ICU after initial ICU discharge.

#### INCLUDE:

- Patients who required ICU care due to an event that occurred during surgery or in the PACU.

#### EXCLUDE:

- Patients with a planned post-operative ICU stay.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Must have occurred during the patient's initial stay at your hospital.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20201   | 1     | Value is not a valid menu option   |
| 20203   | 2     | Element cannot be blank            |
| 20204   | 2     | Element cannot be "Not Applicable" |
| 20240   | 1     | Single Entry Max exceeded          |

## UNPLANNED INTUBATION

### DESCRIPTION

Patient requires placement of an endotracheal tube and mechanical or assisted ventilation manifested by severe respiratory distress, hypoxia, hypercarbia, or respiratory acidosis.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Must have occurred during the patient's initial stay at your hospital.
- For patients who were intubated in the field or emergency department, or those intubated for surgery, an unplanned intubation occurs if they require reintubation >24 hours after they were extubated.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20301   | 1     | Value is not a valid menu option   |
| 20303   | 2     | Element cannot be blank            |
| 20304   | 2     | Element cannot be "Not Applicable" |
| 20340   | 1     | Single Entry Max exceeded          |

## UNPLANNED VISIT TO THE OPERATING ROOM

### DESCRIPTION

Patients with an unplanned operative procedure OR patients returned to the operating room after initial operative management of a related previous procedure.

### EXCLUDE:

- Non-urgent tracheostomy and percutaneous endoscopic gastrostomy.
- Pre-planned, staged and/or procedures for incidental findings.
- Operative management related to a procedure that was initially performed prior to arrival at your center.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Must have occurred during the patient's initial stay at your hospital.

### DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21701   | 1     | Value is not a valid menu option   |
| 21703   | 2     | Element cannot be blank            |
| 21704   | 2     | Element cannot be "Not Applicable" |
| 21740   | 1     | Single Entry Max exceeded          |

## VENTILATOR-ASSOCIATED PNEUMONIA (VAP)

### DESCRIPTION

A pneumonia where the patient is on mechanical ventilation for >2 calendar days on the date of event, with day of ventilator placement being Day 1,

### AND

The ventilator was in place on the date of event or the day before.

#### VAP Algorithm (*PNU2* Bacterial or Filamentous Fungal Pathogens):

| IMAGING TEST EVIDENCE  | SIGNS/SYMPTOMS   | LABORATORY   |
|--|--|--|
| Two or more serial chest imaging test results with at least <b><u>one</u></b> of the following:  | At least <b><u>one</u></b> of the following:   | At least <b><u>one</u></b> of the following:   |
| <ul style="list-style-type: none"> <li>• New and persistent <b>or</b> progressive and persistent</li> <li>• Infiltrate</li> <li>• Consolidation</li> <li>• Cavitation</li> <li>• Pneumatocoles, in infants ≤1-year-old</li> </ul> <p><b>NOTE:</b> In patients <b><i>without</i></b> underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), <b><u>one definitive</u></b> chest imaging test result is acceptable.</p> | <ul style="list-style-type: none"> <li>• Fever (&gt;38°C or &gt;100.4°F)</li> <li>• Leukopenia (&lt;4000 WBC/mm<sup>3</sup>) or leukocytosis (≥12,000 WBC/mm<sup>3</sup>)</li> <li>• For adults ≥70 years old, altered mental status with no other recognized cause</li> </ul> <p>AND at least <b><u>one</u></b> of the following:</p> <ul style="list-style-type: none"> <li>• New onset of purulent sputum or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements</li> <li>• New onset or worsening cough, or dyspnea, or tachypnea</li> <li>• Rales or bronchial breath sounds</li> <li>• Worsening gas exchange (for example: O<sub>2</sub> desaturations [for example: PaO<sub>2</sub>/FiO<sub>2</sub> &lt;240], increased oxygen requirements, or increased ventilator demand)</li> </ul> | <ul style="list-style-type: none"> <li>• Organism identified from blood</li> <li>• Organism identified from pleural fluid</li> <li>• Positive quantitative culture or corresponding semi-quantitative culture result from minimally-contaminated LRT specimen (specifically, BAL, protected specimen brushing or endotracheal aspirate)</li> <li>• ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (for example: Gram's stain)</li> <li>• Positive quantitative culture or corresponding semi-quantitative culture result of lung tissue</li> <li>• Histopathologic exam shows at least <b><u>one</u></b> of the following evidences of pneumonia: <ul style="list-style-type: none"> <li>– Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles and alveoli</li> <li>– Evidence of lung parenchyma invasion by fungal hyphae or pseudohyphae</li> </ul> </li> </ul> |

### VAP Algorithm (PNU2 Viral, Legionella, and other Bacterial Pneumonias):

| IMAGING TEST EVIDENCE   | SIGNS/SYMPTOMS  | LABORATORY  |
|---|---|---|
| Two or more serial chest imaging test results with at least <b>one</b> of the following:  | At least <b>one</b> of the following:   | At least <b>one</b> of the following:   |
| <ul style="list-style-type: none"> <li>• New and persistent or progressive and persistent</li> <li>• Infiltrate</li> <li>• Consolidation</li> <li>• Cavitation</li> <li>• Pneumatocoles, in infants ≤1-year-old</li> </ul> <p><b>NOTE:</b> In patients <i>without</i> underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), <u>one definitive</u> chest imaging test result is acceptable.</p> | <ul style="list-style-type: none"> <li>• Fever (&gt;38°C or &gt;100.4°F)</li> <li>• Leukopenia (&lt;4000 WBC/mm<sup>3</sup>) or leukocytosis (≥12,000 WBC/mm<sup>3</sup>)</li> <li>• For adults ≥70 years old, altered mental status with no other recognized cause</li> </ul> <p>AND at least <b>one</b> of the following:</p> <ul style="list-style-type: none"> <li>• New onset of purulent sputum or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements</li> <li>• New onset or worsening cough, or dyspnea, or tachypnea</li> <li>• Rales or bronchial breath sounds</li> <li>• Worsening gas exchange (for example: O<sub>2</sub> desaturations [for example: PaO<sub>2</sub>/FiO<sub>2</sub> &lt;240], increased oxygen requirements, or increased ventilator demand)</li> </ul> | <ul style="list-style-type: none"> <li>• Virus, <i>Bordetella</i>, <i>Legionella</i>, <i>Chlamydia</i> or <i>Mycoplasma</i> identified from respiratory secretions or tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example: not Active Surveillance Culture/Testing (ASC/AST).</li> <li>• Fourfold rise in paired sera (IgG) for pathogen (e.g., influenza viruses, <i>Chlamydia</i>)</li> <li>• Fourfold rise in <i>Legionella pneumophila</i> serogroup 1 antibody titer to ≥1:128 in paired acute and convalescent sera by indirect IFA.</li> <li>• Detection of L. <i>pneumophila</i> serogroup 1 antigens in urine by RIA or EIA</li> </ul> |

### VAP Algorithm (PNU3 Immunocompromised Patients):

| IMAGING TEST EVIDENCE   | SIGNS/SYMPTOMS  | LABORATORY  |
|---|---|---|
| Two or more serial chest imaging test results with at least <b><u>one</u></b> of the following:   | Patient who is immunocompromised (see definition in footnote) has at least <b><u>one</u></b> of the following:  | At least <b><u>one</u></b> of the following:  |
| <ul style="list-style-type: none"> <li>• New and persistent <b>or</b> progressive and persistent</li> <li>• Infiltrate</li> <li>• Consolidation</li> <li>• Cavitation</li> <li>• Pneumatocoles, in infants <math>\leq 1</math>-year-old</li> </ul> <p><b>NOTE:</b> In patients <b><i>without</i></b> underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), <b><u>one definitive</u></b> chest imaging test result is acceptable.</p> | <ul style="list-style-type: none"> <li>• Fever (<math>&gt;38^{\circ}\text{C}</math> or <math>&gt;100.4^{\circ}\text{F}</math>)</li> <li>• For adults <math>\geq 70</math> years old, altered mental status with no other recognized cause</li> <li>• New onset of purulent sputum or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements</li> <li>• New onset or worsening cough, or dyspnea, or tachypnea</li> <li>• Rales or bronchial breath sounds</li> <li>• Worsening gas exchange (for example: <math>\text{O}_2</math> desaturations [for example: <math>\text{PaO}_2/\text{FiO}_2 &lt; 240</math>], increased oxygen requirements, or increased ventilator demand)</li> <li>• Hemoptysis</li> <li>• Pleuritic chest pain</li> </ul> | <ul style="list-style-type: none"> <li>• Identification of matching <i>Candida</i> spp. from blood and one of the following: sputum, endotracheal aspirate, BAL or protected specimen brushing.</li> <li>• Evidence of fungi from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing) from one of the following: <ul style="list-style-type: none"> <li>– Direct microscopic exam</li> <li>– Positive culture of fungi</li> <li>– Non-culture diagnostic laboratory test</li> </ul> </li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Any of the following from:</li> </ul> <p><b>LABORATORY CRITERIA DEFINED UNDER PNU2</b></p> |

### VAP Algorithm ALTERNATE CRITERIA (PNU1), for infant's ≤ 1 year old:

| IMAGING TEST EVIDENCE  | SIGNS/SYMPTOMS/LABORATORY   |
|--|---|
| <p>Two or more serial chest imaging test results with at least <b>one</b> of the following:</p> <ul style="list-style-type: none"> <li>• New and persistent <b>or</b> progressive and persistent</li> <li>• Infiltrate</li> <li>• Consolidation</li> <li>• Cavitation</li> <li>• Pneumatocoeles, in infants ≤1-year-old</li> </ul> <p><b>NOTE:</b> In patients <b>without</b> underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.</p> | <p>Worsening gas exchange (for example: 2 desaturations [for example pulse oximetry &lt;94%], increased oxygen requirements, or increased ventilator demand)</p> <p>And at least <b>three</b> of the following:</p> <ul style="list-style-type: none"> <li>• Temperature instability</li> <li>• Leukopenia (≤4000 WBC/mm<sup>3</sup>) or leukocytosis (&gt;15,000 WBC/mm<sup>3</sup>) and left shift (&gt;10% band forms)</li> <li>• New onset of purulent sputum or change in character of sputum, or increased respiratory secretions or increased suctioning requirements</li> <li>• Apnea, tachypnea, nasal flaring with retraction of chest wall or nasal flaring with grunting</li> <li>• Wheezing, rales, or rhonchi</li> <li>• Cough</li> <li>• Bradycardia (&lt;100 beats/min) or tachycardia (&gt;170 beats/min)</li> </ul> |

### VAP Algorithm ALTERNATE CRITERIA (PNU1), for children > 1 year old or ≤ 12 years old:

| IMAGING TEST EVIDENCE  | SIGNS/SYMPTOMS/LABORATORY   |
|--|---|
| <p>Two or more serial chest imaging test results with at least <b>one</b> of the following:</p> <ul style="list-style-type: none"> <li>• New and persistent <b>or</b> progressive and persistent</li> <li>• Infiltrate</li> <li>• Consolidation</li> <li>• Cavitation</li> <li>• Pneumatocoeles, in infants ≤1-year-old</li> </ul> <p><b>NOTE:</b> In patients <b>without</b> underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.</p> | <p>ALTERNATE CRITERIA, for child &gt;1 year old or ≤12 years old, at least <b>three</b> of the following:</p> <ul style="list-style-type: none"> <li>• Fever (&gt;38.0°C or &gt;100.4°F) or hypothermia (&lt;36.0°C or &lt;96.8°F)</li> <li>• Leukopenia (≤4000 WBC/mm<sup>3</sup>) or leukocytosis (≥15,000 WBC/mm<sup>3</sup>)</li> <li>• New onset of purulent sputum or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements</li> <li>• New onset or worsening cough, or dyspnea, apnea, or tachypnea</li> <li>• Rales or bronchial breath sounds</li> <li>• Worsening gas exchange (for example: O<sub>2</sub> desaturations [for example pulse oximetry &lt;94%], increased oxygen requirements, or increased ventilator demand)</li> </ul> |



## ELEMENT VALUES

1. Yes
2. No

## ADDITIONAL INFORMATION

- Onset of symptoms began after arrival to your ED/hospital.
- A diagnosis of pneumonia must be documented in the patient's medical record.
- Consistent with the January 2019 CDC defined VAP.

## DATA SOURCE HIERARCHY GUIDE

1. History and Physical
2. Physician Notes/Flow Sheet
3. Progress Notes
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Triage/Trauma Flow Sheet
7. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20501   | 1     | Value is not a valid menu option   |
| 20503   | 2     | Element cannot be blank            |
| 20504   | 2     | Element cannot be "Not Applicable" |
| 20540   | 1     | Single Entry Max exceeded          |

## OUTCOME INFORMATION

## TOTAL ICU LENGTH OF STAY

### DESCRIPTION

The cumulative amount of time spent in the ICU. Each partial or full day should be measured as one calendar day.

### ELEMENT VALUES

- Relevant values for data element

### ADDITIONAL INFORMATION

- Reported in full day increments with any partial calendar day counted as a full calendar day.
- The calculation assumes that the date and time of starting and stopping an ICU episode are recorded in the patient's chart.
- At no time should the ICU LOS exceed the hospital LOS.
- The null value "Not Known/Not Recorded" is reported if any dates are missing.
- If patient has multiple ICU episodes on the same calendar day, count that day as one calendar day.
- The null value "Not Applicable" is reported if the patient had no ICU days according to the above description.

| Example #1 | Start Date | Start Time | Stop Date | Stop Time | LOS   |
|------------|------------|------------|-----------|-----------|---|
| A.         | 01/01/11   | 01:00      | 01/01/11  | 04:00     | 1 day (one calendar day)                                |
| B.         | 01/01/11   | 01:00      | 01/01/11  | 04:00     |   |
|            | 01/01/11   | 16:00      | 01/01/11  | 18:00     | 1 day (2 episodes within one calendar day)              |
| C.         | 01/01/11   | 01:00      | 01/01/11  | 04:00     |   |
|            | 01/02/11   | 16:00      | 01/02/11  | 18:00     | 2 days (episodes on 2 separate calendar days)           |
| D.         | 01/01/11   | 01:00      | 01/01/11  | 16:00     |   |
|            | 01/02/11   | 09:00      | 01/02/11  | 18:00     | 2 days (episodes on 2 separate calendar days)           |
| E.         | 01/01/11   | 01:00      | 01/01/11  | 16:00     |   |
|            | 01/02/11   | 09:00      | 01/02/11  | 21:00     | 2 days (episodes on 2 separate calendar days)           |
| F.         | 01/01/11   | Unknown    | 01/01/11  | 16:00     | 1 day   |
| G.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     | 2 days (patient was in ICU on 2 separate calendar days) |
| H.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     |   |
|            | 01/02/11   | 18:00      | 01/02/11  | Unknown   | 2 days (patient was in ICU on 2 separate calendar days) |
| I.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     |   |
|            | 01/02/11   | 18:00      | 01/02/11  | 20:00     | 2 days (patient was in ICU on 2 separate calendar days) |
| J.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     |   |
|            | 01/03/11   | 18:00      | 01/03/11  | 20:00     | 3 days (patient was in ICU on 3 separate calendar days) |
| K.         | Unknown    | Unknown    | 01/02/11  | 16:00     |   |
|            | 01/03/11   | 18:00      | 01/03/11  | 20:00     | Unknown (can't compute total)                           |

## DATA SOURCE HIERARCHY GUIDE

1. ICU Flow Sheet
2. Nursing Notes/Flow Sheet

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 7501    | 1     | Invalid value   |
| 7502    | 2     | Element cannot be blank   |
| 7503    | 2     | <i>Total ICU Length of Stay</i> is greater than the difference between <i>ED/Hospital Arrival Date</i> and <i>Hospital Discharge Date</i> |
| 7504    | 3     | The value is above 60   |
| 7505    | 2     | The value submitted falls outside the valid range of 1-575  |
| 7540    | 1     | Single Entry Max exceeded   |

## TOTAL VENTILATOR DAYS

### DESCRIPTION

The cumulative amount of time spent on the ventilator. Each partial or full day should be measured as one calendar day.

### ELEMENT VALUES

- Relevant values for data element

### ADDITIONAL INFORMATION

- Excludes mechanical ventilation time associated with OR procedures.
- Non-invasive means of ventilatory support (CPAP or BiPAP) should not be considered in the calculation of ventilator days.
- Reported in full day increments with any partial calendar day counted as a full calendar day.
- The calculation assumes that the date and time of starting and stopping ventilator episode are recorded in the patient's chart.
- At no time should the **Total Ventilator Days** exceed the hospital LOS.
- The null value "Not Known/Not Recorded" is reported if any dates are missing.
- The null value "Not Applicable" is reported if the patient was not on the ventilator according to the above description.

| Example #1 | Start Date | Start Time | Stop Date | Stop Time | LOS   |
|------------|------------|------------|-----------|-----------|---|
| A.         | 01/01/11   | 01:00      | 01/01/11  | 04:00     | 1 day (one calendar day)                                |
| B.         | 01/01/11   | 01:00      | 01/01/11  | 04:00     |   |
|            | 01/01/11   | 16:00      | 01/01/11  | 18:00     | 1 day (2 episodes within one calendar day)              |
| C.         | 01/01/11   | 01:00      | 01/01/11  | 04:00     |   |
|            | 01/02/11   | 16:00      | 01/02/11  | 18:00     | 2 days (episodes on 2 separate calendar days)           |
| D.         | 01/01/11   | 01:00      | 01/01/11  | 16:00     |   |
|            | 01/02/11   | 09:00      | 01/02/11  | 18:00     | 2 days (episodes on 2 separate calendar days)           |
| E.         | 01/01/11   | 01:00      | 01/01/11  | 16:00     |   |
|            | 01/02/11   | 09:00      | 01/02/11  | 21:00     | 2 days (episodes on 2 separate calendar days)           |
| F.         | 01/01/11   | Unknown    | 01/01/11  | 16:00     | 1 day   |
| G.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     | 2 days (patient was in ICU on 2 separate calendar days) |
| H.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     |   |
|            | 01/02/11   | 18:00      | 01/02/11  | Unknown   | 2 days (patient was in ICU on 2 separate calendar days) |
| I.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     |   |
|            | 01/02/11   | 18:00      | 01/02/11  | 20:00     | 2 days (patient was in ICU on 2 separate calendar days) |
| J.         | 01/01/11   | Unknown    | 01/02/11  | 16:00     |   |
|            | 01/03/11   | 18:00      | 01/03/11  | 20:00     | 3 days (patient was in ICU on 3 separate calendar days) |

## DATA SOURCE HIERARCHY GUIDE

1. Respiratory Therapy Notes/Flow Sheet
2. ICU Flow Sheet
3. Progress Notes

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 7601    | 1     | Invalid value  |
| 7602    | 2     | Element cannot be blank  |
| 7603    | 2     | <b>Total Ventilator Days</b> is greater than the difference between <b>ED/Hospital Arrival Date</b> and the latter of the known <b>ED Discharge Date</b> or <b>Hospital Discharge Date</b> |
| 7604    | 3     | The value is above 60  |
| 7605    | 2     | The value submitted falls outside the valid range of 1-575   |
| 7640    | 1     | Single Entry Max exceeded  |

# HOSPITAL DISCHARGE DISPOSITION

## DESCRIPTION

The disposition of the patient when discharged from the hospital.

## ELEMENT VALUES

1. Discharged/Transferred to a short-term general hospital for inpatient care
2. Discharged/Transferred to an Intermediate Care Facility (ICF)
3. Discharged/Transferred to home under care of organized home health service
4. Left against medical advice or discontinued care
5. Deceased/Expired
6. Discharged to home or self-care (routine discharge)
7. Discharged/Transferred to Skilled Nursing Facility (SNF)
8. Discharged/Transferred to hospice care
10. Discharged/Transferred to court/law enforcement.
11. Discharged/Transferred to inpatient rehab or designated unit
12. Discharged/Transferred to Long Term Care Hospital (LTCH)
13. Discharged/Transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital
14. Discharged/Transferred to another type of institution not defined elsewhere

## ADDITIONAL INFORMATION

- If multiple orders were written, report the final disposition order.
- *Element Values* based upon UB-04 disposition coding.
- *Element Value* "6. Home" refers to the patient's current place of residence (e.g., Prison, Child Protective Services etc.).
- Disposition to any other non-medical facility must be reported as *Element Value* "6. Discharged to home or self-care (routine discharge)."
- Disposition to any other medical facility must be reported as *Element Value* "14. Discharged/Transferred to another type of institution not defined elsewhere."
- The null value "Not Applicable" is reported if **ED Discharge Disposition** is reported as *Element Value* 4, 5, 6, 9, 10, or 11.
- Hospital Discharge Dispositions which were retired greater than 2 years before the current NTDS version are no longer listed under *Element Values* above, which is why there are numbering gaps. Refer to the NTDS Change Log for a full list of retired **Hospital Discharge Dispositions**.

## DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. Discharge Instructions
3. Nursing Notes/Flow Sheet
4. Case Management/Social Services Notes
5. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 7901    | 1     | Value is not a valid menu option   |
| 7902    | 2     | Element cannot be blank  |
| 7907    | 2     | Element must be and can only be "Not Applicable" when <b>ED Discharge Disposition</b> is 4, 5, 6, 9, 10, or 11 |
| 7909    | 2     | Element cannot be "Not Known/Not Recorded"   |
| 7940    | 1     | Single Entry Max exceeded  |

## OUTCOME INFORMATION

# HOSPITAL DISCHARGE DATE

## DESCRIPTION

The date the order was written for the patient to be discharged from the hospital.

## ELEMENT VALUES

- Relevant value for data element

## ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- The null value "Not Applicable" is reported if **ED Discharge Disposition** is 4, 5, 6, 9, 10, or 11.
- If **Hospital Discharge Disposition** is Element Value "5. Deceased/Expired," then **Hospital Discharge Date** is the date of death as indicated on the patient's death certificate.

## DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. Discharge Instructions
3. Nursing Notes/Flow Sheet
4. Case Management/Social Services Notes
5. Discharge Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 7701    | 1     | Date is not valid   |
| 7702    | 1     | Date out of range   |
| 7703    | 2     | Element cannot be blank   |
| 7707    | 2     | <b>Hospital Discharge Date</b> cannot be earlier than <b>ED/Hospital Arrival Date</b>                           |
| 7708    | 2     | <b>Hospital Discharge Date</b> cannot be earlier than <b>ED Discharge Date</b>                                  |
| 7711    | 3     | <b>Hospital Discharge Date</b> occurs more than 365 days after <b>ED/Hospital Arrival Date</b>                  |
| 7713    | 2     | Element must be and can only be "Not Applicable" when <b>Hospital Discharge Disposition</b> is "Not Applicable" |
| 7714    | 3     | <b>Hospital Discharge Date</b> is earlier than <b>Injury Incident Date</b>                                      |
| 7715    | 2     | <b>Hospital Discharge Date</b> is earlier than <b>Hospital Procedure Start Date</b>                             |
| 7716    | 2     | <b>Hospital Discharge Date</b> is earlier than <b>Cerebral Monitor Date</b>                                     |
| 7717    | 2     | <b>Hospital Discharge Date</b> is earlier than <b>Venous Thromboembolism Prophylaxis Date</b>                   |
| 7718    | 2     | <b>Hospital Discharge Date</b> is earlier than <b>Angiography Date</b>  |
| 7719    | 2     | <b>Hospital Discharge Date</b> is earlier than <b>Surgery for Hemorrhage Control Date</b>                       |
| 7720    | 2     | <b>Hospital Discharge Date</b> cannot be earlier than <b>Withdrawal of Life Supporting Treatment Date</b>       |
| 7721    | 3     | <b>Hospital Discharge Date</b> is earlier than <b>Antibiotic Therapy Date</b>                                   |
| 7740    | 1     | Single Entry Max exceeded   |



## HOSPITAL DISCHARGE TIME

### DESCRIPTION

The time the order was written for the patient to be discharged from the hospital.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- The null value "Not Applicable" is reported if **ED Discharge Disposition** is 4, 5, 6, 9, 10, or 11.
- If **Hospital Discharge Disposition** is Element Value "5. Deceased/Expired," then **Hospital Discharge Time** is the time of death as indicated on the patient's death certificate.

### DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. Discharge Instructions
3. Nursing Notes/Flow Sheet
4. Case Management/Social Services Notes
5. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 7801    | 1     | Time is not valid   |
| 7802    | 1     | Time out of range   |
| 7803    | 2     | Element cannot be blank   |
| 7807    | 2     | <b>Hospital Discharge Time</b> cannot be earlier than <b>ED/Hospital Arrival Time</b>                     |
| 7808    | 2     | <b>Hospital Discharge Time</b> cannot be earlier than or equal to <b>ED Discharge Time</b>                |
| 7810    | 2     | Element must be and can only be "Not Applicable" when <b>Hospital Discharge Date</b> is "Not Applicable"  |
| 7811    | 2     | Element must be "Not Known/Not Recorded" when <b>Hospital Discharge Date</b> is "Not Known/Not Recorded"  |
| 7812    | 3     | <b>Hospital Discharge Time</b> is earlier than <b>Injury Incident Time</b>                                |
| 7813    | 2     | <b>Hospital Discharge Time</b> is earlier than <b>Hospital Procedure Start Time</b>                       |
| 7814    | 2     | <b>Hospital Discharge Time</b> is earlier than <b>Cerebral Monitor Time</b>                               |
| 7815    | 2     | <b>Hospital Discharge Time</b> is earlier than <b>Venous Thromboembolism Prophylaxis Time</b>             |
| 7816    | 2     | <b>Hospital Discharge Time</b> is earlier than <b>Angiography Time</b>                                    |
| 7817    | 2     | <b>Hospital Discharge Time</b> is earlier than <b>Surgery for Hemorrhage Control Time</b>                 |
| 7818    | 2     | <b>Hospital Discharge Time</b> cannot be earlier than <b>Withdrawal of Life Supporting Treatment Time</b> |
| 7819    | 3     | <b>Hospital Discharge Time</b> is earlier than <b>Antibiotic Therapy Time</b>                             |
| 7840    | 1     | Single Entry Max exceeded   |

## FINANCIAL INFORMATION

## PRIMARY METHOD OF PAYMENT

### DESCRIPTION

Primary source of payment for hospital care.

### ELEMENT VALUES

- |                                 |                     |
|---------------------------------|---------------------|
| 1. Medicaid                     | 6. Medicare         |
| 2. Not Billed (for any reason)  | 7. Other Government |
| 3. Self-Pay                     | 10. Other           |
| 4. Private/Commercial Insurance |                     |

### ADDITIONAL INFORMATION

- No Fault Automobile, Workers Compensation, and Blue Cross/Blue Shield should be reported as *Element Value* "4. Private/Commercial Insurance."
- Primary methods of payments which were retired greater than 2 years before the current NTDS version are no longer listed under *Element Values*. Refer to the NTDS Change Log for a full list of retired **Primary Methods of Payments**.

### DATA SOURCE HIERARCHY GUIDE

1. Billing Sheet
2. Admission Form
3. Face Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 8001    | 1     | Value is not a valid menu option   |
| 8002    | 2     | Element cannot be blank            |
| 8003    | 2     | Element cannot be "Not Applicable" |
| 8040    | 1     | Single Entry Max exceeded          |

# **TRAUMA QUALITY IMPROVEMENT PROGRAM MEASURES FOR PROCESSES OF CARE**

\*The elements in this section must be reported and transmitted by Level 1 and Level 2 TQIP participating centers only. \*

Please contact us at [TraumaQuality@facs.org](mailto:TraumaQuality@facs.org) for information about joining TQIP.

## HIGHEST GCS TOTAL

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Highest total GCS score on calendar day after ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Refers to highest total GCS score on calendar day after ED/hospital arrival to index hospital, where index hospital is the hospital abstracting the data.
- Requires review of all data sources to obtain the highest GCS total on the calendar day after ED/hospital arrival.
- If patient is intubated then the GCS Verbal is equal to 1.
- Best obtained when sedatives or paralytics are withheld as part of sedation holiday.
- If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as "AAOx3," "awake alert and oriented," or "patient with normal mental status," report this as GCS of 15 IF there is no other contradicting documentation.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- The null value "Not Known/Not Recorded" is reported if reporting **Highest GCS-40 Motor**.
- If reporting **Highest GCS Total**, the null value "Not Applicable" is reported if the patient is discharged from your hospital prior to the next calendar day.

### DATA SOURCE HIERARCHY GUIDE

1. Neurology Assessment Flow Sheet
2. Triage/Trauma /ICU Flow Sheet
3. Nursing Notes/Flow Sheet
4. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 10001   | 1     | GCS Total is outside the valid range of 3 - 15  |
| 10002   | 2     | Element cannot be blank   |
| 10003   | 2     | <b>Highest GCS Total</b> is less than GCS Motor Component of <b>Highest GCS Total</b>   |
| 10004   | 2     | Element must be "Not Applicable" as the AIS codes provided do not meet the reporting criterion  |
| 10005   | 2     | Element must not be "Not Applicable" as the AIS codes provided meet the reporting criterion, unless the patients <b>ED Discharge Date</b> or <b>Hospital Discharge Date</b> is prior to the next calendar day |
| 10006   | 2     | Element must be "Not Known/Not Recorded" when <b>Highest GCS-40 Motor</b> is reported.  |
| 10007   | 1     | Invalid Value   |
| 10008   | 2     | Element must be "Not Applicable" as the patient was discharged on the same date as <b>ED/Hospital Arrival Date</b>  |
| 10040   | 1     | Single Entry Max exceeded   |

## HIGHEST GCS MOTOR

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Highest GCS motor on calendar day after ED/hospital arrival.

### ELEMENT VALUES

#### Pediatric ( $\leq 2$ years):

- |                      |  |
|----------------------|--|
| 1. No motor response | 4. Withdrawal from pain                |
| 2. Extension to pain | 5. Localizing pain                     |
| 3. Flexion to pain   | 6. Appropriate response to stimulation |

#### Adult:

- |                      |                         |
|----------------------|-------------------------|
| 1. No motor response | 4. Withdrawal from pain |
| 2. Extension to pain | 5. Localizing pain      |
| 3. Flexion to pain   | 6. Obeys commands       |

### ADDITIONAL INFORMATION

- Refers to highest GCS motor on calendar day after arrival to index hospital, where index hospital is the hospital abstracting the data.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- Requires review of all data sources to obtain the highest GCS motor on calendar day after ED/hospital arrival.
- Best obtained when sedatives or paralytics are withheld as part of sedation holiday.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be reported. For example, the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be reported, IF there is no other contradicting documentation.
- The null value "Not Known/Not Recorded" is reported if reporting **Highest GCS-40 Motor**.
- If reporting **Highest GCS Motor**, the null value "Not Applicable" is reported if the patient is discharged from your hospital prior to the next calendar day.

### DATA SOURCE HIERARCHY GUIDE

1. Neurology Assessment Flow Sheet
2. Triage/Trauma /ICU Flow Sheet
3. Nursing Notes/Flow Sheet
4. Progress Notes

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 10101   | 1     | Value is not a valid menu option  |
| 10102   | 2     | Element cannot be blank   |
| 10104   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion  |
| 10105   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion, unless the patients <b>ED Discharge Date</b> or <b>Hospital Discharge Date</b> is prior to the next calendar day |
| 10106   | 2     | Element must be “Not Known/Not Recorded” when <b>Highest GCS-40 Motor</b> is reported   |
| 10107   | 2     | Element must be “Not Applicable” as the patient was discharged on the same date as <b>ED/Hospital Arrival Date</b>  |
| 10140   | 1     | Single Entry Max exceeded   |

## GCS ASSESSMENT QUALIFIER COMPONENT OF HIGHEST GCS TOTAL

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Documentation of factors potentially affecting the highest GCS on calendar day after ED/hospital arrival.

### ELEMENT VALUES

- |  |  |
|--|--|
| 1. Patient chemically sedated or paralyzed | 4. Valid GCS: patient was not sedated, not |
| 2. Obstruction to the patient's eye        | intubated, and did not have obstruction to |
| 3. Patient intubated                       | the eye                                    |

### ADDITIONAL INFORMATION

- Report all that apply.
- Refers to highest GCS assessment qualifier score on calendar day after ED/hospital arrival to index hospital, where index hospital is the hospital abstracting the data.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- Requires review of all data sources to obtain the highest GCS motor score on calendar day after ED/hospital arrival, which might occur after the ED phase of care.
- Identifies medical treatments given to the patient that may affect the best assessment of GCS. This element does not apply to self-medication the patient may have administered (i.e. ETOH, prescriptions, etc.).
- Must be the assessment qualifier for the **Highest GCS Total** on calendar day after ED/hospital arrival.
- If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier must be reported.
- Neuromuscular blockade is typically induced following the administration of agents like succinylcholine, mivacurium, rocuronium, (cis)atracurium, vecuronium, or pancuronium. While these are the most common agents, please review what might be typically used in your center so it can be identified in the medical record.
- Each of these agents has a slightly different duration of action, so their effect on the GCS depends on when they were given. For example, succinylcholine's effects last for only 5-10 minutes.
- The null value "Not Known/Not Recorded" is reported if reporting **Highest GCS-40 Motor**.
- If reporting **GCS Assessment Qualifier Component of Highest GCS Total**, the null value "Not Applicable" is reported if the patient is discharged from your hospital prior to the next calendar day.



## DATA SOURCE HIERARCHY GUIDE

1. Neurology Assessment Flow Sheet
2. Triage/Trauma/ICU Flow Sheet
3. Nursing Notes/Flow Sheet
4. Progress Notes
5. Medication Summary

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 10201   | 1     | Value is not a valid menu option  |
| 10202   | 2     | Element cannot be blank   |
| 10203   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion  |
| 10204   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion, unless the patients <b>ED Discharge Date</b> or <b>Hospital Discharge Date</b> is prior to the next calendar day |
| 10206   | 2     | Element must be “Not Known/Not Recorded” when <b>Highest GCS-40 Motor</b> is reported.  |
| 10207   | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value   |
| 10208   | 2     | Element must be “Not Applicable” as the patient was discharged on the same date as <b>ED/Hospital Arrival Date</b>  |
| 10250   | 1     | Multiple Entry Max exceeded   |

## HIGHEST GCS-40 MOTOR

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Highest GCS-40 motor on calendar day after ED/hospital arrival.

### ELEMENT VALUES

#### Pediatric < 5 years:

- |                      |                    |
|----------------------|--------------------|
| 0. Not Testable      |                    |
| 1. No motor response | 4. Localizing pain |
| 2. Extension to pain | 5. Obeys commands  |
| 3. Flexion to pain   |                    |

#### Adult:

- |                     |                   |
|---------------------|-------------------|
| 0. Not Testable     |                   |
| 1. None             | 4. Normal Flexion |
| 2. Extension        | 5. Localizing     |
| 3. Abnormal Flexion | 6. Obeys commands |

### ADDITIONAL INFORMATION

- Refers to highest GCS-40 motor on calendar day after arrival to index hospital, where index hospital is the hospital abstracting the data.
- Requires review of all data sources to obtain the **Highest GCS-40 Motor** score on the calendar day after ED/Hospital arrival.
- If a patient does not have a numeric GCS-40 score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be reported. (E.g. the chart indicates: "patient opened mouth and stuck out tongue when asked" for adult patient's, a Motor GCS-40 of 6 may be reported, IF there is no other contradicting documentation).
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- Report *Element Value* "0. Not Testable" if unable to assess (e.g. neuromuscular blockade).
- The null value "Not Known/Not Recorded" is reported if **Highest GCS – Motor** is reported.
- If reporting **Highest GCS-40 Motor**, the null value "Not Applicable" is reported if the patient is discharged from your hospital prior to the next calendar day.

### DATA SOURCE HIERARCHY GUIDE

1. Neurology Assessment Flow Sheet
2. Triage/Trauma /ICU Flow Sheet
3. Nursing Notes/Flow Sheet
4. Progress Notes

## ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 20601   | 1     | Value is not a valid menu option  |
| 20602   | 2     | Element cannot be blank   |
| 20604   | 2     | Element must be "Not Applicable" as the AIS codes provided do not meet the reporting criterion  |
| 20605   | 2     | Element must not be "Not Applicable" as the AIS codes provided meet the reporting criterion, unless the patients <b>ED Discharge Date</b> or <b>Hospital Discharge Date</b> is prior to the next calendar day |
| 20606   | 2     | Element must be "Not Known/Not Recorded" when <b>Highest GCS - Motor</b> is reported  |
| 20607   | 2     | Element must be "Not Applicable" as the patient was discharged on the same date as <b>ED/Hospital Arrival Date</b>  |
| 20608   | 2     | If patient age is less than 5, <i>Element Value</i> 6 is not a valid menu option  |
| 20640   | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL PUPILLARY RESPONSE

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Physiological response of the pupil size within 30 minutes or less of ED/hospital arrival.

### ELEMENT VALUES

1. Both reactive
2. One reactive
3. Neither reactive

### ADDITIONAL INFORMATION

- Please note that first recorded hospital vitals do not need to be from the same assessment.
- If a patient does not have a listed element value recorded, but there is documentation related to their pupillary response such as Pupils Equal Round Reactive to Light (PERRL) report *Element Value* "1. Both reactive" IF there is no other contradicting documentation.
- The null value "Not Known/Not Recorded" must be reported if this information is not documented or if assessment is unable to be obtained due to facial trauma and/or foreign object in the eye.
- *Element Value* "2. One reactive" must be reported for patients who have a prosthetic eye.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

### DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma Flow Sheet
2. Nursing Notes/Flow Sheet
3. Progress Notes
4. History and Physical

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 13601   | 1     | Value is not a valid menu option   |
| 13602   | 2     | Element cannot be blank  |
| 13603   | 2     | Element must be "Not Applicable" as the AIS codes provided do not meet the reporting criterion |
| 13604   | 2     | Element must not be "Not Applicable" as the AIS codes provided meet the reporting criterion    |
| 13640   | 1     | Single Entry Max exceeded  |

## MIDLINE SHIFT

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

>5mm shift of the brain past its center line within 24-hours after time of injury.

### ELEMENT VALUES

1. Yes
2. No
3. Not Imaged (e.g. CT Scan, MRI)

### ADDITIONAL INFORMATION

- If there is documentation of "massive" midline shift in lieu of >5mm shift measurement, report *Element Value* "1. Yes."
- Radiological and surgical documentation from transferring facilities should be considered for this data element.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- The null value "Not Known/Not Recorded" is reported if both the injury date and injury time are unknown.
- If the injury time is unknown, but there is supporting documentation that the injury occurred within 24-hours of any CT measuring a >5mm shift, report the *Element Value* "1. Yes" if there is no other contradicting documentation.
- If the patient was not imaged within 24 hours from the time of injury, report the *Element Value* "3. Not Imaged (e.g. CT Scan, MRI)."

### DATA SOURCE HIERARCHY GUIDE

1. Radiology Reports
2. Operative Reports
3. Physician Notes/Flow Sheet
4. Nursing Notes/Flow Sheet
5. Hospital Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 13701   | 1     | Value is not a valid menu option   |
| 13702   | 2     | Element cannot be blank  |
| 13703   | 2     | Element must be "Not Applicable" as the AIS codes provided do not meet the reporting criterion |
| 13704   | 2     | Element must not be "Not Applicable" as the AIS codes provided meet the reporting criterion    |
| 13740   | 1     | Single Entry Max exceeded  |

## CEREBRAL MONITOR

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Indicate all cerebral monitors that were placed, including any of the following: ventriculostomy, subarachnoid bolt, camino bolt, external ventricular drain (EVD), licox monitor, jugular venous bulb.

### ELEMENT VALUES

- |   |   |
|---|---|
| 1. Intraventricular drain/catheter (e.g. ventriculostomy; external ventricular drain)                 | 3. Intraparenchymal oxygen monitor (e.g. Licox) |
| 2. Intraparenchymal pressure monitor (e.g. Camino bolt, subarachnoid bolt, intraparenchymal catheter) | 4. Jugular venous bulb                          |
|   | 5. None   |

### ADDITIONAL INFORMATION

- Report all that apply.
- Refers to insertion of an intracranial pressure (ICP) monitor (or other measures of cerebral perfusion) for the purposes of managing severe TBI.
- Cerebral monitor placed at a referring facility would be acceptable if such a monitor was used by receiving facility to monitor the patient.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Procedure Notes
3. Triage/Trauma/ICU Flow Sheet
4. Nursing Notes/Flow Sheet
5. Progress Notes
6. Anesthesia Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 10301   | 1     | Value is not a valid menu option   |
| 10302   | 2     | Element cannot be blank  |
| 10304   | 2     | Element must be "Not Applicable" as the AIS codes provided do not meet the reporting criterion   |
| 10305   | 2     | Element must not be "Not Applicable" as the AIS codes provided meet the reporting criterion  |
| 10306   | 2     | Element cannot be "Not Applicable", "Not Known/Not Recorded", or <i>Element Value</i> "5. None" along with <i>Element Values</i> 1, 2, 3, and/or 4 |
| 10350   | 1     | Multiple Entry Max exceeded  |

## CEREBRAL MONITOR DATE

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Date of first cerebral monitor placement.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- The null value "Not Applicable" is reported if *Cerebral Monitor* is *Element Value* "5. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- If the cerebral monitor was placed at the referring facility, ***Cerebral Monitor Date*** must be the date of insertion at the referring facility.

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Procedure Notes
3. Triage/Trauma/ICU Flow Sheet
4. Nursing Notes/Flow Sheet
5. Progress Notes
6. Anesthesia Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 10401   | 1     | Date is not valid  |
| 10402   | 2     | Element cannot be blank  |
| 10403   | 1     | Date out of range  |
| 10405   | 3     | Element should not be "Not Known/Not Recorded" when <i>Cerebral Monitor</i> is <i>Element Values</i> 1, 2, 3, and/or 4                                     |
| 10407   | 3     | <b><i>Cerebral Monitor Date</i></b> should not be earlier than <i>ED/Hospital Arrival Date</i> unless placed at referring facility and used for monitoring |
| 10409   | 2     | Element must be and can only be "Not Applicable" when <i>Cerebral Monitor</i> is "Not Applicable" or <i>Element Value</i> "5. None"                        |
| 10410   | 2     | Element must be "Not Known/Not Recorded" when <i>Cerebral Monitor</i> is "Not Known/Not Recorded"  |
| 10440   | 1     | Single Entry Max exceeded  |

## CEREBRAL MONITOR TIME

**REPORTING CRITERION:** Report 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).

### DESCRIPTION

Time of first cerebral monitor placement.

### ELEMENT VALUES

- Relevant values for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- The null value "Not Applicable" is reported if **Cerebral Monitor** is *Element Value* "5. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- If the cerebral monitor was placed at the referring facility, **Cerebral Monitor Time** must be the time of insertion at the referring facility.

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Procedure Notes
3. Triage/Trauma/ICU Flow Sheet
4. Nursing Notes/Flow Sheet
5. Progress Notes
6. Anesthesia Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 10501   | 1     | Time is not valid   |
| 10502   | 1     | Time out of range   |
| 10503   | 2     | Element cannot be blank   |
| 10505   | 3     | Element should not be "Not Known/Not Recorded" when <b>Cerebral Monitor</b> is <i>Element Values</i> 1, 2, 3, and/or 4                              |
| 10506   | 3     | <b>Cerebral Monitor Time</b> should not be earlier than <b>ED/Hospital Arrival Time</b> unless placed at referring facility and used for monitoring |
| 10509   | 2     | Element must be and can only be "Not Applicable" when <b>Cerebral Monitor Date</b> is "Not Applicable"  |
| 10510   | 2     | Element must be "Not Known/Not Recorded" when <b>Cerebral Monitor Date</b> is "Not Known/Not Recorded"  |
| 10540   | 1     | Single Entry Max exceeded   |



## VENOUS THROMBOEMBOLISM PROPHYLAXIS TYPE

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Type of first dose of venous thromboembolism prophylaxis administered to patient at your hospital.

### EXCLUDE:

- Sequential compression devices

### ELEMENT VALUES

- |   |                                     |
|---|-------------------------------------|
| 5. None   | 8. Xa Inhibitor (Rivaroxaban, etc.) |
| 6. LMWH (Dalteparin, Enoxaparin, etc.)          | 10. Other                           |
| 7. Direct Thrombin Inhibitor (Dabigatran, etc.) | 11. Unfractionated Heparin (UH)     |

### ADDITIONAL INFORMATION

- *Element Value "5. None"* is reported if the first dose of venous thromboembolism prophylaxis is administered post discharge order date/time.
- *Element Value "5. None"* is reported if the patient refuses venous thromboembolism prophylaxis.
- *Element Value "10. Other"* is reported if "Coumadin" and/or "aspirin" are given as venous thromboembolism prophylaxis.
- Venous Thromboembolism Prophylaxis Types which were retired greater than 2 years before the current NTDS version are no longer listed under *Element Values* above, which is why there are numbering gaps. Refer to the NTDS Change Log for a full list of retired **Venous Thromboembolism Prophylaxis Types**.

### DATA SOURCE HIERARCHY GUIDE

1. Medication Summary
2. Nursing Notes/Flow Sheet
3. Pharmacy Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 10601   | 1     | Value is not a valid menu option   |
| 10602   | 2     | Element cannot be blank            |
| 10603   | 2     | Element cannot be "Not Applicable" |
| 10640   | 1     | Single Entry Max exceeded          |

## VENOUS THROMBOEMBOLISM PROPHYLAXIS DATE

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Date of administration of first dose of venous thromboembolism prophylaxis administered to patient at your hospital.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- Refers to date upon which patient first received the prophylactic agent indicated in *Venous Thromboembolism Prophylaxis Type*.
- The null value "Not Applicable" is reported if *Venous Thromboembolism Prophylaxis Type* is *Element Value* "5. None."

### DATA SOURCE HIERARCHY GUIDE

1. Medication Summary
2. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 10701   | 1     | Date is not valid  |
| 10702   | 1     | Date out of range  |
| 10703   | 2     | Element cannot be blank  |
| 10706   | 2     | <i>Venous Thromboembolism Prophylaxis Date</i> is earlier than <i>ED/Hospital Arrival Date</i>   |
| 10708   | 2     | Element must be and can only be "Not Applicable" when <i>Venous Thromboembolism Prophylaxis Type</i> is <i>Element Value</i> "5. None" |
| 10709   | 2     | Element must be "Not Known/Not Recorded" when <i>Venous Thromboembolism Prophylaxis Type</i> is "Not Known/Not Recorded"               |
| 10740   | 1     | Single Entry Max exceeded  |

## VENOUS THROMBOEMBOLISM PROPHYLAXIS TIME

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Time of administration of first dose of venous thromboembolism prophylaxis administered to patient at your hospital

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- Refers to time at which patient first received the prophylactic agent indicated in *Venous Thromboembolism Prophylaxis Type*.
- The null value "Not Applicable" is reported if *Venous Thromboembolism Prophylaxis Type* is *Element Value* "5. None."

### DATA SOURCE HIERARCHY GUIDE

1. Medication Summary
2. Nursing Notes/Flow Sheet

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 10801   | 1     | Time is not valid  |
| 10802   | 1     | Time out of range  |
| 10803   | 2     | Element cannot be blank  |
| 10806   | 2     | <i>Venous Thromboembolism Prophylaxis Time</i> is earlier than <i>ED/Hospital Arrival Time</i>                           |
| 10809   | 2     | Element must be and can only be "Not Applicable" when <i>Venous Thromboembolism Prophylaxis Date</i> is "Not Applicable" |
| 10810   | 2     | Element must be "Not Known/Not Recorded" when <i>Venous Thromboembolism Prophylaxis Date</i> is "Not Known/Not Recorded" |
| 10840   | 1     | Single Entry Max exceeded  |

## PACKED RED BLOOD CELLS

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Volume of packed red blood cells transfused (CCs [mLs]) within first 4 hours after ED/hospital arrival.

### EXCLUDE:

- Packed red blood cells transfusing upon patient arrival.
- Cell saver blood.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Refers to amount of transfused packed red blood cells (CCs [mLs]) within first 4 hours after arrival to your hospital.
- If no packed red blood cells were given, then volume reported must be 0 (zero).

### DATA SOURCE HIERARCHY GUIDE

1. Trauma Flow Sheet
2. Anesthesia Record
3. Operative Reports
4. Nursing Notes/Flow Sheet
5. Blood Bank

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21801   | 1     | Invalid value                      |
| 21802   | 2     | Element cannot be blank            |
| 21803   | 2     | Element cannot be "Not Applicable" |
| 21804   | 3     | Value exceeds 40,000 for CCs       |
| 21840   | 1     | Single Entry Max exceeded          |

## WHOLE BLOOD

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Volume of whole blood transfused (CCs [mLs]) within first 4 hours after ED/hospital arrival.

### EXCLUDE:

- Packed red blood cells transfusing upon patient arrival.
- Cell saver blood.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Refers to amount of transfused whole blood (CCs [mLs]) within first 4 hours after arrival to your hospital.
- If no whole blood was given, then volume reported must be 0 (zero).

### DATA SOURCE HIERARCHY GUIDE

1. Trauma Flow Sheet
2. Anesthesia Record
3. Operative Reports
4. Nursing Notes/Flow Sheet
5. Blood Bank

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21101   | 1     | Invalid value                      |
| 21102   | 2     | Element cannot be blank            |
| 21103   | 2     | Element cannot be "Not Applicable" |
| 21104   | 3     | Value exceeds 40,000 for CCs       |
| 21140   | 1     | Single Entry Max exceeded          |

## PLASMA

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Volume of plasma (CCs [mLs]) transfused within first 4 hours after ED/hospital arrival.

### EXCLUDE:

- Packed red blood cells transfusing upon patient arrival.
- Cell saver blood.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Refers to amount of transfused fresh frozen, thawed, or never frozen plasma (CCs[mLs]) within first 4 hours after arrival to your hospital.
- If no plasma was given, then volume reported must be 0 (zero).

### DATA SOURCE HIERARCHY GUIDE

1. Trauma Flow Sheet
2. Anesthesia Record
3. Operative Reports
4. Nursing Notes/Flow Sheet
5. Blood Bank

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21201   | 1     | Invalid value                      |
| 21202   | 2     | Element cannot be blank            |
| 21204   | 3     | Value exceeds 40,000 for CCs       |
| 21208   | 2     | Element cannot be "Not Applicable" |
| 21240   | 1     | Single Entry Max exceeded          |

## PLATELETS

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Volume of platelets (CCs [mLs]) transfused within first 4 hours after ED/hospital arrival.

### EXCLUDE:

- Packed red blood cells transfusing upon patient arrival.
- Cell saver blood.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Refers to amount of transfused platelets (CCs [mLs]) within first 4 hours after arrival to your hospital.
- If no platelets were given, then volume reported must be 0 (zero).

### DATA SOURCE HIERARCHY GUIDE

1. Trauma Flow Sheet
2. Anesthesia Record
3. Operative Reports
4. Nursing Notes/Flow Sheet
5. Blood Bank

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21301   | 1     | Invalid value                      |
| 21302   | 2     | Element cannot be blank            |
| 21304   | 3     | Value exceeds 40,000 for CCs       |
| 21308   | 2     | Element cannot be "Not Applicable" |
| 21340   | 1     | Single Entry Max exceeded          |

## CRYOPRECIPITATE

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Volume of solution enriched with clotting factors transfused (CCs [mLs]) within first 4 hours after ED/hospital arrival.

### EXCLUDE:

- Packed red blood cells transfusing upon patient arrival.
- Cell saver blood.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Refers to amount of transfused cryoprecipitate (CCs [mLs]) within first 4 hours after arrival to your hospital.
- If no cryoprecipitate was given, then volume reported must be 0 (zero).

### DATA SOURCE HIERARCHY GUIDE

1. Trauma Flow Sheet
2. Anesthesia Record
3. Operative Reports
4. Nursing Notes/Flow Sheet
5. Blood Bank

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21401   | 1     | Invalid value                      |
| 21402   | 2     | Element cannot be blank            |
| 21404   | 3     | Value exceeds 40,000 for CCs       |
| 21408   | 2     | Element cannot be "Not Applicable" |
| 21440   | 1     | Single Entry Max exceeded          |



## ANGIOGRAPHY

**REPORTING CRITERION:** Report on all patient with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

### DESCRIPTION

First interventional angiogram for hemorrhage control within first 24 hours of ED/hospital arrival.

### EXCLUDE:

- Computerized Tomographic Angiography (CTA).

### ELEMENT VALUES

1. None
2. Angiogram only
3. Angiogram with embolization
4. Angiogram with stenting

### ADDITIONAL INFORMATION

- Limit reporting angiography data to the first 24 hours following ED/hospital arrival.
- Only report *Element Value* "4. Angiogram with stenting" if stenting was performed specifically for hemorrhage control.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

### DATA SOURCE HIERARCHY GUIDE

1. Radiology Reports
2. Operative Reports
3. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 11701   | 1     | Invalid value   |
| 11702   | 2     | Element cannot be blank   |
| 11704   | 2     | Element must be and can only be "Not Applicable" when <i>Packed Red Blood Cells</i> and <i>Whole Blood</i> are 0                |
| 11705   | 2     | Element must be "Not Known/Not Recorded" when <i>Packed Red Blood Cells</i> and <i>Whole Blood</i> are "Not Known/Not Recorded" |
| 11740   | 1     | Single Entry Max exceeded   |

## EMBOLIZATION SITE

**REPORTING CRITERION:** Report on all patient with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

### DESCRIPTION

Organ/site of embolization for hemorrhage control.

### ELEMENT VALUES

- |                                       |  |
|---------------------------------------|--|
| 1. Liver                              | 5. Retroperitoneum (lumbar, sacral)        |
| 2. Spleen                             | 6. Peripheral vascular (neck, extremities) |
| 3. Kidneys                            | 8. Other                                   |
| 4. Pelvic (iliac, gluteal, obturator) |  |

### ADDITIONAL INFORMATION

- Report all that apply.
- The null value "Not Applicable" is reported if **Angiography** is *Element Value* "1. None," "2. Angiogram only," or "4. Angiogram with stenting."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- Embolization Sites which were retired greater than 2 years before the current NTDS version are no longer listed under *Element Values* above, which is why there are numbering gaps. Refer to the NTDS Change Log for a full list of retired **Embolization Sites**.

### DATA SOURCE HIERARCHY GUIDE

1. Radiology Reports
2. Operative Reports
3. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 11801   | 1     | Value is not a valid menu option   |
| 11802   | 2     | Element cannot be blank  |
| 11804   | 2     | Element must be and can only be "Not Applicable" when <b>Angiography</b> is "Not Applicable" or <i>Element Value</i> "1. None", "2. Angiogram only", or "4. Angiogram with stenting" |
| 11805   | 2     | Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other value  |
| 11850   | 1     | Multiple Entry Max exceeded  |

## ANGIOGRAPHY DATE

**REPORTING CRITERION:** Report on all patient with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

### DESCRIPTION

Date the first angiogram with or without embolization was performed.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- Procedure start date is the date of needle insertion in the groin.
- The null value "Not Applicable" is reported if the data element *Angiography* is *Element Value* "1. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

### DATA SOURCE HIERARCHY GUIDE

1. Radiology Reports
2. Operative Reports
3. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 11901   | 1     | Date is not valid  |
| 11902   | 1     | Date out of range  |
| 11903   | 2     | Element cannot be blank  |
| 11905   | 2     | Element must be and can only be "Not Applicable" when <i>Angiography</i> is "Not Applicable" or <i>Element Value</i> "1. None" |
| 11906   | 2     | <i>Angiography Date</i> is earlier than <i>ED/Hospital Arrival Date</i>  |
| 11908   | 2     | <i>Angiography Date</i> occurs more than 24 hours after <i>ED Hospital Arrival Date</i>  |
| 11909   | 2     | Element must be "Not Known/Not Recorded" when <i>Angiography</i> is "Not Known/Not Recorded"                                   |
| 11940   | 1     | Single Entry Max exceeded  |

## ANGIOGRAPHY TIME

**REPORTING CRITERION:** Report on all patient with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

### DESCRIPTION

Time the first angiogram with or without embolization was performed.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- Procedure start date is the date of needle insertion in the groin.
- The null value "Not Applicable" is reported if the data element **Angiography** is *Element Value* "1. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

### DATA SOURCE HIERARCHY GUIDE

1. Radiology Reports
2. Operative Reports
3. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 12001   | 1     | Time is not valid   |
| 12002   | 1     | Time out of range   |
| 12003   | 2     | Element cannot be blank   |
| 12004   | 2     | Element cannot be "Not Applicable" when <b>Angiography</b> is <i>Element Value</i> "2. Angiogram only," "3. Angiogram with embolization," or "4. Angiogram with stenting" |
| 12005   | 2     | Element must be and can only be "Not Applicable" when <b>Angiography</b> is "Not Applicable" or <i>Element Value</i> "1. None"  |
| 12006   | 2     | <b>Angiography Time</b> is earlier than <b>ED/Hospital Arrival Time</b>   |
| 12008   | 2     | <b>Angiography Time</b> occurs more than 24 hours after <b>ED/Hospital Arrival Time</b>   |
| 12009   | 2     | Element must be "Not Known/Not Recorded" when <b>Angiography Date</b> is "Not Known/Not Recorded"   |
| 12040   | 1     | Single Entry Max exceeded   |

## SURGERY FOR HEMORRHAGE CONTROL TYPE

**REPORTING CRITERION:** Report on all patient with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

### DESCRIPTION

First type of surgery for hemorrhage control within the first 24 hours of ED/hospital arrival.

### ELEMENT VALUES

- |                |   |
|----------------|---|
| 1. None        | 6. Neck   |
| 2. Laparotomy  | 7. Mangled extremity/traumatic amputation         |
| 3. Thoracotomy | 8. Other skin/soft tissue (e.g. scalp laceration) |
| 4. Sternotomy  | 9. Extrapertitoneal Pelvic Packing                |
| 5. Extremity   |   |

### ADDITIONAL INFORMATION

- If unclear if surgery was for hemorrhage control, then consult TMD or operating/consulting/relevant surgeon.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- *Element Value* "1. None" is reported if ***Surgery for Hemorrhage Control Type*** is not a listed *Element Value* option.

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Procedure Notes
3. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 12101   | 1     | Value is not a valid menu option  |
| 12102   | 2     | Element cannot be blank   |
| 12104   | 2     | Element must be and can only be "Not Applicable" when <b><i>Packed Red Blood Cells</i></b> and <b><i>Whole Blood</i></b> are 0                |
| 12105   | 2     | Element must be "Not Known/Not Recorded" when <b><i>Packed Red Blood Cells</i></b> and <b><i>Whole Blood</i></b> are "Not Known/Not Recorded" |
| 12140   | 1     | Single Entry Max exceeded   |

## SURGERY FOR HEMORRHAGE CONTROL DATE

**REPORTING CRITERION:** Report on all patient with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

### DESCRIPTION

Date of first surgery for hemorrhage control within first 24 hours of ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- Procedure start date is defined as the date the incision was made (or the procedure started).
- If unclear if surgery was for hemorrhage control, then consult TMD or operating/consulting/relevant surgeon.
- The null value "Not Applicable" is reported if *Surgery for Hemorrhage Control Type* is *Element Value* "1. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Procedure Notes
3. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 12201   | 1     | Date is not valid  |
| 12202   | 1     | Date out of range  |
| 12203   | 2     | <i>Surgery For Hemorrhage Control Date</i> is earlier than <i>ED/Hospital Arrival Date</i>   |
| 12206   | 2     | Element must be and can only be "Not Applicable" when <i>Surgery For Hemorrhage Control Type</i> is "Not Applicable" or <i>Element Value</i> "1. None" |
| 12207   | 2     | Element cannot be blank  |
| 12208   | 2     | <i>Surgery for Hemorrhage Control Date</i> occurs more than 24 hours after <i>ED/Hospital Arrival Date</i>   |
| 12209   | 2     | Element must be "Not Known/Not Recorded" when <i>Surgery For Hemorrhage Control Type</i> is "Not Known/Not Recorded"                                   |
| 12240   | 1     | Single Entry Max exceeded  |

## SURGERY FOR HEMORRHAGE CONTROL TIME

**REPORTING CRITERION:** Report on all patient with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

### DESCRIPTION

Time of first surgery for hemorrhage control within first 24 hours of ED/hospital arrival.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- Procedure start time is defined as the time the incision was made (or the procedure started).
- If unclear if surgery was for hemorrhage control, then consult TMD or operating/consulting/relevant surgeon.
- The null value "Not Applicable" is reported if *Surgery for Hemorrhage Control Type* is *Element Value* "1. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

### DATA SOURCE HIERARCHY GUIDE

1. Operative Reports
2. Procedure Notes
3. Progress Notes

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 12301   | 1     | Time is not valid  |
| 12302   | 1     | Time out of range  |
| 12303   | 2     | <i>Surgery For Hemorrhage Control Time</i> is earlier than <i>ED/Hospital Arrival Time</i>                           |
| 12307   | 2     | Element cannot be blank  |
| 12308   | 2     | <i>Surgery for Hemorrhage Control Time</i> occurs more than 24 hours after <i>ED/Hospital Arrival Time</i>           |
| 12309   | 2     | Element must be and can only be "Not Applicable" when <i>Surgery For Hemorrhage Control Date</i> is "Not Applicable" |
| 12310   | 2     | Element must be "Not Known/Not Recorded" when <i>Surgery For Hemorrhage Control Date</i> is "Not Known/Not Recorded" |
| 12340   | 1     | Single Entry Max exceeded  |

## WITHDRAWAL OF LIFE SUPPORTING TREATMENT

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

Treatment was withdrawn based on a decision to either remove or withhold further life supporting intervention. This decision must be documented in the medical record and is often, but not always associated with a discussion with the legal next of kin.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- Do-not-resuscitate (DNR) order not a requirement.
- A note to limit escalation of treatment qualifies as a withdrawal of life supporting treatment. These interventions are limited to: ventilator support (with or without extubation), dialysis or other forms of renal support, institution of medications to support blood pressure or cardiac function, or a specific surgical, interventional or radiological procedure (e.g. decompressive craniectomy, operation for hemorrhage control, angiography). Note that this definition provides equal weight to the withdrawal of an intervention already in place (e.g. extubation) and a decision not to proceed with a life-supporting intervention (e.g. intubation).
- Excludes the discontinuation of CPR and typically involves prior planning.
- DNR order is not the same as withdrawal of life supporting treatment.
- *Element Value "2. No"* must be reported for patients whose time of death, according to your hospital's definition, was prior to the removal of any interventions or escalation of care.

### DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. Progress Order
3. Case Management/Social Services Notes
4. Nursing Notes/Flow Sheet
5. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 13801   | 1     | Value is not a valid menu option   |
| 13802   | 2     | Element cannot be blank            |
| 13803   | 2     | Element cannot be "Not Applicable" |
| 13840   | 1     | Single Entry Max exceeded          |



## WITHDRAWAL OF LIFE SUPPORTING TREATMENT DATE

**REPORTING CRITERION:** Report on all patients .

### DESCRIPTION

The date treatment was withdrawn.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD.
- Report the date the first of any existing life-supporting intervention(s) is withdrawn (e.g. extubation). If no intervention(s) is in place, record the date the decision not to proceed with a life- supporting intervention(s) occurs (e.g. intubation).
- The null value "Not Applicable" is reported for patients when *Withdrawal of Life Supporting Treatment* is Element Value "2. No."

### DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. Progress Order
3. Respiratory Therapy Notes/Flow Sheet
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 13901   | 1     | Date is not valid   |
| 13902   | 1     | Date out of range   |
| 13903   | 2     | <i>Withdrawal of Life Supporting Treatment Date</i> is earlier than <i>ED/Hospital Arrival Date</i>                           |
| 13906   | 2     | Element must be and can only be "Not Applicable" when <i>Withdrawal of Life Supporting Treatment</i> is Element Value "2. No" |
| 13907   | 2     | Element cannot be blank   |
| 13908   | 2     | Element must be "Not Known/Not Recorded" when <i>Withdrawal of Life Supporting Treatment</i> is "Not Known/Not Recorded"      |
| 13940   | 1     | Single Entry Max exceeded   |

## WITHDRAWAL OF LIFE SUPPORTING TREATMENT TIME

**REPORTING CRITERION:** Report on all patients.

### DESCRIPTION

The time treatment was withdrawn.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time.
- Report the time the first of any existing life-supporting intervention(s) is withdrawn (e.g. extubation). If no intervention(s) is in place, record the time the decision not to proceed with a life-supporting intervention(s) occurs (e.g. intubation).
- The null value "Not Applicable" is reported for patients when *Withdrawal of Life Supporting Treatment* is Element Value "2. No."

### DATA SOURCE HIERARCHY GUIDE

1. Physician Order
2. Progress Order
3. Respiratory Therapy Notes/Flow Sheet
4. Case Management/Social Services Notes
5. Nursing Notes/Flow Sheet
6. Discharge Summary

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 14001   | 1     | Time is not valid   |
| 14002   | 1     | Time out of range   |
| 14003   | 2     | <i>Withdrawal of Life Supporting Treatment Time</i> is earlier than <i>ED/Hospital Arrival Time</i>                           |
| 14007   | 2     | Element cannot be blank   |
| 14008   | 2     | Element must be and can only be "Not Applicable" when <i>Withdrawal of Life Supporting Treatment Date</i> is "Not Applicable" |
| 14009   | 2     | Element must be "Not Known/Not Recorded" when <i>Withdrawal of Life Supporting Treatment Date</i> is "Not Known/Not Recorded" |
| 14040   | 1     | Single Entry Max exceeded   |

## ANTIBIOTIC THERAPY

**REPORTING CRITERION:** Report on all patients with any open fracture(s).

### DESCRIPTION

Intravenous antibiotic therapy was administered to the patient within 24 hours after injury.

### ELEMENT VALUES

1. Yes
2. No

### ADDITIONAL INFORMATION

- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- Open fractures as defined by the Association for the Advancement of Automotive Medicine AIS Coding Rules and Guidelines and includes all AIS code descriptors that contain "open" and all AIS extremity/limb codes descriptors that contain "amputation."

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Sheet
2. Triage/Trauma/ICU Flow Sheet
3. Medication Summary
4. Anesthesia Record
5. Nursing Notes/Flow Sheet
6. Pharmacy Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 20701   | 1     | Value is not a valid menu option   |
| 20702   | 2     | Element cannot be blank  |
| 20705   | 2     | Element must be "Not Applicable" as the AIS codes provided do not meet the reporting criterion |
| 20706   | 2     | Element must not be "Not Applicable" as the AIS codes provided meet the reporting criterion    |
| 20740   | 1     | Single Entry Max exceeded  |

## ANTIBIOTIC THERAPY DATE

**REPORTING CRITERION:** Report on all patients with any open fracture(s).

### DESCRIPTION

The date of first recorded intravenous antibiotic therapy administered to the patient within 24 hours after injury.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as YYYY-MM-DD
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- The null value "Not Applicable" is reported if *Antibiotic Therapy* is *Element Value* "2. No."
- Open fractures as defined by the Association for the Advancement of Automotive Medicine AIS Coding Rules and Guidelines and includes all AIS code descriptors that contain "open" and all AIS extremity/limb codes descriptors that contain "amputation."

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Sheet
2. Triage/Trauma/ICU Flow Sheet
3. Medication Summary
4. Anesthesia Record
5. Nursing Notes/Flow Sheet
6. Pharmacy Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message   |
|---------|-------|---|
| 20801   | 1     | Date is not valid   |
| 20802   | 2     | Date is out of range  |
| 20804   | 2     | Element must be and can only be "Not Applicable" when <i>Antibiotic Therapy</i> is "Not Applicable" or <i>Element Value</i> "2. No" |
| 20808   | 2     | Element cannot be blank   |
| 20809   | 2     | Element must be "Not Known/Not Recorded" when <i>Antibiotic Therapy</i> is "Not Known/Not Recorded"                                 |
| 20840   | 1     | Single Entry Max exceeded   |

## ANTIBIOTIC THERAPY TIME

**REPORTING CRITERION:** Report on all patients with any open fracture(s).

### DESCRIPTION

The time of first recorded intravenous antibiotic therapy administered to the patient within 24 hours after injury.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Reported as HHMM military time
- The null value “Not Applicable” is reported for patients that do not meet the reporting criterion.
- The null value “Not Applicable” is reported if *Antibiotic Therapy* is *Element Value* “2. No.”
- Open fractures as defined by the Association for the Advancement of Automotive Medicine AIS Coding Rules and Guidelines and includes all AIS code descriptors that contain "open" and all AIS extremity/limb codes descriptors that contain "amputation."

### DATA SOURCE HIERARCHY GUIDE

1. EMS Run Sheet
2. Triage/Trauma/ICU Flow Sheet
3. Medication Summary
4. Anesthesia Record
5. Nursing Notes/Flow Sheet
6. Pharmacy Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message  |
|---------|-------|--|
| 20901   | 1     | Time is not valid  |
| 20902   | 2     | Time is out of range   |
| 20908   | 2     | Element cannot be blank  |
| 20909   | 2     | Element must be and can only be “Not Applicable” when <i>Antibiotic Therapy Date</i> is “Not Applicable” |
| 20910   | 2     | Element must be “Not Known/Not Recorded” when <i>Antibiotic Therapy Date</i> is “Not Known/Not Recorded” |
| 20940   | 1     | Single Entry Max exceeded  |

## **SURGEON SPECIFIC REPORTING-OPTIONAL**

\*Element(s) in this section are optional\*

## NATIONAL PROVIDER IDENTIFIER (NPI)

### DESCRIPTION

The National Provider Identifier (NPI) of the admitting surgeon.

### ELEMENT VALUES

- Relevant value for data element

### ADDITIONAL INFORMATION

- Must be stored as a 10-digit numeric value.
- This variable is considered optional and is not required as part of the NTDS dataset.
- The null value “Not Applicable” is reported if this optional element is not being reported.

### DATA SOURCE HIERARCHY GUIDE

1. Medical Record

### ASSOCIATED EDIT CHECKS

| Rule ID | Level | Message                   |
|---------|-------|---------------------------|
| 9801    | 1     | Invalid value             |
| 9802    | 2     | Element cannot be blank   |
| 9840    | 1     | Single Entry Max exceeded |

## APPENDIX 1: ACCOUNT CENTER

### FACILITY CHARACTERISTICS

| VARIABLE                                     | VALUES                              |
|--|-------------------------------------|
| Number of Hospital Bed Licensed - Adult      | Numeric                             |
| Number of Hospital Bed Staffed - Adult       | Numeric                             |
| Average Census - Adult                       | Numeric                             |
| Number of Hospital Beds Licensed - Pediatric | Numeric                             |
| Number of Hospital Beds Staffed - Pediatric  | Numeric                             |
| Average Census - Pediatric                   | Numeric                             |
| ICU for Trauma                               | Numeric                             |
| Burn   | Numeric                             |
| ICU for Burn                                 | Numeric                             |
| Hospital Tax Status                          | For profit; Non-profit; Government  |
| Hospital Teaching Status                     | University; Community; Non-teaching |
| Hospital Payer Mix                           | Numeric                             |

### PEDIATRICS

| VARIABLE   | VALUES  |
|--|---|
| Are you associated with a pediatric hospital?                                  | Yes; No   |
| Do you have a pediatric ward?  | Yes; No   |
| Do you have a pediatric ICU?   | Yes; No   |
| Do you transfer the most severely injured children to other specialty centers? | Yes; No   |
| How do you provide care to injured children?                                   | No children (Not Applicable); Provide all acute care services; Shared role with another center. |
| What is the oldest age for pediatric patients in your facility?                | 10; 11; 12 ;13; 14; 15; 16; 17; 18; 19;20; 21; or none  |

### PERSONNEL

| VARIABLE                                     | VALUES  |
|--|---------|
| Number of core trauma surgeons               | Numeric |
| Number of orthopedic surgeons                | Numeric |
| Number of neurosurgeons                      | Numeric |
| Number of data abstractors/trauma registrars | Numeric |
| Number of registrars that are certified      | Numeric |



## APPENDIX 2: EDIT CHECKS FOR THE NATIONAL TRAUMA DATA STANDARDS DATA ELEMENTS

The flags described in this Appendix are those that are produced by the Validator when an NTDS XML file is checked. Each rule ID is assigned a flag level 1 – 3. Level 1 and 2 flags must be resolved, or the entire file cannot be submitted to the NTDB. Level 3 flags serve as recommendations to check data elements associated with the flags. However, level 3 flags do not necessarily indicate that data are incorrect.

The Flag Levels are defined as follows:

- **Level 1: Format / schema\*** – any element that does not conform to the “rules” of the XSD. That is, these are errors that arise from XML data that cannot be parsed or would otherwise not be legal XML. Some errors in this Level do not have a Rule ID – for example: illegal tag, commingling of null values and actual data, out of range errors, etc.
- **Level 2: Inclusion criteria and/or critical to analyses\*** – this level affects the elements needed to determine if the record meets the inclusion criteria for NTDB or are required for critical analyses.
- **Level 3: Logic** – data consistency checks related to variables commonly used for reporting (e.g. Arrival Date, E-code, etc.) and blank elements that are acceptable to create a “valid” XML record but may cause certain parts of the record to be excluded from analysis.

Please note:

- Any XML file submitted to NTDB that contains one or more Level 1 or 2 Flags will result in the entire file being rejected. These kinds of flags must be resolved before a submission will be accepted.
- *Facility ID, Patient ID and Last Modified Date/Time* are not described in the data dictionary and are only required in the XML file as control information for back-end NTDB processing. However, these elements are mandatory to provide in every XML record. Consult your Registry Vendor if one of these flags occurs.

The remainder of this Appendix provides a consolidated list of Rule IDs by Data Element. There is an additional Rule ID, “0000”, with Flag Level 1 that will be returned when a Data Element is contained in the XML file that is not valid based on this Data Dictionary.

## DEMOGRAPHIC INFORMATION

### PATIENT'S HOME ZIP/POSTAL CODE

| Rule ID | Level | Message                   |
|---------|-------|---------------------------|
| 0001    | 1     | Invalid value             |
| 0002    | 2     | Element cannot be blank   |
| 0040    | 1     | Single Entry Max exceeded |

### PATIENT'S HOME COUNTRY

| Rule ID | Level | Message   |
|---------|-------|---|
| 0101    | 1     | Invalid value   |
| 0102    | 2     | Element cannot be blank   |
| 0104    | 2     | Element cannot be "Not Applicable"  |
| 0105    | 2     | Element cannot be "Not Known/Not Recorded" when <i>Patient's Home Zip/Postal Code</i> is any response other than "Not Applicable" or "Not Known/Not Recorded" |
| 0140    | 1     | Single Entry Max exceeded   |

### PATIENT'S HOME STATE

| Rule ID | Level | Message   |
|---------|-------|---|
| 0201    | 1     | Invalid value   |
| 0202    | 2     | Element cannot be blank   |
| 0204    | 2     | Element must be "Not Applicable" (Non-US hospitals only)                                |
| 0205    | 2     | Element must be "Not Applicable" when <i>Patient's Home Zip/Postal Code</i> is reported |
| 0240    | 1     | Single Entry Max exceeded   |

### PATIENT'S HOME COUNTY

| Rule ID | Level | Message   |
|---------|-------|---|
| 0301    | 1     | Invalid value   |
| 0302    | 2     | Element cannot be blank   |
| 0304    | 2     | Element must be "Not Applicable" (Non-US hospitals only)                                |
| 0305    | 2     | Element must be "Not Applicable" when <i>Patient's Home Zip/Postal Code</i> is reported |
| 0340    | 1     | Single Entry Max exceeded   |

## PATIENT'S HOME CITY

| Rule ID | Level | Message   |
|---------|-------|---|
| 0401    | 1     | Invalid value   |
| 0402    | 2     | Element cannot be blank   |
| 0404    | 2     | Element must be "Not Applicable" (Non-US hospitals only)                                |
| 0405    | 2     | Element must be "Not Applicable" when <i>Patient's Home Zip/Postal Code</i> is reported |
| 0440    | 1     | Single Entry Max exceeded   |

## ALTERNATE HOME RESIDENCE

| Rule ID | Level | Message   |
|---------|-------|---|
| 0501    | 1     | Value is not a valid menu option  |
| 0502    | 2     | Element cannot be blank   |
| 0503    | 2     | Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other value |
| 0540    | 1     | Multiple Entry Max exceeded   |

## DATE OF BIRTH

| Rule ID | Level | Message   |
|---------|-------|---|
| 0601    | 1     | Invalid value   |
| 0602    | 1     | Date out of range   |
| 0603    | 2     | Element cannot be blank   |
| 0612    | 2     | Date of Birth + 120 years must be less than <i>Injury Incident Date</i> |
| 0613    | 2     | Element cannot be "Not Applicable"                                      |
| 0640    | 1     | Single Entry Max exceeded   |

## AGE

| Rule ID | Level | Message   |
|---------|-------|---|
| 0701    | 1     | Age is outside the valid range of 0 - 120   |
| 0703    | 2     | Element cannot be blank   |
| 0705    | 3     | Age is greater than expected for the <i>Age Units</i> specified. Age should not exceed 60 minutes, 24 hours, 30 days, 24 months, or 120 years. Please verify this is correct. |
| 0708    | 2     | Element must be "Not Known/Not Recorded" when <i>Age Units</i> is "Not Known/Not Recorded"  |
| 0709    | 2     | Element must be and can only be "Not Applicable" if <i>Date of Birth</i> is reported unless <i>Date of Birth</i> is the same as <i>ED/Hospital Arrival Date</i>               |
| 0740    | 1     | Single Entry Max exceeded   |

## AGE UNITS

| Rule ID | Level | Message  |
|---------|-------|--|
| 0801    | 1     | Value is not a valid menu option   |
| 0803    | 2     | Element cannot be blank  |
| 0806    | 2     | Element must be “Not Known/Not Recorded” when <b>Age</b> is “Not Known/Not Recorded” |
| 0810    | 2     | Element must be and can only be “Not Applicable” if <b>Age</b> is “Not Applicable”   |
| 0840    | 1     | Single Entry Max exceeded  |

## RACE

| Rule ID | Level | Message   |
|---------|-------|---|
| 0901    | 1     | Value is not a valid menu option  |
| 0902    | 2     | Element cannot be blank   |
| 0903    | 2     | Element cannot be “Not Applicable” (excluding Canadian hospitals)                         |
| 0905    | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value |
| 0950    | 1     | Multiple Entry Max exceeded   |

## ETHNICITY

| Rule ID | Level | Message   |
|---------|-------|---|
| 1001    | 1     | Value is not a valid menu option                                  |
| 1002    | 2     | Element cannot be blank   |
| 1003    | 2     | Element cannot be “Not Applicable” (excluding Canadian hospitals) |
| 1040    | 1     | Single Entry Max exceeded   |

## SEX

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 1101    | 1     | Value is not a valid menu option   |
| 1102    | 2     | Element cannot be blank            |
| 1103    | 2     | Element cannot be “Not Applicable” |
| 1140    | 1     | Single Entry Max exceeded          |

## INJURY INFORMATION

### INJURY INCIDENT DATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 1201    | 1     | Date is not valid  |
| 1202    | 1     | Date out of range  |
| 1203    | 2     | Element cannot be blank  |
| 1204    | 2     | <i>Injury Incident Date</i> is earlier than <i>Date of Birth</i>                                 |
| 1211    | 2     | Element cannot be “Not Applicable”   |
| 1212    | 3     | <i>Injury Incident Date</i> is greater than 14 days earlier than <i>ED/Hospital Arrival Date</i> |
| 1240    | 1     | Single Entry Max exceeded  |

### INJURY INCIDENT TIME

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 1301    | 1     | Time is not valid                  |
| 1302    | 1     | Time out of range                  |
| 1303    | 2     | Element cannot be blank            |
| 1310    | 2     | Element cannot be “Not Applicable” |
| 1340    | 1     | Single Entry Max exceeded          |

### WORK-RELATED

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 1401    | 1     | Value is not a valid menu option   |
| 1402    | 2     | Element cannot be blank            |
| 1407    | 2     | Element cannot be “Not Applicable” |
| 1440    | 1     | Single Entry Max exceeded          |

### PATIENT’S OCCUPATIONAL INDUSTRY

| Rule ID | Level | Message   |
|---------|-------|---|
| 1501    | 1     | Value is not a valid menu option  |
| 1504    | 2     | Element cannot be blank   |
| 1505    | 2     | If <i>Work-Related</i> is “1. Yes”, <i>Patient’s Occupational Industry</i> cannot be “Not Applicable” |
| 1506    | 2     | “Not Applicable” must be reported if <i>Work-Related</i> is <i>Element Value</i> “2. No”              |
| 1540    | 1     | Single Entry Max exceeded   |

## PATIENT'S OCCUPATION

| Rule ID | Level | Message   |
|---------|-------|---|
| 1601    | 1     | Value is not a valid menu option  |
| 1604    | 2     | Element cannot be blank   |
| 1605    | 2     | If <b>Work-Related</b> is <i>Element Value</i> "1. Yes", <b>Patient's Occupation</b> cannot be "Not Applicable" |
| 1606    | 2     | "Not Applicable" must be reported if <b>Work-Related</b> is <i>Element Value</i> "2. No"                        |
| 1640    | 1     | Single Entry Max exceeded   |

## ICD-10 PRIMARY EXTERNAL CAUSE CODE

| Rule ID | Level | Message  |
|---------|-------|--|
| 8901    | 1     | E-Code is not a valid ICD-10-CM code (ICD-10-CM only)  |
| 8902    | 2     | Element cannot be blank  |
| 8904    | 2     | Must not be Y92.X/Y92.XX/Y92.XXX (where X is A-Z or 0-9) (ICD-10-CM only)                    |
| 8905    | 3     | ICD-10 External Cause Code must not be Y93.X/Y93.XX (where X is A-Z or 0-9) (ICD-10 CM only) |
| 8906    | 1     | E-Code is not a valid ICD-10-CA code (ICD-10-CA only)  |
| 8907    | 2     | Element cannot be "Not Applicable"   |
| 8940    | 1     | Single Entry Max exceeded  |

## ICD-10 PLACE OF OCCURRENCE EXTERNAL CAUSE CODE

| Rule ID | Level | Message  |
|---------|-------|--|
| 9001    | 1     | Invalid value (ICD-10-CM only)   |
| 9002    | 2     | Element cannot be blank  |
| 9003    | 3     | Place of Injury code must be Y92.X/Y92.XX/Y92.XXX (where X is A-Z [excluding I,O] or 0-9) (ICD-10-CM only) |
| 9004    | 1     | Invalid value (ICD-10-CA only)   |
| 9005    | 3     | Place of Injury code must be U98X (where X is 0-9) (ICD-10-CA only)  |
| 9006    | 2     | Element cannot be "Not Applicable"   |
| 9040    | 1     | Single Entry Max exceeded  |

## ICD-10 ADDITIONAL EXTERNAL CAUSE CODE

| Rule ID | Level | Message   |
|---------|-------|---|
| 9101    | 1     | E-Code is not a valid ICD-10-CM code (ICD-10-CM only)                               |
| 9102    | 3     | Additional External Cause Code ICD-10 must not be equal to Primary External         |
| 9103    | 2     | Element cannot be blank   |
| 9104    | 1     | E-Code is not a valid ICD-10-CA code (ICD-10-CA only)                               |
| 9105    | 2     | ICD-10-CM T74 and T76 codes cannot be submitted as Additional External Cause Codes  |
| 9106    | 2     | Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any value |
| 9140    | 1     | Multiple Entry Max exceeded   |

## INCIDENT LOCATION ZIP/POSTAL CODE

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 2001    | 1     | Invalid value                      |
| 2002    | 2     | Element cannot be blank            |
| 2006    | 2     | Element cannot be “Not Applicable” |
| 2040    | 1     | Single entry max exceeded          |

## INCIDENT COUNTRY

| Rule ID | Level | Message  |
|---------|-------|--|
| 2101    | 1     | Invalid value  |
| 2102    | 2     | Element cannot be blank  |
| 2104    | 2     | Element cannot be “Not Applicable”   |
| 2105    | 2     | Element cannot be “Not Known/Not Recorded” when <i>Incident Location ZIP/Postal Code</i> is any response other than “Not Known/Not Recorded” |
| 2140    | 1     | Single Entry Max exceeded  |

## INCIDENT STATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 2201    | 1     | Invalid value  |
| 2203    | 2     | Element cannot be blank  |
| 2204    | 2     | Element must be “Not Applicable” (Non-US hospitals)  |
| 2205    | 2     | Element must be “Not Applicable” when <i>Incident Location ZIP/Postal Code</i> is reported |
| 2240    | 1     | Single Entry Max exceeded  |

## INCIDENT COUNTY

| Rule ID | Level | Message  |
|---------|-------|--|
| 2301    | 1     | Invalid value (US only)  |
| 2303    | 2     | Element cannot be blank  |
| 2304    | 2     | Element must be “Not Applicable” (Non-US hospitals)  |
| 2305    | 2     | Element must be “Not Applicable” when <i>Incident Location ZIP/Postal code</i> is reported |
| 2340    | 1     | Single Entry Max exceeded  |

## INCIDENT CITY

| Rule ID | Level | Message  |
|---------|-------|--|
| 2401    | 1     | Invalid value  |
| 2403    | 2     | Element cannot be blank  |
| 2404    | 2     | Element must be “Not Applicable” (Non-US hospitals)  |
| 2405    | 2     | Element must be “Not Applicable” when <i>Incident Location ZIP/Postal Code</i> is reported |
| 2440    | 1     | Single Entry Max exceeded  |

## PROTECTIVE DEVICES

| Rule ID | Level | Message  |
|---------|-------|--|
| 2501    | 1     | Value is not a valid menu option   |
| 2502    | 2     | Element cannot be blank  |
| 2507    | 2     | Element cannot be “Not Applicable”   |
| 2508    | 2     | Element cannot be “Not Known/Not Recorded” or <i>Element Value</i> “1. None” along with <i>Element Values</i> 2, 3, 4, 5, 6, 7, 8, 9, 10, and/ or 11 |
| 2550    | 1     | Multiple Entry Max exceeded  |

## CHILD SPECIFIC RESTRAINT

| Rule ID | Level | Message   |
|---------|-------|---|
| 2601    | 1     | Value is not a valid menu option  |
| 2603    | 2     | Element cannot be blank   |
| 2604    | 2     | Element cannot be “Not Applicable” when <i>Protective Devices</i> is “6. Child Restraint” |
| 2640    | 1     | Single Entry Max exceeded   |

## AIRBAG DEPLOYMENT

| Rule ID | Level | Message   |
|---------|-------|---|
| 2701    | 1     | Value is not a valid menu option  |
| 2703    | 2     | Element cannot be blank   |
| 2704    | 2     | Element cannot be “Not Applicable” when <i>Protective Devices</i> is “8. Airbag Present”  |
| 2705    | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value |
| 2750    | 1     | Multiple Entry Max exceeded   |



## PRE-HOSPITAL INFORMATION

### TRANSPORT MODE

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 3401    | 1     | Value is not a valid menu option   |
| 3402    | 2     | Element cannot be blank            |
| 3404    | 2     | Element cannot be “Not Applicable” |
| 3440    | 1     | Single Entry Max exceeded          |

### OTHER TRANSPORT MODE

| Rule ID | Level | Message   |
|---------|-------|---|
| 3501    | 1     | Value is not a valid menu option  |
| 3502    | 2     | Element cannot be blank   |
| 3503    | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value |
| 3550    | 1     | Multiple Entry Max exceeded   |

### EMS PATIENT CARE REPORT UNIVERSALLY UNIQUE IDENTIFIER (UUID)

| Rule ID | Level | Message   |
|---------|-------|---|
| 90000   | 1     | Invalid value   |
| 90001   | 2     | Element cannot be blank   |
| 90002   | 2     | Element cannot be "Not Known/Not Recorded" along with any other value |
| 9940    | 1     | Multiple Entry Max exceeded   |

### INTER-FACILITY TRANSFER

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 4401    | 2     | Element cannot be blank            |
| 4402    | 1     | Value is not a valid menu option   |
| 4405    | 2     | Element cannot be “Not Applicable” |
| 4440    | 1     | Single Entry Max exceeded          |

### PRE-HOSPITAL CARDIAC ARREST

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 9701    | 1     | Value is not a valid menu option   |
| 9702    | 2     | Element cannot be blank            |
| 9703    | 2     | Element cannot be “Not Applicable” |
| 9740    | 1     | Single Entry Max exceeded          |

## EMERGENCY DEPARTMENT INFORMATION

### HIGHEST ACTIVATION

| Rule ID | Level | Message                          |
|---------|-------|----------------------------------|
| 14201   | 1     | Value is not a valid menu option |
| 14202   | 2     | Element cannot be blank          |
| 14240   | 1     | Single Entry Max exceeded        |

### TRAUMA SURGEON ARRIVAL DATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 14301   | 1     | Date is not valid  |
| 14302   | 1     | Date out of range  |
| 14303   | 2     | Element cannot be blank  |
| 14304   | 3     | <i>Trauma Surgeon Arrival Date</i> is earlier than <i>Injury Incident Date</i> |
| 14340   | 1     | Single Entry Max exceeded  |

### TRAUMA SURGEON ARRIVAL TIME

| Rule ID | Level | Message  |
|---------|-------|--|
| 14401   | 1     | Time is not valid  |
| 14402   | 1     | Time out of range  |
| 14403   | 2     | Element cannot be blank  |
| 14404   | 3     | <i>Trauma Surgeon Arrival Time</i> is earlier than <i>Injury Incident Time</i> |
| 14440   | 1     | Single Entry Max exceeded  |

### ED/HOSPITAL ARRIVAL DATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 4501    | 1     | Date is not valid  |
| 4502    | 1     | Date out of range  |
| 4503    | 2     | Element cannot be blank  |
| 4505    | 2     | Element cannot be "Not Known/Not Recorded"   |
| 4511    | 3     | <i>ED/Hospital Arrival Date</i> is earlier than <i>Date of Birth</i>                       |
| 4513    | 3     | <i>ED/Hospital Arrival Date</i> occurs more than 14 days after <i>Injury Incident Date</i> |
| 4515    | 2     | Element cannot be "Not Applicable"   |
| 4516    | 3     | <i>ED/Hospital Arrival Date</i> is earlier than <i>Injury Incident Date</i>                |
| 4540    | 1     | Single Entry Max exceeded  |

## ED/HOSPITAL ARRIVAL TIME

| Rule ID | Level | Message   |
|---------|-------|---|
| 4601    | 1     | Time is not valid   |
| 4602    | 1     | Time out of range   |
| 4603    | 2     | Element cannot be blank   |
| 4609    | 2     | Element cannot be “Not Applicable”  |
| 4610    | 3     | <i>ED/Hospital Arrival Time</i> is earlier than <i>Injury Incident Time</i> |
| 4640    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL SYSTOLIC BLOOD PRESSURE

| Rule ID | Level | Message  |
|---------|-------|--|
| 4701    | 1     | Invalid value  |
| 4702    | 2     | Element cannot be blank                                    |
| 4704    | 3     | The value is above 220                                     |
| 4705    | 2     | Element cannot be “Not Applicable”                         |
| 4706    | 2     | The value submitted falls outside the valid range of 0-380 |
| 4707    | 3     | The value is below 30                                      |
| 4740    | 1     | Single Entry Max exceeded                                  |

## INITIAL ED/HOSPITAL PULSE RATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 4801    | 1     | Invalid value  |
| 4802    | 2     | Element cannot be blank                                    |
| 4804    | 3     | The value is above 220                                     |
| 4805    | 2     | Element cannot be “Not Applicable”                         |
| 4806    | 2     | The value submitted falls outside the valid range of 0-300 |
| 4807    | 3     | The value is below 30                                      |
| 4840    | 1     | Single Entry Max exceeded                                  |

## INITIAL ED/HOSPITAL TEMPERATURE

| Rule ID | Level | Message  |
|---------|-------|--|
| 4901    | 1     | Invalid value  |
| 4902    | 2     | Element cannot be blank  |
| 4903    | 3     | The value is above 42.0  |
| 4904    | 2     | Element cannot be “Not Applicable”                             |
| 4905    | 2     | The value submitted falls outside the valid range of 10.0-45.0 |
| 4906    | 3     | The value is below 20.0  |
| 4940    | 1     | Single Entry Max exceeded                                      |

## INITIAL ED/HOSPITAL RESPIRATORY RATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 5001    | 1     | Invalid value  |
| 5002    | 2     | Element cannot be blank                                    |
| 5005    | 2     | The value submitted falls outside the valid range of 0-100 |
| 5006    | 2     | Element cannot be “Not Applicable”                         |
| 5007    | 3     | The value is below 5                                       |
| 5008    | 3     | The value is above 75                                      |
| 5040    | 1     | Single Entry Max exceeded                                  |

## INITIAL ED/HOSPITAL RESPIRATORY ASSISTANCE

| Rule ID | Level | Message   |
|---------|-------|---|
| 5101    | 1     | Value is not a valid menu option  |
| 5102    | 2     | Element cannot be blank   |
| 5103    | 2     | Element must be “Not Applicable” when <i>Initial ED/Hospital Respiratory Rate</i> is “Not Known/Not Recorded” |
| 5140    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL OXYGEN SATURATION

| Rule ID | Level | Message  |
|---------|-------|--|
| 5201    | 1     | Invalid value  |
| 5202    | 2     | Element cannot be blank                                    |
| 5205    | 2     | Element cannot be “Not Applicable”                         |
| 5206    | 2     | The value submitted falls outside the valid range of 0-100 |
| 5207    | 3     | The value is below 40                                      |
| 5240    | 1     | Single Entry Max exceeded                                  |

## INITIAL ED/HOSPITAL SUPPLEMENTAL OXYGEN

| Rule ID | Level | Message  |
|---------|-------|--|
| 5301    | 1     | Value is not a valid menu option   |
| 5303    | 2     | Element cannot be blank  |
| 5304    | 2     | Element must be “Not Applicable” when <i>Initial ED/Hospital Oxygen Saturation</i> is “Not Known/Not Recorded” |
| 5340    | 1     | Single Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS-EYES

| Rule ID | Level | Message  |
|---------|-------|--|
| 5401    | 1     | Value is not a valid menu option   |
| 5403    | 2     | Element cannot be blank  |
| 5404    | 2     | Element cannot be “Not Applicable”   |
| 5405    | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS 40 – Eye</i> is reported. |
| 5440    | 1     | Single Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS-VERBAL

| Rule ID | Level | Message   |
|---------|-------|---|
| 5501    | 1     | Value is not a valid menu option  |
| 5503    | 2     | Element cannot be blank   |
| 5504    | 2     | Element cannot be “Not Applicable”  |
| 5505    | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS 40 - Verbal</i> is reported. |
| 5540    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL GCS-MOTOR

| Rule ID | Level | Message   |
|---------|-------|---|
| 5601    | 1     | Value is not a valid menu option  |
| 5603    | 2     | Element cannot be blank   |
| 5604    | 2     | Element cannot be “Not Applicable”  |
| 5605    | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS 40 - Motor</i> is reported |
| 5640    | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL GCS-TOTAL

| Rule ID | Level | Message  |
|---------|-------|--|
| 5701    | 1     | GCS Total is outside the valid range of 3 - 15   |
| 5703    | 3     | <i>Initial ED/Hospital GCS - Total</i> does not equal the sum of <i>Initial ED/Hospital GCS - Eye</i> , <i>Initial ED/Hospital GCS - Verbal</i> , and <i>Initial ED/Hospital GCS – Motor</i> , unless any of these values are “Not Known/Not Recorded” |
| 5705    | 2     | Element cannot be blank  |
| 5706    | 2     | Element cannot be “Not Applicable”   |
| 5707    | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS 40 – Eye</i> , <i>Initial ED/Hospital GCS 40 – Verbal</i> , or <i>Initial ED/Hospital GCS 40 – Motor</i> are reported.  |
| 5740    | 1     | Single Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS ASSESSMENT QUALIFIERS

| Rule ID | Level | Message   |
|---------|-------|---|
| 5801    | 1     | Value is not a valid menu option  |
| 5802    | 2     | Element cannot be blank   |
| 5803    | 2     | Element cannot be “Not Applicable”  |
| 5804    | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS 40 – Eye</i> , <i>Initial ED/Hospital GCS 40 – Verbal</i> , or <i>Initial ED/Hospital GCS 40 – Motor</i> are reported. |
| 5805    | 2     | Element cannot be “Not Known/Not Recorded” along with any other value   |
| 5850    | 1     | Multiple Entry Max exceeded   |

## INITIAL ED/HOSPITAL GCS-40 EYE

| Rule ID | Level | Message   |
|---------|-------|---|
| 15301   | 1     | Value is not a valid menu option  |
| 15303   | 2     | Element cannot be blank   |
| 15304   | 2     | Element cannot be “Not Applicable”  |
| 15305   | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS – Eye</i> is reported. |
| 15340   | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL GCS-40 VERBAL

| Rule ID | Level | Message  |
|---------|-------|--|
| 15401   | 1     | Value is not a valid menu option   |
| 15403   | 2     | Element cannot be blank  |
| 15404   | 2     | Element cannot be “Not Applicable”   |
| 15405   | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS – Verbal</i> is reported. |
| 15440   | 1     | Single Entry Max exceeded  |

## INITIAL ED/HOSPITAL GCS-40 MOTOR

| Rule ID | Level | Message   |
|---------|-------|---|
| 15501   | 1     | Value is not a valid menu option  |
| 15503   | 2     | Element cannot be blank   |
| 15504   | 2     | Element cannot be “Not Applicable”  |
| 15505   | 2     | Element must be “Not Known/Not Recorded” when <i>Initial ED/Hospital GCS – Motor</i> is reported. |
| 15506   | 2     | If patient age is less than 5, <i>Element Value 6</i> is not a valid menu option                  |
| 15540   | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL HEIGHT

| Rule ID | Level | Message   |
|---------|-------|---|
| 8501    | 1     | Invalid value   |
| 8502    | 2     | Element cannot be blank                                     |
| 8503    | 3     | The value is above 215                                      |
| 8504    | 2     | Element cannot be “Not Applicable”                          |
| 8505    | 2     | The value submitted falls outside the valid range of 30-275 |
| 8506    | 3     | The value is below 50                                       |
| 8540    | 1     | Single Entry Max exceeded                                   |

## INITIAL ED/HOSPITAL WEIGHT

| Rule ID | Level | Message   |
|---------|-------|---|
| 8601    | 1     | Invalid value   |
| 8602    | 2     | Element cannot be blank                                 |
| 8603    | 3     | The value is above 200                                  |
| 8604    | 2     | Element cannot be “Not Applicable”                      |
| 8605    | 2     | The value submitted falls outside the valid range 1-650 |
| 8606    | 3     | The value is below 3                                    |
| 8640    | 1     | Single Entry Max exceeded                               |

## DRUG SCREEN

| Rule ID | Level | Message  |
|---------|-------|--|
| 6011    | 1     | Value is not a valid menu option   |
| 6012    | 2     | Element cannot be blank  |
| 6013    | 2     | Element cannot be “Not Applicable”   |
| 6014    | 2     | Element cannot be “Not Known/Not Recorded,” <i>Element Value</i> “14. None,” or “15. Not Tested” along with <i>Element Values</i> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and/or 13 |
| 6050    | 1     | Multiple Entry Max exceeded  |

## ALCOHOL SCREEN

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 5911    | 1     | Value is not a valid menu option   |
| 5912    | 2     | Element cannot be blank            |
| 5913    | 2     | Element cannot be “Not Applicable” |
| 5940    | 1     | Single Entry Max exceeded          |

## ALCOHOL SCREEN RESULTS

| Rule ID | Level | Message   |
|---------|-------|---|
| 5931    | 1     | Invalid value   |
| 5932    | 2     | Element cannot be blank   |
| 5933    | 2     | Element must be and can only be “Not Applicable” when <i>Alcohol Screen</i> is <i>Element Value</i> “2. No” |
| 5935    | 2     | The value submitted falls outside the valid range of 0.0-1.5  |
| 5936    | 3     | The value is above 0.4  |
| 5934    | 1     | Single Entry Max exceeded   |

## ED DISCHARGE DISPOSITION

| Rule ID | Level | Message                                    |
|---------|-------|--|
| 6101    | 1     | Value is not a valid menu option           |
| 6102    | 2     | Element cannot be blank                    |
| 6104    | 2     | Element cannot be “Not Known/Not Recorded” |
| 6140    | 1     | Single Entry Max exceeded                  |

## ED DISCHARGE DATE

| Rule ID | Level | Message   |
|---------|-------|---|
| 6301    | 1     | Date is not valid   |
| 6302    | 1     | Date out of range   |
| 6303    | 2     | Element cannot be blank   |
| 6307    | 2     | <i>ED Discharge Date</i> is earlier than <i>ED/Hospital Arrival Date</i>  |
| 6310    | 3     | <i>ED Discharge Date</i> occurs more than 365 days after <i>ED/Hospital Arrival Date</i>  |
| 6311    | 2     | Element must be and can only be “Not Applicable” when <i>ED Discharge Disposition</i> is “Not Applicable”   |
| 6312    | 3     | <i>ED Discharge Date</i> is earlier than <i>Injury Incident Date</i>  |
| 6313    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Date</i> cannot be earlier than <i>Hospital Procedure Start Date</i>                |
| 6314    | 3     | <i>Hospital Discharge Disposition</i> is “Not Applicable” and <i>ED Discharge Date</i> is earlier than <i>Cerebral Monitor Date</i>                                   |
| 6315    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Date</i> cannot be earlier than <i>Venous Thromboembolism Prophylaxis Date</i>      |
| 6316    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Date</i> cannot be earlier than <i>Angiography Date</i>                             |
| 6317    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Date</i> cannot be earlier than <i>Surgery For Hemorrhage Control Date</i>          |
| 6318    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Date</i> cannot be earlier than <i>Withdrawal of Life Supporting Treatment Date</i> |
| 6319    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Date</i> cannot be earlier than <i>Antibiotic Therapy Date</i>                      |
| 6340    | 1     | Single Entry Max exceeded   |



## ED DISCHARGE TIME

| Rule ID | Level | Message   |
|---------|-------|---|
| 6401    | 1     | Time is not valid   |
| 6402    | 1     | Time out of range   |
| 6403    | 2     | Element cannot be blank   |
| 6407    | 2     | <i>ED Discharge Time</i> is earlier than <i>ED/Hospital Arrival Time</i>  |
| 6409    | 2     | Element must be and can only be “Not Applicable” when <i>ED Discharge Date</i> is “Not Applicable”  |
| 6410    | 3     | Element must be “Not Known/Not Recorded” when <i>ED Discharge Date</i> is “Not Known/Not Recorded”  |
| 6411    | 3     | <i>ED Discharge Time</i> is earlier than <i>Injury Incident Time</i>  |
| 6412    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Time</i> cannot be earlier than <i>Hospital Procedure Start Time</i>                |
| 6413    | 3     | <i>Hospital Discharge Disposition</i> is “Not Applicable” and <i>ED Discharge Time</i> is earlier than <i>Cerebral Monitor Time</i>                                   |
| 6414    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Time</i> cannot be earlier than <i>Venous Thromboembolism Prophylaxis Time</i>      |
| 6415    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Time</i> cannot be earlier than <i>Angiography Time</i>                             |
| 6416    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Time</i> cannot be earlier than <i>Surgery For Hemorrhage Control Time</i>          |
| 6417    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Time</i> cannot be earlier than <i>Withdrawal of Life Supporting Treatment Time</i> |
| 6418    | 2     | If <i>Hospital Discharge Disposition</i> is “Not Applicable” then <i>ED Discharge Time</i> cannot be earlier than <i>Antibiotic Therapy Time</i>                      |
| 6440    | 1     | Single Entry Max exceeded   |

## PRIMARY TRAUMA SERVICE TYPE

| Rule ID | Level | Message                          |
|---------|-------|----------------------------------|
| 22501   | 1     | Value is not a valid menu option |
| 22502   | 2     | Element cannot be blank          |
| 22540   | 1     | Single Entry Max exceeded        |

## HOSPITAL PROCEDURE INFORMATION

### ICD-10 HOSPITAL PROCEDURES

| Rule ID | Level | Message   |
|---------|-------|---|
| 8801    | 1     | Invalid Value (ICD-10 PCS only)   |
| 8803    | 2     | Element cannot be blank   |
| 8804    | 2     | Element must not be “Not Applicable” or “Not Known/Not Recorded” along with any other value |
| 8805    | 1     | Invalid value (ICD-10-CA only)  |
| 8850    | 1     | Multiple Entry Max exceeded   |

### HOSPITAL PROCEDURE START DATE

| Rule ID | Level | Message   |
|---------|-------|---|
| 6601    | 1     | Date is not valid   |
| 6602    | 1     | Date out of range   |
| 6606    | 3     | <i>Hospital Procedure Start Date</i> is earlier than <i>ED/Hospital Arrival Date</i>                        |
| 6609    | 2     | Element cannot be blank   |
| 6610    | 2     | Element must be and can only be “Not Applicable” when <i>ICD-10 Hospital Procedures</i> is “Not Applicable” |
| 6611    | 2     | Element must be “Not Known/Not Recorded” when <i>ICD-10 Hospital Procedures</i> is “Not Known/Not Recorded” |
| 6650    | 1     | Multiple Entry Max exceeded   |

### HOSPITAL PROCEDURE TIME

| Rule ID | Level | Message  |
|---------|-------|--|
| 6701    | 1     | Time is not valid  |
| 6702    | 1     | Time out of range  |
| 6706    | 3     | <i>Hospital Procedure Start Time</i> is earlier than <i>ED/Hospital Arrival Time</i>                           |
| 6708    | 2     | Element cannot be blank  |
| 6709    | 2     | Element must be and can only be “Not Applicable” when <i>Hospital Procedure Start Date</i> is “Not Applicable” |
| 6710    | 2     | Element must be “Not Known/Not Recorded” when <i>Hospital Procedure Start Date</i> is “Not Known/Not Recorded” |
| 6750    | 1     | Multiple Entry Max exceeded  |

## PRE-EXISTING CONDITIONS

### ADVANCED DIRECTIVE LIMITING CARE

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16001   | 1     | Value is not a valid menu option   |
| 16003   | 2     | Element cannot be blank            |
| 16004   | 2     | Element cannot be "Not Applicable" |
| 16040   | 1     | Single Entry Max exceeded          |

### ALCOHOL USE DISORDER

| Rule ID | Level | Message  |
|---------|-------|--|
| 16101   | 1     | Value is not a valid menu option   |
| 16103   | 2     | Element cannot be blank  |
| 16104   | 2     | Element must be and can only be "Not Applicable" for patients <15 years-of-age |
| 16140   | 1     | Single Entry Max exceeded  |

### ANTICOAGULANT THERAPY

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16301   | 1     | Value is not a valid menu option   |
| 16303   | 2     | Element cannot be blank            |
| 16304   | 2     | Element cannot be "Not Applicable" |
| 16340   | 1     | Single Entry Max exceeded          |

### ATTENTION DEFICIT DISORDER/ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16401   | 1     | Value is not a valid menu option   |
| 16403   | 2     | Element cannot be blank            |
| 16404   | 2     | Element cannot be "Not Applicable" |
| 16440   | 1     | Single Entry Max exceeded          |

### BIPOLAR I/II DISORDER

| Rule ID | Level | Message  |
|---------|-------|--|
| 21901   | 1     | Value is not a valid menu option   |
| 21902   | 2     | Element cannot be blank  |
| 21903   | 2     | Element must be and can only be "Not Applicable" for patients <15 years-of-age |
| 21940   | 1     | Single Entry Max exceeded  |

## BLEEDING DISORDER

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16501   | 1     | Value is not a valid menu option   |
| 16503   | 2     | Element cannot be blank            |
| 16504   | 2     | Element cannot be “Not Applicable” |
| 16540   | 1     | Single Entry Max exceeded          |

## CEREBRAL VASCULAR ACCIDENT (CVA)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16601   | 1     | Value is not a valid menu option   |
| 16603   | 2     | Element cannot be blank            |
| 16604   | 2     | Element cannot be “Not Applicable” |
| 16640   | 1     | Single Entry Max exceeded          |

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

| Rule ID | Level | Message  |
|---------|-------|--|
| 16701   | 1     | Value is not a valid menu option   |
| 16703   | 2     | Element cannot be blank  |
| 16704   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 16740   | 1     | Single Entry Max exceeded  |

## CHRONIC RENAL FAILURE

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16801   | 1     | Value is not a valid menu option   |
| 16803   | 2     | Element cannot be blank            |
| 16804   | 2     | Element cannot be “Not Applicable” |
| 16840   | 1     | Single Entry Max exceeded          |

## CIRRHOSIS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 16901   | 1     | Value is not a valid menu option   |
| 16903   | 2     | Element cannot be blank            |
| 16904   | 2     | Element cannot be “Not Applicable” |
| 16940   | 1     | Single Entry Max exceeded          |

## CONGENITAL ANOMALIES

| Rule ID | Level | Message  |
|---------|-------|--|
| 17001   | 1     | Value is not a valid menu option   |
| 17003   | 2     | Element cannot be blank  |
| 17004   | 2     | Element must be and can only be “Not Applicable” for patients ≥15-years-of-age |
| 17040   | 1     | Single Entry Max exceeded  |

## CONGESTIVE HEART FAILURE (CHF)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17101   | 1     | Value is not a valid menu option   |
| 17103   | 2     | Element cannot be blank            |
| 17104   | 2     | Element cannot be “Not Applicable” |
| 17140   | 1     | Single Entry Max exceeded          |

## CURRENT SMOKER

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17201   | 1     | Value is not a valid menu option   |
| 17203   | 2     | Element cannot be blank            |
| 17204   | 2     | Element cannot be “Not Applicable” |
| 17240   | 1     | Single Entry Max exceeded          |

## CURRENTLY RECEIVING CHEMOTHERAPY FOR CANCER

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17301   | 1     | Value is not a valid menu option   |
| 17303   | 2     | Element cannot be blank            |
| 17304   | 2     | Element cannot be “Not Applicable” |
| 17340   | 1     | Single Entry Max exceeded          |

## DEMENTIA

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17401   | 1     | Value is not a valid menu option   |
| 17403   | 2     | Element cannot be blank            |
| 17404   | 2     | Element cannot be “Not Applicable” |
| 17440   | 1     | Single Entry Max exceeded          |

## DIABETES MELLITUS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17501   | 1     | Value is not a valid menu option   |
| 17503   | 2     | Element cannot be blank            |
| 17504   | 2     | Element cannot be “Not Applicable” |
| 17540   | 1     | Single Entry Max exceeded          |

## DISSEMINATED CANCER

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17601   | 1     | Value is not a valid menu option   |
| 17603   | 2     | Element cannot be blank            |
| 17604   | 2     | Element cannot be “Not Applicable” |
| 17640   | 1     | Single Entry Max exceeded          |

## FUNCTIONALLY DEPENDENT HEALTH STATUS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17701   | 1     | Value is not a valid menu option   |
| 17703   | 2     | Element cannot be blank            |
| 17704   | 2     | Element cannot be “Not Applicable” |
| 17740   | 1     | Single Entry Max exceeded          |

## HYPERTENSION

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 17801   | 1     | Value is not a valid menu option   |
| 17803   | 2     | Element cannot be blank            |
| 17804   | 2     | Element cannot be “Not Applicable” |
| 17840   | 1     | Single Entry Max exceeded          |

## MAJOR DEPRESSIVE DISORDER

| Rule ID | Level | Message  |
|---------|-------|--|
| 22001   | 1     | Value is not a valid menu option   |
| 22002   | 2     | Element cannot be blank  |
| 22003   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 22040   | 1     | Single Entry Max exceeded  |

## MYOCARDIAL INFARCTION (MI)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18001   | 1     | Value is not a valid menu option   |
| 18003   | 2     | Element cannot be blank            |
| 18004   | 2     | Element cannot be “Not Applicable” |
| 18040   | 1     | Single Entry Max exceeded          |

## OTHER MENTAL/PERSONALITY DISORDERS

| Rule ID | Level | Message  |
|---------|-------|--|
| 22101   | 1     | Value is not a valid menu option   |
| 22102   | 2     | Element cannot be blank  |
| 22103   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 22140   | 1     | Single Entry Max exceeded  |

## PERIPHERAL ARTERIAL DISEASE (PAD)

| Rule ID | Level | Message  |
|---------|-------|--|
| 18101   | 1     | Value is not a valid menu option   |
| 18103   | 2     | Element cannot be blank  |
| 18104   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 18140   | 1     | Single Entry Max exceeded  |

## POST-TRAUMATIC STRESS DISORDER

| Rule ID | Level | Message  |
|---------|-------|--|
| 22201   | 1     | Value is not a valid menu option   |
| 22202   | 2     | Element cannot be blank  |
| 22203   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 22240   | 1     | Single Entry Max exceeded  |

## PREGNANCY

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21501   | 1     | Value is not a valid menu option   |
| 21503   | 2     | Element cannot be blank            |
| 21504   | 2     | Element cannot be “Not Applicable” |
| 21540   | 1     | Single Entry Max exceeded          |

## PREMATURITY

| Rule ID | Level | Message  |
|---------|-------|--|
| 18201   | 1     | Value is not a valid menu option   |
| 18203   | 2     | Element cannot be blank  |
| 18204   | 2     | Element must be and can only be “Not Applicable” for patients ≥15-years-of-age |
| 18240   | 1     | Single Entry Max exceeded  |

## SCHIZOAFFECTIVE DISORDER

| Rule ID | Level | Message  |
|---------|-------|--|
| 22301   | 1     | Value is not a valid menu option   |
| 22302   | 2     | Element cannot be blank  |
| 22303   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 22340   | 1     | Single Entry Max exceeded  |

## SCHIZOPHRENIA

| Rule ID | Level | Message  |
|---------|-------|--|
| 22401   | 1     | Value is not a valid menu option   |
| 22402   | 2     | Element cannot be blank  |
| 22403   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 22440   | 1     | Single Entry Max exceeded  |

## STEROID USE

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18301   | 1     | Value is not a valid menu option   |
| 18303   | 2     | Element cannot be blank            |
| 18304   | 2     | Element cannot be “Not Applicable” |
| 18340   | 1     | Single Entry Max exceeded          |

## SUBSTANCE USE DISORDER

| Rule ID | Level | Message  |
|---------|-------|--|
| 18401   | 1     | Value is not a valid menu option   |
| 18403   | 2     | Element cannot be blank  |
| 18404   | 2     | Element must be and can only be “Not Applicable” for patients <15 years-of-age |
| 18440   | 1     | Single Entry Max exceeded  |



## DIAGNOSIS INFORMATION

### ICD-10 INJURY DIAGNOSES

| Rule ID | Level | Message   |
|---------|-------|---|
| 8701    | 1     | Invalid value (ICD-10-CM only)  |
| 8702    | 2     | Element cannot be blank   |
| 8703    | 2     | At least one diagnosis must be provided and meet inclusion criteria. (ICD-10-CM only)     |
| 8705    | 1     | Invalid value (ICD-10-CA only)  |
| 8706    | 2     | At least one diagnosis must be provided and meet inclusion criteria. (ICD-10-CA only)     |
| 8707    | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value |
| 8750    | 1     | Multiple Entry Max exceeded   |

### AIS CODE

| Rule ID | Level | Message  |
|---------|-------|--|
| 21001   | 1     | Invalid value  |
| 21004   | 2     | AIS codes submitted are not valid AIS 05, Update 08, or AIS 2015 codes |
| 21007   | 2     | Element cannot be blank  |
| 21008   | 2     | Element cannot be “Not Applicable”                                     |
| 21009   | 2     | Element cannot be “Not Known/Not Recorded” along with any other value  |
| 21050   | 1     | Multiple Entry Max exceeded  |

### AIS VERSION

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 7301    | 1     | Value is not a valid menu option   |
| 7302    | 2     | Element cannot be blank            |
| 7303    | 2     | Element cannot be “Not Applicable” |
| 7340    | 1     | Single Entry Max exceeded          |

## HOSPITAL EVENTS

### ACUTE KIDNEY INJURY (AKI)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18501   | 1     | Value is not a valid menu option   |
| 18503   | 2     | Element cannot be blank            |
| 18504   | 2     | Element cannot be “Not Applicable” |
| 18540   | 1     | Single Entry Max exceeded          |

### ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18601   | 1     | Value is not a valid menu option   |
| 18603   | 2     | Element cannot be blank            |
| 18604   | 2     | Element cannot be “Not Applicable” |
| 18640   | 1     | Single Entry Max exceeded          |

### ALCOHOL WITHDRAWAL SYNDROME

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18701   | 1     | Value is not a valid menu option   |
| 18703   | 2     | Element cannot be blank            |
| 18704   | 2     | Element cannot be “Not Applicable” |
| 18740   | 1     | Single Entry Max exceeded          |

### CARDIAC ARREST WITH CPR

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18801   | 1     | Value is not a valid menu option   |
| 18803   | 2     | Element cannot be blank            |
| 18804   | 2     | Element cannot be “Not Applicable” |
| 18840   | 1     | Single Entry Max exceeded          |

### CATHERTER-ASSOCIATED URINARY TRACT INFECTION (CAUTI)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 18901   | 1     | Value is not a valid menu option   |
| 18903   | 2     | Element cannot be blank            |
| 18904   | 2     | Element cannot be “Not Applicable” |
| 18940   | 1     | Single Entry Max exceeded          |

## CENTRAL LINE-ASSOCIATED BLOOD STREAM INFECTION (CLABSI)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19001   | 1     | Value is not a valid menu option   |
| 19003   | 2     | Element cannot be blank            |
| 19004   | 2     | Element cannot be “Not Applicable” |
| 19040   | 1     | Single Entry Max exceeded          |

## DEEP SURGICAL SITE INFECTION

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19101   | 1     | Value is not a valid menu option   |
| 19103   | 2     | Element cannot be blank            |
| 19104   | 2     | Element cannot be “Not Applicable” |
| 19140   | 1     | Single Entry Max exceeded          |

## DEEP VEIN THROMBOSIS (DVT)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19201   | 1     | Value is not a valid menu option   |
| 19203   | 2     | Element cannot be blank            |
| 19204   | 2     | Element cannot be “Not Applicable” |
| 19240   | 1     | Single Entry Max exceeded          |

## DELIRIUM

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21601   | 1     | Value is not a valid menu option   |
| 21603   | 2     | Element cannot be blank            |
| 21604   | 2     | Element cannot be “Not Applicable” |
| 21640   | 1     | Single Entry Max exceeded          |

## MYOCARDIAL INFARCTION (MI)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19401   | 1     | Value is not a valid menu option   |
| 19403   | 2     | Element cannot be blank            |
| 19404   | 2     | Element cannot be “Not Applicable” |
| 19440   | 1     | Single Entry Max exceeded          |

## ORGAN/SPACE SURGICAL SITE INFECTION

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19501   | 1     | Value is not a valid menu option   |
| 19503   | 2     | Element cannot be blank            |
| 19504   | 2     | Element cannot be “Not Applicable” |
| 19540   | 1     | Single Entry Max exceeded          |

## OSTEOMYELITIS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19601   | 1     | Value is not a valid menu option   |
| 19603   | 2     | Element cannot be blank            |
| 19604   | 2     | Element cannot be “Not Applicable” |
| 19640   | 1     | Single Entry Max exceeded          |

## PULMONARY EMBOLISM (PE)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19701   | 1     | Value is not a valid menu option   |
| 19703   | 2     | Element cannot be blank            |
| 19704   | 2     | Element cannot be “Not Applicable” |
| 19740   | 1     | Single Entry Max exceeded          |

## PRESSURE ULCER

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19801   | 1     | Value is not a valid menu option   |
| 19803   | 2     | Element cannot be blank            |
| 19804   | 2     | Element cannot be “Not Applicable” |
| 19840   | 1     | Single Entry Max exceeded          |

## SEVERE SEPSIS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 19901   | 1     | Value is not a valid menu option   |
| 19903   | 2     | Element cannot be blank            |
| 19904   | 2     | Element cannot be “Not Applicable” |
| 19940   | 1     | Single Entry Max exceeded          |

## STROKE/CVA

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20001   | 1     | Value is not a valid menu option   |
| 20003   | 2     | Element cannot be blank            |
| 20004   | 2     | Element cannot be “Not Applicable” |
| 20040   | 1     | Single Entry Max exceeded          |

## SUPERFICIAL INCISIONAL SURGICAL SITE INFECTION

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20101   | 1     | Value is not a valid menu option   |
| 20103   | 2     | Element cannot be blank            |
| 20104   | 2     | Element cannot be “Not Applicable” |
| 20140   | 1     | Single Entry Max exceeded          |

## UNPLANNED ADMISSION TO ICU

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20201   | 1     | Value is not a valid menu option   |
| 20203   | 2     | Element cannot be blank            |
| 20204   | 2     | Element cannot be “Not Applicable” |
| 20240   | 1     | Single Entry Max exceeded          |

## UNPLANNED INTUBATION

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20301   | 1     | Value is not a valid menu option   |
| 20303   | 2     | Element cannot be blank            |
| 20304   | 2     | Element cannot be “Not Applicable” |
| 20340   | 1     | Single Entry Max exceeded          |

## UNPLANNED VISIT TO THE OPERATING ROOM

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21701   | 1     | Value is not a valid menu option   |
| 21703   | 2     | Element cannot be blank            |
| 21704   | 2     | Element cannot be “Not Applicable” |
| 21740   | 1     | Single Entry Max exceeded          |

## VENTILATOR-ASSOCIATED PNEUMONIA (VAP)

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 20501   | 1     | Value is not a valid menu option   |
| 20503   | 2     | Element cannot be blank            |
| 20504   | 2     | Element cannot be “Not Applicable” |
| 20540   | 1     | Single Entry Max exceeded          |

## OUTCOME INFORMATION

### TOTAL ICU LENGTH OF STAY

| Rule ID | Level | Message   |
|---------|-------|---|
| 7501    | 1     | Invalid value   |
| 7502    | 2     | Element cannot be blank   |
| 7503    | 2     | <i>Total ICU Length of Stay</i> is greater than the difference between <i>ED/Hospital Arrival Date</i> and <i>Hospital Discharge Date</i> |
| 7504    | 3     | The value is above 60   |
| 7505    | 2     | The value submitted falls outside the valid range of 1-575  |
| 7540    | 1     | Single Entry Max exceeded   |

### TOTAL VENTILATOR DAYS

| Rule ID | Level | Message  |
|---------|-------|--|
| 7601    | 1     | Invalid value  |
| 7602    | 2     | Element cannot be blank  |
| 7603    | 2     | <i>Total Ventilator Days</i> is greater than the difference between <i>ED/Hospital Arrival Date</i> and the latter of the known <i>ED Discharge Date</i> or <i>Hospital Discharge Date</i> |
| 7604    | 3     | The value is above 60  |
| 7605    | 2     | The value submitted falls outside the valid range of 1-575   |
| 7640    | 1     | Single Entry Max exceeded  |

## HOSPITAL DISCHARGE DISPOSITION

| Rule ID | Level | Message  |
|---------|-------|--|
| 7901    | 1     | Value is not a valid menu option   |
| 7902    | 2     | Element cannot be blank  |
| 7907    | 2     | Element must be and can only be "Not Applicable" when <i>ED Discharge Disposition</i> is <i>Element Values</i> 4, 5, 6, 9, 10, or 11 |
| 7909    | 2     | Element cannot be "Not Known/Not Recorded"   |
| 7940    | 1     | Single Entry Max exceeded  |

## HOSPITAL DISCHARGE DATE

| Rule ID | Level | Message   |
|---------|-------|---|
| 7701    | 1     | Date is not valid   |
| 7702    | 1     | Date out of range   |
| 7703    | 2     | Element cannot be blank   |
| 7707    | 2     | <i>Hospital Discharge Date</i> cannot be earlier than <i>ED/Hospital Arrival Date</i>                           |
| 7708    | 2     | <i>Hospital Discharge Date</i> cannot be earlier than <i>ED Discharge Date</i>                                  |
| 7711    | 3     | <i>Hospital Discharge Date</i> occurs more than 365 days after <i>ED/Hospital Arrival Date</i>                  |
| 7713    | 2     | Element must be and can only be "Not Applicable" when <i>Hospital Discharge Disposition</i> is "Not Applicable" |
| 7714    | 3     | <i>Hospital Discharge Date</i> is earlier than <i>Injury Incident Date</i>                                      |
| 7715    | 2     | <i>Hospital Discharge Date</i> is earlier than <i>Hospital Procedure Start Date</i>                             |
| 7716    | 2     | <i>Hospital Discharge Date</i> is earlier than <i>Cerebral Monitor Date</i>                                     |
| 7717    | 2     | <i>Hospital Discharge Date</i> is earlier than <i>Venous Thromboembolism Prophylaxis Date</i>                   |
| 7718    | 2     | <i>Hospital Discharge Date</i> is earlier than <i>Angiography Date</i>  |
| 7719    | 2     | <i>Hospital Discharge Date</i> is earlier than <i>Surgery for Hemorrhage Control Date</i>                       |
| 7720    | 2     | <i>Hospital Discharge Date</i> cannot be earlier than <i>Withdrawal of Life Supporting Treatment Date</i>       |
| 7721    | 3     | <i>Hospital Discharge Date</i> is earlier than <i>Antibiotic Therapy Date</i>                                   |
| 7740    | 1     | Single Entry Max exceeded   |

## HOSPITAL DISCHARGE TIME

| Rule ID | Level | Message   |
|---------|-------|---|
| 7801    | 1     | Time is not valid   |
| 7802    | 1     | Time out of range   |
| 7803    | 2     | Element cannot be blank   |
| 7807    | 2     | <i>Hospital Discharge Time</i> cannot be earlier than <i>ED/Hospital Arrival Time</i>                     |
| 7808    | 2     | <i>Hospital Discharge Time</i> cannot be earlier than or equal to <i>ED Discharge Time</i>                |
| 7810    | 2     | Element must be and can only be “Not Applicable” when <i>Hospital Discharge Date</i> is “Not Applicable”  |
| 7811    | 2     | Element must be “Not Known/Not Recorded” when <i>Hospital Discharge Date</i> is “Not Known/Not Recorded”  |
| 7812    | 3     | <i>Hospital Discharge Time</i> is earlier than <i>Injury Incident Time</i>                                |
| 7813    | 2     | <i>Hospital Discharge Time</i> is earlier than <i>Hospital Procedure Start Time</i>                       |
| 7814    | 2     | <i>Hospital Discharge Time</i> is earlier than <i>Cerebral Monitor Time</i>                               |
| 7815    | 2     | <i>Hospital Discharge Time</i> is earlier than <i>Venous Thromboembolism Prophylaxis Time</i>             |
| 7816    | 2     | <i>Hospital Discharge Time</i> is earlier than <i>Angiography Time</i>                                    |
| 7817    | 2     | <i>Hospital Discharge Time</i> is earlier than <i>Surgery for Hemorrhage Control Time</i>                 |
| 7818    | 2     | <i>Hospital Discharge Time</i> cannot be earlier than <i>Withdrawal of Life Supporting Treatment Time</i> |
| 7819    | 3     | <i>Hospital Discharge Time</i> is earlier than <i>Antibiotic Therapy Time</i>                             |
| 7840    | 1     | Single Entry Max exceeded   |

## FINANCIAL INFORMATION

### PRIMARY METHOD OF PAYMENT

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 8001    | 1     | Value is not a valid menu option   |
| 8002    | 2     | Element cannot be blank            |
| 8003    | 2     | Element cannot be “Not Applicable” |
| 8040    | 1     | Single Entry Max exceeded          |



## TQIP MEASURES FOR PROCESS OF CARE

### HIGHEST GCS TOTAL

| Rule ID | Level | Message   |
|---------|-------|---|
| 10001   | 1     | GCS Total is outside the valid range of 3 - 15  |
| 10002   | 2     | Element cannot be blank   |
| 10003   | 2     | <b>Highest GCS Total</b> is less than GCS Motor Component of <b>Highest GCS Total</b>   |
| 10004   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion  |
| 10005   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion, unless the patients <b>ED Discharge Date</b> or <b>Hospital Discharge Date</b> is prior to the next calendar day |
| 10006   | 2     | Element must be “Not Known/Not Recorded” when <b>Highest GCS 40 – Motor</b> is reported.  |
| 10007   | 1     | Invalid Value   |
| 10008   | 2     | Element must be “Not Applicable” as the patient was discharged on the same date as <b>ED/Hospital Arrival Date</b>  |
| 10040   | 1     | Single Entry Max exceeded   |

### HIGHEST GCS MOTOR

| Rule ID | Level | Message   |
|---------|-------|---|
| 10101   | 1     | Value is not a valid menu option  |
| 10102   | 2     | Element cannot be blank   |
| 10104   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion  |
| 10105   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion, unless the patients <b>ED Discharge Date</b> or <b>Hospital Discharge Date</b> is prior to the next calendar day |
| 10106   | 2     | Element must be “Not Known/Not Recorded” when <b>Highest GCS 40 – Motor</b> is reported.  |
| 10107   | 2     | Element must be “Not Applicable” as the patient was discharged on the same date as <b>ED/Hospital Arrival Date</b>  |
| 10140   | 1     | Single Entry Max exceeded   |

## GCS ASSESSMENT QUALIFIER COMPONENT OF HIGHEST GCS TOTAL

| Rule ID | Level | Message   |
|---------|-------|---|
| 10201   | 1     | Value is not a valid menu option  |
| 10202   | 2     | Element cannot be blank   |
| 10203   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion  |
| 10204   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion, unless the patients <i>ED Discharge Date</i> or <i>Hospital Discharge Date</i> is prior to the next calendar day |
| 10206   | 2     | Element must be “Not Known/Not Recorded” when <i>Highest GCS 40 – Motor</i> is reported.  |
| 10207   | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value   |
| 10208   | 2     | Element must be “Not Applicable” as the patient was discharged on the same date as <i>ED/Hospital Arrival Date</i>  |
| 10250   | 1     | Multiple Entry Max exceeded   |

## HIGHEST GCS-40 MOTOR

| Rule ID | Level | Message   |
|---------|-------|---|
| 20601   | 1     | Value is not a valid menu option  |
| 20602   | 2     | Element cannot be blank   |
| 20604   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion  |
| 20605   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion, unless the patients <i>ED Discharge Date</i> or <i>Hospital Discharge Date</i> is prior to the next calendar day |
| 20606   | 2     | Element must be "Not Known/Not Recorded" when <i>Highest GCS - Motor</i> is reported  |
| 20607   | 2     | Element must be “Not Applicable” as the patient was discharged on the same date as <i>ED/Hospital Arrival Date</i>  |
| 20608   | 2     | If patient is less than 5, <i>Element Value 6</i> is not a valid menu option  |
| 20640   | 1     | Single Entry Max exceeded   |

## INITIAL ED/HOSPITAL PUPILLARY RESPONSE

| Rule ID | Level | Message  |
|---------|-------|--|
| 13601   | 1     | Value is not a valid menu option   |
| 13602   | 2     | Element cannot be blank  |
| 13603   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion |
| 13604   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion    |

## MIDLINE SHIFT

| Rule ID | Level | Message  |
|---------|-------|--|
| 13701   | 1     | Value is not a valid menu option   |
| 13702   | 2     | Element cannot be blank  |
| 13703   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion |
| 13704   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion    |
| 13740   | 1     | Single Entry Max exceeded  |

## CEREBRAL MONITOR

| Rule ID | Level | Message  |
|---------|-------|--|
| 10301   | 1     | Value is not a valid menu option   |
| 10302   | 2     | Element cannot be blank  |
| 10304   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion   |
| 10305   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion  |
| 10306   | 2     | Element cannot be “Not Applicable”, “Not Known/Not Recorded”, or <i>Element Value</i> “5. None” along with <i>Element Values</i> 1, 2, 3, and/or 4 |
| 10350   | 1     | Multiple Entry Max exceeded  |

## CEREBRAL MONITOR DATE

| Rule ID | Level | Message   |
|---------|-------|---|
| 10401   | 1     | Date is not valid   |
| 10402   | 2     | Element cannot be blank   |
| 10403   | 1     | Date out of range   |
| 10405   | 3     | Element should not be “Not Known/Not Recorded” when <i>Cerebral Monitor</i> is <i>Element Values</i> 1, 2, 3, and/or 4                              |
| 10407   | 3     | <i>Cerebral Monitor Date</i> should not be earlier than <i>ED/Hospital Arrival Date</i> unless placed at referring facility and used for monitoring |
| 10409   | 2     | Element must be and can only be “Not Applicable” when <i>Cerebral Monitor</i> is “Not Applicable” or <i>Element Value</i> “5. None”                 |
| 10410   | 2     | Element must be “Not Known/Not Recorded” when <i>Cerebral Monitor</i> is “Not Known/Not Recorded”   |
| 10440   | 1     | Single Entry Max exceeded   |

## CEREBRAL MONITOR TIME

| Rule ID | Level | Message   |
|---------|-------|---|
| 10501   | 1     | Time is not valid   |
| 10502   | 1     | Time out of range   |
| 10503   | 2     | Element cannot be blank   |
| 10505   | 3     | Element should not be “Not Known/Not Recorded” when <i>Cerebral Monitor</i> is <i>Element Values 1, 2, 3, and/or 4</i>                              |
| 10506   | 3     | <i>Cerebral Monitor Time</i> should not be earlier than <i>ED/Hospital Arrival Time</i> unless placed at referring facility and used for monitoring |
| 10509   | 2     | Element must be and can only be “Not Applicable” when <i>Cerebral Monitor Date</i> is “Not Applicable”  |
| 10510   | 2     | Element must be “Not Known/Not Recorded” when <i>Cerebral Monitor Date</i> is “Not Known/Not Recorded”  |
| 10540   | 1     | Single Entry Max exceeded   |

## VENOUS THROMBOEMBOLISM PROPHYLAXIS TYPE

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 10601   | 1     | Value is not a valid menu option   |
| 10602   | 2     | Element cannot be blank            |
| 10603   | 2     | Element cannot be “Not Applicable” |
| 10640   | 1     | Single Entry Max exceeded          |

## VENOUS THROMBOEMBOLISM PROPHYLAXIS DATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 10701   | 1     | Date is not valid  |
| 10702   | 1     | Date out of range  |
| 10703   | 2     | Element cannot be blank  |
| 10706   | 2     | <i>Venous Thromboembolism Prophylaxis Date</i> is earlier than <i>ED/Hospital Arrival Date</i>   |
| 10708   | 2     | Element must be and can only be “Not Applicable” when <i>Venous Thromboembolism Prophylaxis Type</i> is <i>Element Value “5. None”</i> |
| 10709   | 2     | Element must be “Not Known/Not Recorded” when <i>Venous Thromboembolism Prophylaxis Type</i> is “Not Known/Not Recorded”               |
| 10740   | 1     | Single Entry Max exceeded  |

## VENOUS THROMBOEMBOLISM PROPHYLAXIS TIME

| Rule ID | Level | Message  |
|---------|-------|--|
| 10801   | 1     | Time is not valid  |
| 10802   | 1     | Time out of range  |
| 10803   | 2     | Element cannot be blank  |
| 10806   | 2     | <i>Venous Thromboembolism Prophylaxis Time</i> is earlier than <i>ED/Hospital Arrival Time</i>                           |
| 10809   | 2     | Element must be and can only be “Not Applicable” when <i>Venous Thromboembolism Prophylaxis Date</i> is “Not Applicable” |
| 10810   | 2     | Element must be “Not Known/Not Recorded” when <i>Venous Thromboembolism Prophylaxis Date</i> is “Not Known/Not Recorded” |
| 10840   | 1     | Single Entry Max exceeded  |

## PACKED RED BLOOD CELLS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21801   | 1     | Invalid value                      |
| 21802   | 2     | Element cannot be blank            |
| 21803   | 2     | Element cannot be “Not Applicable” |
| 21804   | 3     | Value exceeds 40,000 for CCs       |
| 21840   | 1     | Single Entry Max exceeded          |

## WHOLE BLOOD

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21101   | 1     | Invalid value                      |
| 21102   | 2     | Element cannot be blank            |
| 21103   | 2     | Element cannot be “Not Applicable” |
| 21104   | 3     | Value exceeds 40,000 for CCs       |
| 21140   | 1     | Single Entry Max exceeded          |

## PLASMA

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21201   | 1     | Invalid value                      |
| 21202   | 2     | Element cannot be blank            |
| 21204   | 3     | Value exceeds 40,000 for CCs       |
| 21208   | 2     | Element cannot be “Not Applicable” |
| 21240   | 1     | Single Entry Max exceeded          |

## PLATELETS

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21201   | 1     | Invalid value                      |
| 21202   | 2     | Element cannot be blank            |
| 21204   | 3     | Value exceeds 40,000 for CCs       |
| 21208   | 2     | Element cannot be “Not Applicable” |
| 21240   | 1     | Single Entry Max exceeded          |

## CRYOPRECIPITATE

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 21401   | 1     | Invalid value                      |
| 21402   | 2     | Element cannot be blank            |
| 21404   | 3     | Value exceeds 40,000 for CCs       |
| 21408   | 2     | Element cannot be “Not Applicable” |
| 21440   | 1     | Single Entry Max exceeded          |

## ANGIOGRAPHY

| Rule ID | Level | Message   |
|---------|-------|---|
| 11701   | 1     | Invalid value   |
| 11702   | 2     | Element cannot be blank   |
| 11704   | 2     | Element must be and can only be “Not Applicable” when <i>Packed Red Blood Cells</i> and <i>Whole Blood</i> are 0                |
| 11705   | 2     | Element must be “Not Known/Not Recorded” when <i>Packed Red Blood Cells</i> and <i>Whole Blood</i> are “Not Known/Not Recorded” |
| 11740   | 1     | Single Entry Max exceeded   |

## EMBOLIZATION SITE

| Rule ID | Level | Message  |
|---------|-------|--|
| 11801   | 1     | Value is not a valid menu option   |
| 11802   | 2     | Element cannot be blank  |
| 11804   | 2     | Element must be and can only be “Not Applicable” when <i>Angiography</i> is <i>Element Value</i> “1. None”, “2. Angiogram only”, or “4. Angiogram with stenting” |
| 11805   | 2     | Element cannot be “Not Applicable” or “Not Known/Not Recorded” along with any other value  |
| 11850   | 1     | Multiple Entry Max exceeded  |

## ANGIOGRAPHY DATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 11901   | 1     | Date is not valid  |
| 11902   | 1     | Date out of range  |
| 11903   | 2     | Element cannot be blank  |
| 11905   | 2     | Element must be and can only be “Not Applicable” when <i>Angiography</i> is “Not Applicable” or <i>Element Value</i> “1. None” |
| 11906   | 2     | <i>Angiography Date</i> is earlier than <i>ED/Hospital Arrival Date</i>  |
| 11908   | 2     | <i>Angiography Date</i> occurs more than 24 hours after <i>ED Hospital Arrival Date</i>  |
| 11909   | 2     | Element must be “Not Known/Not Recorded” when <i>Angiography</i> is “Not Known/Not Recorded”                                   |
| 11940   | 1     | Single Entry Max exceeded  |

## ANGIOGRAPHY TIME

| Rule ID | Level | Message   |
|---------|-------|---|
| 12001   | 1     | Time is not valid   |
| 12002   | 1     | Time out of range   |
| 12003   | 2     | Element cannot be blank   |
| 12004   | 2     | Element cannot be “Not Applicable” when <i>Angiography</i> is <i>Element Value</i> “2. 'Angiogram only', 3. 'Angiogram with embolization', or 4. 'Angiogram with stenting’” |
| 12005   | 2     | Element must be and can only be “Not Applicable” when <i>Angiography</i> is “Not Applicable” or <i>Element Value</i> “1. None”  |
| 12006   | 2     | <i>Angiography Time</i> is earlier than <i>ED/Hospital Arrival Time</i>   |
| 12008   | 2     | <i>Angiography Time</i> occurs more than 24 hours after <i>ED/Hospital Arrival Time</i>   |
| 12009   | 2     | Element must be “Not Known/Not Recorded” when <i>Angiography Date</i> is “Not Known/Not Recorded”   |
| 12040   | 1     | Single Entry Max exceeded   |

## SURGERY FOR HEMORRHAGE CONTROL TYPE

| Rule ID | Level | Message   |
|---------|-------|---|
| 12101   | 1     | Value is not a valid menu option  |
| 12102   | 2     | Element cannot be blank   |
| 12104   | 2     | Element must be and can only be “Not Applicable” when <i>Packed Red Blood Cells</i> and <i>Whole Blood</i> are 0                |
| 12105   | 2     | Element must be “Not Known/Not Recorded” when <i>Packed Red Blood Cells</i> and <i>Whole Blood</i> are “Not Known/Not Recorded” |
| 12140   | 1     | Single Entry Max exceeded   |

## SURGERY FOR HEMORRHAGE CONTROL DATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 12201   | 1     | Date is not valid  |
| 12202   | 1     | Date out of range  |
| 12203   | 2     | <i>Surgery For Hemorrhage Control Date</i> is earlier than <i>ED/Hospital Arrival Date</i>   |
| 12206   | 2     | Element must be and can only be “Not Applicable” when <i>Surgery For Hemorrhage Control Type</i> is “Not Applicable” or <i>Element Value</i> “1. None” |
| 12207   | 2     | Element cannot be blank  |
| 12208   | 2     | <i>Surgery for Hemorrhage Control Date</i> occurs more than 24 hours after <i>ED/Hospital Arrival Date</i>   |
| 12209   | 2     | Element must be “Not Known/Not Recorded” when <i>Surgery For Hemorrhage Control Type</i> is “Not Known/Not Recorded”                                   |
| 12240   | 1     | Single Entry Max exceeded  |

## SURGERY FOR HEMORRHAGE CONTROL TIME

| Rule ID | Level | Message  |
|---------|-------|--|
| 12301   | 1     | Time is not valid  |
| 12302   | 1     | Time out of range  |
| 12303   | 2     | <i>Surgery For Hemorrhage Control Time</i> is earlier than <i>ED/Hospital Arrival Time</i>                           |
| 12307   | 2     | Element cannot be blank  |
| 12308   | 2     | <i>Surgery for Hemorrhage Control Time</i> occurs more than 24 hours after <i>ED/Hospital Arrival Time</i>           |
| 12309   | 2     | Element must be and can only be “Not Applicable” when <i>Surgery For Hemorrhage Control Date</i> is “Not Applicable” |
| 12310   | 2     | Element must be “Not Known/Not Recorded” when <i>Surgery For Hemorrhage Control Date</i> is “Not Known/Not Recorded” |
| 12340   | 1     | Single Entry Max exceeded  |

## WITHDRAWAL OF LIFE SUPPORTING TREATMENT

| Rule ID | Level | Message                            |
|---------|-------|------------------------------------|
| 13801   | 1     | Value is not a valid menu option   |
| 13802   | 2     | Element cannot be blank            |
| 13803   | 2     | Element cannot be “Not Applicable” |
| 13840   | 1     | Single Entry Max exceeded          |



## WITHDRAWAL OF LIFE SUPPORTING TREATMENT DATE

| Rule ID | Level | Message  |
|---------|-------|--|
| 13901   | 1     | Date is not valid  |
| 13902   | 1     | Date out of range  |
| 13903   | 2     | <b>Withdrawal of Life Supporting Treatment Date</b> is earlier than <b>ED/Hospital Arrival Date</b>                                  |
| 13906   | 2     | Element must be and can only be “Not Applicable” when <b>Withdrawal of Life Supporting Treatment</b> is <i>Element Value</i> “2. No” |
| 13907   | 2     | Element cannot be blank  |
| 13908   | 2     | Element must be “Not Known/Not Recorded” when <b>Withdrawal of Life Supporting Treatment</b> is “Not Known/Not Recorded”             |
| 13940   | 1     | Single Entry Max exceeded  |

## WITHDRAWAL OF LIFE SUPPORTING TREATMENT TIME

| Rule ID | Level | Message   |
|---------|-------|---|
| 14001   | 1     | Time is not valid   |
| 14002   | 1     | Time out of range   |
| 14003   | 2     | <b>Withdrawal of Life Supporting Treatment Time</b> is earlier than <b>ED/Hospital Arrival Time</b>                           |
| 14007   | 2     | Element cannot be blank   |
| 14008   | 2     | Element must be and can only be “Not Applicable” when <b>Withdrawal of Life Supporting Treatment Date</b> is “Not Applicable” |
| 14009   | 2     | Element must be “Not Known/Not Recorded” when <b>Withdrawal of Life Supporting Treatment Date</b> is “Not Known/Not Recorded” |
| 14040   | 1     | Single Entry Max exceeded   |

## ANTIBIOTIC THERAPY

| Rule ID | Level | Message  |
|---------|-------|--|
| 20701   | 1     | Value is not a valid menu option   |
| 20702   | 2     | Element cannot be blank  |
| 20705   | 2     | Element must be “Not Applicable” as the AIS codes provided do not meet the reporting criterion |
| 20706   | 2     | Element must not be “Not Applicable” as the AIS codes provided meet the reporting criterion    |
| 20740   | 1     | Single Entry Max exceeded  |

## ANTIBIOTIC THERAPY DATE

| Rule ID | Level | Message   |
|---------|-------|---|
| 20801   | 1     | Date is not valid   |
| 20802   | 2     | Date is out of range  |
| 20804   | 2     | Element must be and can only be “Not Applicable” when <i>Antibiotic Therapy</i> is “Not Applicable” or <i>Element Value</i> “2. No” |
| 20808   | 2     | Element cannot be blank   |
| 20809   | 2     | Element must be “Not Known/Not Recorded” when <i>Antibiotic Therapy</i> is “Not Known/Not Recorded”                                 |
| 20840   | 1     | Single Entry Max exceeded   |

## ANTIBIOTIC THERAPY TIME

| Rule ID | Level | Message  |
|---------|-------|--|
| 20901   | 1     | Time is not valid  |
| 20902   | 2     | Time is out of range   |
| 20908   | 2     | Element cannot be blank  |
| 20909   | 2     | Element must be and can only be “Not Applicable” when <i>Antibiotic Therapy Date</i> is “Not Applicable” |
| 20910   | 2     | Element must be “Not Known/Not Recorded” when <i>Antibiotic Therapy Date</i> is “Not Known/Not Recorded” |
| 20940   | 1     | Single Entry Max exceeded  |

## SURGEON SPECIFIC REPORTING -OPTIONAL

### NATIONAL PROVIDER IDENTIFIER (NPI)

| Rule ID | Level | Message                   |
|---------|-------|---------------------------|
| 9801    | 1     | Invalid value             |
| 9802    | 2     | Element cannot be blank   |
| 9840    | 1     | Single Entry Max exceeded |

## CONTROL INFORMATION

### LASTMODIFIEDDATETIME

| Rule ID | Level | Message               |
|---------|-------|-----------------------|
| 8201    | 1     | Time is not valid     |
| 8202    | 2     | Field cannot be blank |

### PATIENTID

| Rule ID | Level | Message               |
|---------|-------|-----------------------|
| 8302    | 2     | Field cannot be blank |

### FACILITYID

| Rule ID | Level | Message               |
|---------|-------|-----------------------|
| 8402    | 2     | Field cannot be blank |

## AGGREGATE INFORMATION

| Rule ID | Level | Message   |
|---------|-------|---|
| 9901    | 1     | The Facility ID must be consistent throughout the file -- that is, only one Facility ID per file  |
| 9902    | 1     | The ED/Hospital Arrival year must be consistent throughout the file -- that is, only one admission year per file  |
| 9903    | 1     | There can only be one unique Facility ID/Patient ID/Last Modified Date combination per file   |
| 9904    | 3     | More than one AIS Version has been used in the submission file  |
| 9906    | 3     | The version of AIS codes entered in the submission file have been identified as 05. However, the AIS Version(s) submitted throughout the file do NOT contain 05 Full Code |
| 9909    | 3     | Average Initial ED/Hospital Temperature $\leq 36^{\circ}$ C across all known records in submission  |
| 9910    | 3     | More than 10% of patients with an unknown Initial ED/Hospital Temperature across all records in submission  |
| 9911    | 3     | More than 10% of patients with an unknown Initial ED/Hospital Systolic Blood Pressure across all records in submission  |
| 9912    | 3     | More than 10% of patients with an unknown Initial ED/Hospital Pulse across all records in submission  |
| 9913    | 3     | More than 10% of patients with an unknown Initial ED/Hospital GCS Motor across all records in submission  |
| 9914    | 3     | More than 10% of patients with an unknown Pre-Hospital Cardiac Arrest across all records in submission  |
| 9915    | 3     | More than 10% of patients with an unknown Pre-Existing Condition across all records in submission   |
| 9916    | 3     | More than 1% of patients with an unknown Hospital Event across all records in submission  |
| 9917    | 2     | Value submitted for Hospital Events is not valid  |
| 9918    | 2     | Value submitted for Pre-Existing Conditions is not valid  |

## APPENDIX 3: TECHNICAL SPECIFICATIONS

## DEMOGRAPHIC INFORMATION

### PATIENT'S HOME ZIP/POSTAL CODE

|                                  |  |
|----------------------------------|--|
| <b>XSD Element Name:</b> HomeZip | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> Zip      | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes      | <b>Accepts Null Value:</b> yes, common null values |

### PATIENT'S HOME COUNTRY

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> HomeCountry | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> Country      | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |

### PATIENT'S HOME STATE

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> HomeState | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> State      | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |

### PATIENT'S HOME COUNTY

|                                     |  |
|-------------------------------------|--|
| <b>XSD Element Name:</b> HomeCounty | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> County      | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes         | <b>Accepts Null Value:</b> yes, common null values |

### PATIENT'S HOME CITY

|                                   |  |
|-----------------------------------|--|
| <b>XSD Element Name:</b> HomeCity | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> City      | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes       | <b>Accepts Null Value:</b> yes, common null values |

### ALTERNATE HOME RESIDENCE

|  |  |
|--|--|
| <b>XSD Element Name:</b> HomeResidence | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> HomeResidence  | <b>Multiple Entry Configuration:</b> Yes, max 3    |
| <b>Required in XSD:</b> Yes            | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List     |  |

### DATE OF BIRTH

|  |  |
|--|--|
| <b>XSD Element Name:</b> DateOfBirth                                 | <b>XSD Schema Data Type:</b> xs:date               |
| <b>XSD ComplexType:</b> DateOfBirth                                  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1890-01-01<br><b>Maximum Value:</b> 2030-01-01 |  |

## AGE

|   |  |
|---|--|
| <b>XSD Element Name:</b> Age                      | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Age                       | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0 <b>Maximum Value:</b> 120 |  |

## AGE UNITS

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> AgeUnits  | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> AgeUnits   | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

## RACE

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> Race      | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Race       | <b>Multiple Entry Configuration:</b> Yes, max 6    |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

## ETHNICITY

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> Ethnicity | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Ethnicity  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

## SEX

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> Sex       | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Sex        | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

# INJURY INFORMATION

## INJURY INCIDENT DATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> IncidentDate                                | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date19902030                                 | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1990-01-01<br><b>Maximum Value:</b> 2030-01-01 |  |

## INJURY INCIDENT TIME

|                                       |  |
|---------------------------------------|--|
| <b>XSD Element Name:</b> IncidentTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time          | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes           | <b>Accepts Null Value:</b> yes, common null values |

## WORK-RELATED

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> WorkRelated | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo        | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List   |  |

## PATIENT'S OCCUPATIONAL INDUSTRY

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>PatientsOccupationalIndustry | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b><br>PatientsOccupationalIndustry  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                       |  |

## PATIENT'S OCCUPATION

|   |  |
|---|--|
| <b>XSD Element Name:</b> PatientsOccupation | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> PatientsOccupation  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List          |  |

## ICD-10 PRIMARY EXTERNAL CAUSE CODE

|  |  |
|--|--|
| <b>XSD Element Name:</b> PrimaryECodeIcd10           | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> ECodeIcd10                   | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Length:</b> 3<br><b>Maximum Length:</b> 8 |  |

## ICD-10 PLACE OF OCCURRENCE EXTERNAL CAUSE CODE

|  |  |
|--|--|
| <b>XSD Element Name:</b> PlaceOfInjuryCode           | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> PlaceOfInjuryCode            | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Length:</b> 4<br><b>Maximum Length:</b> 7 |  |



## ICD-10 ADDITIONAL EXTERNAL CAUSE CODE

|  |  |
|--|--|
| <b>XSD Element Name:</b> AdditionalECodeIcd10        | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> ECodeIcd10                   | <b>Multiple Entry Configuration:</b> Yes. max 2    |
| <b>Required in XSD:</b> Yes                          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Length:</b> 3<br><b>Maximum Length:</b> 8 |  |

## INCIDENT LOCATION ZIP/POSTAL CODE

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> InjuryZip | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> Zip        | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |

## INCIDENT COUNTRY

|  |  |
|--|--|
| <b>XSD Element Name:</b> IncidentCountry | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> Country          | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |

## INCIDENT STATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> IncidentState | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> State          | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes            | <b>Accepts Null Value:</b> yes, common null values |

## INCIDENT COUNTY

|   |  |
|---|--|
| <b>XSD Element Name:</b> IncidentCounty | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> County          | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes             | <b>Accepts Null Value:</b> yes, common null values |

## INCIDENT CITY

|                                       |  |
|---------------------------------------|--|
| <b>XSD Element Name:</b> IncidentCity | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> City          | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes           | <b>Accepts Null Value:</b> yes, common null values |

## PROTECTIVE DEVICES

|   |  |
|---|--|
| <b>XSD Element Name:</b> ProtectiveDevice | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> ProtectiveDevice  | <b>Multiple Entry Configuration:</b> Yes, max 10   |
| <b>Required in XSD:</b> Yes               | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List        |  |

### CHILD SPECIFIC RESTRAINT

|   |  |
|---|--|
| <b>XSD Element Name:</b> ChildSpecificRestraint | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> ChildSpecificRestraint  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                     | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List              |  |

### AIRBAG DEPLOYMENT

|   |  |
|---|--|
| <b>XSD Element Name:</b> AirbagDeployment | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> AirbagDeployment  | <b>Multiple Entry Configuration:</b> Yes, max 4    |
| <b>Required in XSD:</b> Yes               | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List        |  |

## PRE-HOSPITAL INFORMATION

### TRANSPORT MODE

|  |  |
|--|--|
| <b>XSD Element Name:</b> TransportMode | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TransportMode  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes            | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List     |  |

### OTHER TRANSPORT MODE

|   |  |
|---|--|
| <b>XSD Element Name:</b> OtherTransportMode | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TransportMode       | <b>Multiple Entry Configuration:</b> Yes, max 5    |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List          |  |

### EMS PATIENT CARE REPORT UNIVERSALLY UNIQUE IDENTIFIER (UUID)

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> PatientUUID | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> PatientUUID  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |

### INTER-FACILITY TRANSFER

|  |  |
|--|--|
| <b>XSD Element Name:</b> InterFacilityTransfer | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                    | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List             |  |

### PRE-HOSPITAL CARDIAC ARREST

|   |  |
|---|--|
| <b>XSD Element Name:</b> PrehospitalCardiacArrest | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## EMERGENCY DEPARTMENT INFORMATION

### HIGHEST ACTIVATION

|  |  |
|--|--|
| <b>XSD Element Name:</b> HighestActivation | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo              | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List         |  |

### TRAUMA SURGEON ARRIVAL DATE

|   |  |
|---|--|
| <b>XSD Element Name:</b> TraumaSurgeonArrivalDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date19902030              | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1990-01-01                  |  |
| <b>Maximum Value:</b> 2030-01-01                  |  |

### TRAUMA SURGEON ARRIVAL TIME

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>TraumaSurgeonArrivalTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                         | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                          | <b>Accepts Null Value:</b> yes, common null values |

### ED/HOSPITAL ARRIVAL DATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> HospitalArrivalDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date19902030         | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1990-01-01             |  |
| <b>Maximum Value:</b> 2030-01-01             |  |

### ED/HOSPITAL ARRIVAL TIME

|  |  |
|--|--|
| <b>XSD Element Name:</b> HospitalArrivalTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                 | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                  | <b>Accepts Null Value:</b> yes, common null values |

### INITIAL ED/HOSPITAL SYSTOLIC BLOOD PRESSURE

|                              |  |
|------------------------------|--|
| <b>XSD Element Name:</b> Sbp | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Sbp  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0      |  |
| <b>Maximum Value:</b> 380    |  |

### INITIAL ED/HOSPITAL PULSE RATE

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> PulseRate | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> PulseRate  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0            |  |
| <b>Maximum Value:</b> 300          |  |

### INITIAL ED/HOSPITAL TEMPERATURE

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> Temperature | <b>XSD Schema Datatype:</b> xs:decimal             |
| <b>XSD ComplexType:</b> Temperature  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 10.0           |  |
| <b>Maximum Value:</b> 45.0           |  |

### INITIAL ED/HOSPITAL RESPIRATORY RATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> RespiratoryRate | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> RespiratoryRate  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0                  |  |
| <b>Maximum Value:</b> 100                |  |

### INITIAL ED/HOSPITAL RESPIRATORY ASSISTANCE

|  |  |
|--|--|
| <b>XSD Element Name:</b> RespiratoryAssistance | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> RespiratoryAssistance  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                    | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List             |  |

### INITIAL ED/HOSPITAL OXYGEN SATURATION

|   |  |
|---|--|
| <b>XSD Element Name:</b> PulseOximetry            | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> PulseOximetry             | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0 <b>Maximum Value:</b> 100 |  |

### INITIAL ED/HOSPITAL SUPPLEMENTAL OXYGEN

|   |  |
|---|--|
| <b>XSD Element Name:</b> SupplementalOxygen | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> SupplementalOxygen  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List          |  |

### INITIAL ED/HOSPITAL GCS - EYES

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> GcsEye    | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> GcsEye     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

### INITIAL ED/HOSPITAL GCS - VERBAL

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> GcsVerbal | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> GcsVerbal  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

### INITIAL ED/HOSPITAL GCS - MOTOR

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> GcsMotor  | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> GcsMotor   | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

### INITIAL ED/HOSPITAL GCS - TOTAL

|                                   |  |
|-----------------------------------|--|
| <b>XSD Element Name:</b> TotalGcs | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TotalGcs  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 3           |  |
| <b>Maximum Value:</b> 15          |  |

### INITIAL ED/HOSPITAL GCS ASSESSMENT QUALIFIERS

|                                       |  |
|---------------------------------------|--|
| <b>XSD Element Name:</b> GcsQualifier | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> GcsQualifier  | <b>Multiple Entry Configuration:</b> Yes, max 3    |
| <b>Required in XSD:</b> Yes           | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List    |  |

### INITIAL ED/HOSPITAL GCS-40 EYE

|                                    |  |
|------------------------------------|--|
| <b>XSD Element Name:</b> Gcs40Eye  | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Gcs40Eye   | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes        | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List |  |

### INITIAL ED/HOSPITAL GCS-40 VERBAL

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> Gcs40Verbal | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Gcs40Verbal  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List   |  |

### INITIAL ED/HOSPITAL GCS-40 MOTOR

|                                     |  |
|-------------------------------------|--|
| <b>XSD Element Name:</b> Gcs40Motor | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Gcs40Motor  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes         | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List  |  |

### INITIAL ED/HOSPITAL HEIGHT

|                                 |  |
|---------------------------------|--|
| <b>XSD Element Name:</b> Height | <b>XSD Schema Datatype:</b> xs:decimal             |
| <b>XSD ComplexType:</b> Height  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes     | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 30.0      |  |
| <b>Maximum Value:</b> 275.0     |  |

### INITIAL ED/HOSPITAL WEIGHT

|                                 |  |
|---------------------------------|--|
| <b>XSD Element Name:</b> Weight | <b>XSD Schema Datatype:</b> xs:decimal             |
| <b>XSD ComplexType:</b> Weight  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes     | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1         |  |
| <b>Maximum Value:</b> 650       |  |

### DRUG SCREEN

|                                     |  |
|-------------------------------------|--|
| <b>XSD Element Name:</b> DrugScreen | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> DrugScreen  | <b>Multiple Entry Configuration:</b> Yes, max 15   |
| <b>Required in XSD:</b> Yes         | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List  |  |

### ALCOHOL SCREEN

|  |  |
|--|--|
| <b>XSD Element Name:</b> AlcoholScreen | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo          | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes            | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List     |  |

### ALCOHOL SCREEN RESULTS

|  |  |
|--|--|
| <b>XSD Element Name:</b> AlcoholScreenResult | <b>XSD Schema Datatype:</b> xs:decimal             |
| <b>XSD ComplexType:</b> AlcoholScreenResult  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0.00                   |  |
| <b>Maximum Value:</b> 1.5                    |  |



## ED DISCHARGE DISPOSITION

|   |  |
|---|--|
| <b>XSD Element Name:</b> EdDischargeDisposition | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> EdDischargeDisposition  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                     | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List              |  |

## ED DISCHARGE DATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> EdDischargeDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date19902030     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1990-01-01         |  |
| <b>Maximum Value:</b> 2030-01-01         |  |

## ED DISCHARGE TIME

|  |  |
|--|--|
| <b>XSD Element Name:</b> EdDischargeTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time             | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |

## PRIMARY TRAUMA SERVICE TYPE

|   |  |
|---|--|
| <b>XSD Element Name:</b> PrimaryTraumaServiceType | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> PrimaryTraumaServiceType  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |

# HOSPITAL PROCEDURE INFORMATION

## ICD-10 HOSPITAL PROCEDURES

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalProcedureIcd10 | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> HospitalProcedureIcd10  | <b>Multiple Entry Configuration:</b> Yes, max 200  |
| <b>Required in XSD:</b> Yes                     | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Length:</b> 5                        |  |
| <b>Maximum Length:</b> 10                       |  |

## HOSPITAL PROCEDURE START DATE

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalProcedureStartDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date19902030                | <b>Multiple Entry Configuration:</b> Yes, max 200  |
| <b>Required in XSD:</b> Yes                         | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1990-01-01                    |  |
| <b>Maximum Value:</b> 2030-01-01                    |  |

## HOSPITAL PROCEDURE START TIME

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalProcedureStartTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                        | <b>Multiple Entry Configuration:</b> Yes, max 200  |
| <b>Required in XSD:</b> Yes                         | <b>Accepts Null Value:</b> yes, common null values |

## PRE-EXISTING CONDITIONS

### ADVANCED DIRECTIVE LIMITING CARE

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 13 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### ALCOHOL USE DISORDER

|   |  |
|---|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 2 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                               | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                          |  |

### ANTICOAGULANT THERAPY

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 31 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### ATTENTION DEFICIT DISORDER/ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADD/ADHD)

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 30 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### BIPOLAR I/II DISORDER

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 39 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### BLEEDING DISORDER

|   |  |
|---|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 4 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                               | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                          |  |



### CEREBRAL VASCULAR ACCIDENT (CVA)

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 10 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 23 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### CHRONIC RENAL FAILURE

|   |  |
|---|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 9 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                               | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                          |  |

### CIRRHOSIS

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 25 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### CONGENITAL ANOMALIES

|   |  |
|---|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 6 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                               | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                          |  |

### CONGESTIVE HEART FAILURE (CHF)

|   |  |
|---|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 7 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                               | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                          |  |

### CURRENT SMOKER

|   |  |
|---|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 8 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                               | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                          |  |

### CURRENTLY RECEIVING CHEMOTHERAPY FOR CANCER

|   |  |
|---|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 5 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                               | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                          |  |

### DEMENTIA

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 26 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### DIABETES MELLITUS

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 11 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### DISSEMINATED CANCER

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 12 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

### FUNCTIONALLY DEPENDENT HEALTH STATUS

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 15 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## HYPERTENSION

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 19 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## MAJOR DEPRESSIVE DISORDER

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 40 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## MYOCARDIAL INFARCTION (MI)

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 34 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## OTHER MENTAL/PERSONALITY DISORDERS

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 41 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## PERIPHERAL ARTERIAL DISEASE (PAD)

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 35 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## POST-TRAUMATIC STRESS DISORDER

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 42 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## PREGNANCY

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 38 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## PREMATURITY

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 37 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## SCHIZOAFFECTIVE DISORDER

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 43 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## SCHIZOPHRENIA

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 44 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## STEROID USE

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 24 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## SUBSTANCE USE DISORDER

|  |  |
|--|--|
| <b>XSD Element Name:</b> Preexisting Condition<br>Value = 36 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                           |  |

## DIAGNOSTIC INFORMATION

### ICD-10 INJURY DIAGNOSES

|   |  |
|---|--|
| <b>XSD Element Name:</b> DiagnosisIcd10 | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> DiagnosisIcd10  | <b>Multiple Entry Configuration:</b> Yes, max 50   |
| <b>Required in XSD:</b> Yes             | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Length:</b> 3                |  |
| <b>Maximum Length:</b> 8                |  |

### AIS CODE

|                                  |  |
|----------------------------------|--|
| <b>XSD Element Name:</b> AisCode | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> AisCode  | <b>Multiple Entry Configuration:</b> Yes, max 50   |
| <b>Required in XSD:</b> Yes      | <b>Accepts Null Value:</b> yes, common null values |

### AIS VERSION

|                                     |  |
|-------------------------------------|--|
| <b>XSD Element Name:</b> AisVersion | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> AisVersion  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes         | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List  |  |

## HOSPITAL EVENTS

### ACUTE KIDNEY INJURY (AKI)

|  |  |
|--|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 4 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                    | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                      | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List               |  |

### ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS)

|  |  |
|--|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 5 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                    | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                      | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List               |  |

### ALCOHOL WITHDRAWAL SYNDROME

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 36 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

### CARDIAC ARREST WITH CPR

|  |  |
|--|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 8 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                    | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                      | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List               |  |

### CATHETER-ASSOCIATED URINARY TRACT INFECTION (CAUTI)

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 33 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

### CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTION (CLABSI)

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 34 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

### DEEP SURGICAL SITE INFECTION

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 12 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

### DEEP VEIN THROMBOSIS (DVT)

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 14 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

### DELIRIUM

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 39 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

### MYOCARDIAL INFARCTION (MI)

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 18 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |



## ORGAN/SPACE SURGICAL SITE INFECTION

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 19 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## OSTEOMYELITIS

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 29 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## PULMONARY EMBOLISM (PE)

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 21 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## PRESSURE ULCER

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 37 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## SVERE SEPSIS

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 32 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## STROKE/CVA

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 22 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## SUPERFICIAL INCISIONAL SURGICAL SITE INFECTION

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 38 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## UNPLANNED ADMISSION TO ICU

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 31 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## UNPLANNED INTUBATION

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 25 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## UNPLANNED VISIT TO THE OPERATING ROOM

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 40 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

## VENTILATOR-ASSOCIATED PNEUMONIA (VAP)

|   |  |
|---|--|
| <b>XSD Element Name:</b> HospitalEvent Value = 35 | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                       | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                |  |

# OUTCOME INFORMATION

## TOTAL ICU LENGTH OF STAY

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> TotalIcuLos | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TotalIcuLos  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1              |  |
| <b>Maximum Value:</b> 575            |  |

## TOTAL VENTILATOR DAYS

|  |  |
|--|--|
| <b>XSD Element Name:</b> TotalVentDays | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TotalVentDays  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes            | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1                |  |
| <b>Maximum Value:</b> 575              |  |



## HOSPITAL DISCHARGE DISPOSITION

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>HospitalDischargeDisposition | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b><br>HospitalDischargeDisposition  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                       |  |

## HOSPITAL DISCHARGE DATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> HospitalDischargeDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date19902030           | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                    | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 1990-01-01               |  |
| <b>Maximum Value:</b> 2030-01-01               |  |

## HOSPITAL DISCHARGE TIME

|  |  |
|--|--|
| <b>XSD Element Name:</b> HospitalDischargeTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                   | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                    | <b>Accepts Null Value:</b> yes, common null values |

# FINANCIAL INFORMATION

## PRIMARY METHOD OF PAYMENT

|   |  |
|---|--|
| <b>XSD Element Name:</b> PrimaryMethodPayment | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> PrimaryMethodPayment  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                   | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List            |  |

# TQIP MEASURE FOR PROCESS OF CARE

## HIGHEST GCS TOTAL

|   |  |
|---|--|
| <b>XSD Element Name:</b> TbiHighestTotalGcs | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TotalGcs            | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 3                     |  |
| <b>Maximum Value:</b> 15                    |  |

## HIGHEST GCS MOTOR

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> TbiGcsMotor | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> GcsMotor     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List   |  |

## GCS ASSESSMENT QUALIFIER COMPO-

## NENT OF HIGHEST GCS TOTAL

|  |  |
|--|--|
| <b>XSD Element Name:</b> TbiGcsQualifier | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> GcsQualifier     | <b>Multiple Entry Configuration:</b> Yes, max 3    |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List       |  |

## HIGHEST GCS-40 MOTOR

|  |  |
|--|--|
| <b>XSD Element Name:</b> TbiGcs40Motor | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> GcsMotor       | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes            | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List     |  |

## INITIAL ED/HOSPITAL PUPILLARY RESPONSE

|   |  |
|---|--|
| <b>XSD Element Name:</b> TbiPupillaryResponse | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TbiPupillaryResponse  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                   | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List            |  |

## MIDLINE SHIFT

|  |  |
|--|--|
| <b>XSD Element Name:</b> TbiMidlineShift | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TbiMidlineShift  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List       |  |

## CEREBRAL MONITOR

|   |  |
|---|--|
| <b>XSD Element Name:</b> TbiCerebralMonitor | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> TbiCerebralMonitor  | <b>Multiple Entry Configuration:</b> Yes, max 4    |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List          |  |

## CEREBRAL MONITOR DATE

|   |  |
|---|--|
| <b>XSD Element Name:</b> TbiCerebralMonitorDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date20102030            | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                     | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 2010-01-01                |  |
| <b>Maximum Value:</b> 2030-01-01                |  |

## CEREBRAL MONITOR TIME

|   |  |
|---|--|
| <b>XSD Element Name:</b> TbiCerebralMonitorTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                    | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                     | <b>Accepts Null Value:</b> yes, common null values |

### VENOUS THROMBOEMBOLISM PROPHYLAXIS TYPE

|   |  |
|---|--|
| <b>XSD Element Name:</b> VteProphylaxisType | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> VteProphylaxisType  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List          |  |

### VENOUS THROMBOEMBOLISM PROPHYLAXIS DATE

|   |  |
|---|--|
| <b>XSD Element Name:</b> VteProphylaxisDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date20102030        | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 2010-01-01            |  |
| <b>Maximum Value:</b> 2030-01-01            |  |

### VENOUS THROMBOEMBOLISM PROPHYLAXIS TIME

|   |  |
|---|--|
| <b>XSD Element Name:</b> VteProphylaxisTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                 | <b>Accepts Null Value:</b> yes, common null values |

### PACKED RED BLOOD CELLS

|  |  |
|--|--|
| <b>XSD Element Name:</b> PackedRedBloodCells | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Fluids4Hours         | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0                      |  |
| <b>Maximum Value:</b> 40000                  |  |

### WHOLE BLOOD

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> WholeBlood  | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Fluids4Hours | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0              |  |
| <b>Maximum Value:</b> 40000          |  |

### PLASMA

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> Plasma      | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Fluids4Hours | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0              |  |
| <b>Maximum Value:</b> 40000          |  |

### PLATELETS

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> Platelets   | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Fluids4Hours | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |

|                             |  |
|-----------------------------|--|
| <b>Minimum Value:</b> 0     |  |
| <b>Maximum Value:</b> 40000 |  |

### CRYOPRECIPITATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> Cryoprecipitate | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Fluids4Hours     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 0                  |  |
| <b>Maximum Value:</b> 40000              |  |

### ANGIOGRAPHY

|                                      |  |
|--------------------------------------|--|
| <b>XSD Element Name:</b> Angiography | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> Angiography  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes          | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List   |  |

### EMBOLIZATION SITE

|   |  |
|---|--|
| <b>XSD Element Name:</b> EmbolizationSite | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> EmbolizationSite  | <b>Multiple Entry Configuration:</b> Yes, max 7    |
| <b>Required in XSD:</b> Yes               | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List        |  |

### ANGIOGRAPHY DATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> AngiographyDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date20102030     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 2010-01-01         |  |
| <b>Maximum Value:</b> 2030-01-01         |  |

### ANGIOGRAPHY TIME

|  |  |
|--|--|
| <b>XSD Element Name:</b> AngiographyTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time             | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes              | <b>Accepts Null Value:</b> yes, common null values |

### SURGERY FOR HEMORRHAGE CONTROL TYPE

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>HemorrhageControlSurgeryType | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b><br>HemorrhageControlSurgeryType  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                              | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                       |  |

### **SURGERY FOR HEMORRHAGE CONTROL DATE**

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>HemorrhageControlSurgeryDate             | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date20102030                                 | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 2010-01-01<br><b>Maximum Value:</b> 2030-01-01 |  |

### **SURGERY FOR HEMORRHAGE CONTROL TIME**

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>HemorrhageControlSurgeryTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                             | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                              | <b>Accepts Null Value:</b> yes, common null values |

### **WITHDRAWAL OF LIFE SUPPORTING TREATMENT**

|   |  |
|---|--|
| <b>XSD Element Name:</b><br>WithdrawalOfLifeSupportingTreatment | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo                                   | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                                     | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List                              |  |

### **WITHDRAWAL OF LIFE SUPPORTING TREATMENT DATE**

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>WithdrawalOfLifeSupportingTreatmentDate  | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date20102030                                 | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes  | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 2010-01-01<br><b>Maximum Value:</b> 2030-01-01 |  |

### **WITHDRAWAL OF LIFE SUPPORTING TREATMENT TIME**

|   |  |
|---|--|
| <b>XSD Element Name:</b><br>WithdrawalOfLifeSupportingTreatmentTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time  | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes   | <b>Accepts Null Value:</b> yes, common null values |

### **ANTIBIOTIC THERAPY**

|  |  |
|--|--|
| <b>XSD Element Name:</b> AntibioticTherapy | <b>XSD Schema Datatype:</b> xs:integer             |
| <b>XSD ComplexType:</b> YesNo              | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                | <b>Accepts Null Value:</b> yes, common null values |
| <b>Constraint:</b> Enumerated List         |  |

#### ANTIBIOTIC THERAPY DATE

|  |  |
|--|--|
| <b>XSD Element Name:</b> AntibioticTherapyDate | <b>XSD Schema Datatype:</b> xs:date                |
| <b>XSD ComplexType:</b> Date20102030           | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                    | <b>Accepts Null Value:</b> yes, common null values |
| <b>Minimum Value:</b> 2010-01-01               |  |
| <b>Maximum Value:</b> 2030-01-01               |  |

#### ANTIBIOTIC THERAPY TIME

|  |  |
|--|--|
| <b>XSD Element Name:</b> AntibioticTherapyTime | <b>XSD Schema Datatype:</b> xs:time                |
| <b>XSD ComplexType:</b> Time                   | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                    | <b>Accepts Null Value:</b> yes, common null values |

### SURGEON SPECIFIC REPORTING - OPTIONAL

#### NATIONAL PROVIDER IDENTIFIER (NPI)

|  |  |
|--|--|
| <b>XSD Element Name:</b><br>NationalProviderIdentifier | <b>XSD Schema Datatype:</b> xs:string              |
| <b>XSD ComplexType:</b> NationalProviderIdentifier     | <b>Multiple Entry Configuration:</b> No            |
| <b>Required in XSD:</b> Yes                            | <b>Accepts Null Value:</b> yes, common null values |

## APPENDIX 4: TECHNICAL ADDENDUM FOR EMS DATA TRANSFER

To accommodate third party entities that use the NTDS Technical Standard as a template, the NTDS Technical Standard will allow retired pre-hospital data elements to be transmitted using the retired tags in a data submission file. These data are optional, they are not used by ACS or required for any TQP deliverables, they are not validated at the *TQP Data Center*, nor are they required to pass the TQP validator.

Each of the optional NTDS data elements are listed below and follow the same technical specifications as when they were retired from the NTDS after admission year 2020.

- EMS DISPATCH DATE
- EMS DISPATCH TIME
- EMS UNIT ARRIVAL DATE AT SCENE OR TRANSFERRING FACILITY
- EMS UNIT ARRIVAL TIME AT SCENE OR TRANSFERRING FACILITY
- EMS UNIT DEPARTURE DATE FROM SCENE OR TRANSFERRING FACILITY
- EMS UNIT DEPARTURE TIME FROM SCENE OR TRANSFERRING FACILITY
- INITIAL FIELD SYSTOLIC BLOOD PRESSURE
- INITIAL FIELD PULSE RATE
- INITIAL FIELD RESPIRATORY RATE
- INITIAL FIELD OXYGEN SATURATION
- INITIAL FIELD GCS – EYE
- INITIAL FIELD GCS – VERBAL
- INITIAL FIELD GCS – MOTOR
- INITIAL FIELD GCS – TOTAL
- INITIAL FIELD GCS 40 – EYE
- INITIAL FIELD GCS 40 – VERBAL
- INITIAL FIELD GCS 40 – MOTOR
- TRAUMA TRIAGE CRITERIA (Steps 1 and 2)
- TRAUMA TRIAGE CRITERIA (Steps 3 and 4)

For questions regarding if these data are included in your data submission file, please contact your trauma registry vendor for assistance.



## APPENDIX 5: ACRONYMS

- AIS: Abbreviated Injury Scale
- CDC: Centers for Disease Control
- CPR: cardiopulmonary resuscitation
- CT: computerized tomography
- ED: emergency department
- EMS: emergency medical service
- GCS: Glasgow Coma Scale
- ICD-10: International Classification of Diseases, Tenth Revision
- ICD-10-CA: International Classification of Diseases, Tenth Revision, Canada
- ICD-10-CM: International Classification of Diseases, Tenth Revision, Clinical Modification
- ICD-10-PCS: International Classification of Diseases, Tenth Revision, Procedure Coding System
- ICU: intensive care unit
- LOS: length of stay
- NA: not applicable
- NEMSIS: National Emergency Medical Services Information System
- NK/NR: not known/not recorded
- NTDB: National Trauma Data Bank
- NTDS: National Trauma Data Standard
- OR: operating room
- PACU: post-anesthesia care unit
- TQIP: Trauma Quality Improvement Program
- TQP: Trauma Quality Programs



## **Acknowledgements**

### **ACS Committee on Trauma**

All participating members

### **NTDS Workgroup**

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### **Trauma Quality Programs**

All contributing staff

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