

Trauma Data Dictionary 2024





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Indiana Inclusion/Exclusion Criteria

Description:

To ensure consistent data collection across the State and with the National Trauma Data Standard, a trauma patient is defined as a patient sustaining a traumatic injury and meeting the following criteria:

The patient must have incurred, no more than 14 days prior to presentation for initial

treatment, at least one of the following injury diagnostic codes defined as follows:

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

A. 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)

B. Excluding the following isolated injuries:

ICD-10-CM:

\$00 (Superficial injuries of the head)

\$10 (Superficial injuries of the neck)

S20 (Superficial injuries of the thorax)

\$30 (Superficial injuries of the abdomen, pelvis, lower back and external genitals)

S40 (Superficial injuries of shoulder and upper arm)

\$50 (Superficial injuries of elbow and forearm)

S60 (Superficial injuries of wrist, hand and fingers)

\$70 (Superficial injuries of hip and thigh)

\$80 (Superficial injuries of knee and lower leg)

\$90 (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.

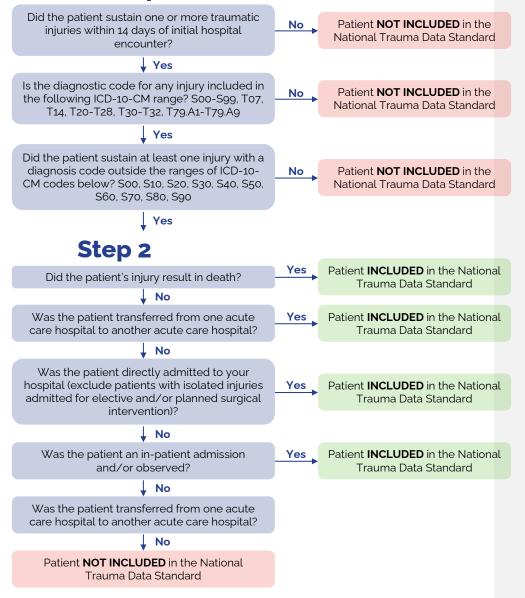
Starting 2022, exclude in-house traumas

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 transfer status) **OR:**
- Patient transfer from one acute care* 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 **OR:**
- Patients who were a trauma consult or any level of trauma activation

Indiana Trauma Registry Inclusion Criteria Map **Step 1**



COMMON NULL VALUES

National & State Element **Data Format** [combo] single choice

Description

These values are to be used with each of the National Trauma Data Standard Data Elements and Indiana Trauma Data Standard Data Elements described in this document which have been defined to accept the Null Values.

Element Values

- 1. Not Applicable
- 2. Not Known / Not Recorded

Additional Information

- For any collection of data to be of value and reliably represents what was
 intended, a strong commitment must be made to ensure the correct
 documentation of incomplete data. When data elements associated with the
 National Trauma Data Standard and Indiana Trauma Data Standard are to be
 electronically stored in a database or moved from one database to another using
 XML, the indicated null values should be applied.
- Not Applicable (NA): This null value code applies if, at the time of patient care
 documentation, the information requested was "Not Applicable" to the patient,
 the hospitalization, or the patient care event. For example, variables documenting
 EMS care would be "Not Applicable" if a patient self-transport to the hospital.
- Not Known / Not Recorded (NK / NR): This null value applies if, at the time of patient care documentation, information was "Not Known" (to the patient, family, or health care provider) or no value for the element recorded for the patient. This documents that there was an attempt to obtain information, but it was unknown by all parties, or the information was missing at the time of documentation. For example, injury date and time may be documented in the hospital patient care report as "Unknown". Another example, Not Known/Not Recorded should also be coded when documentation was expected, but none was provided (i.e., no EMS run sheet in the hospital record for patient transported by EMS).

Demographic Information

MEDICAL RECORD

TR 1.2

Data Format [text]

ImageTrend Description

The hospital's medical record number for the patient.

Element Values

• Relevant value for data element

Additional Information

• Auto-generated by the hospital

ACCOUNT NUMBER

TR 1.27

Data Format [text]

ImageTrend Description

The hospital's encounter number for the patient that is unique to this visit.

Element Values

• Relevant value for data element

Additional Information

• Auto-generated by the hospital

National & State Element **Data Format** [date]

NTDB/ImageTrend Description

The date the injury occurred.

XSD Data Type	xs: date	XSD Element / Domain (Complex Type)		IncidentDate
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values Max. Constraint: 2,030	
Required in XSD	Yes	Min. Constraint: 1,990		

Element Values

• Relevant value for data element

Additional Information

- Reported as MM/DD/YYYY.
- 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.
- If date of injury is "Not Known/Not Recorded", the null value is unknown.

Data Source

- EMS Run Report
- Triage Form / Trauma Flow Sheet
- History & Physical
- Face Sheet

National Element

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National & State Element **Data Format** [time]

NTDB/ImageTrend Description

The time the injury occurred.

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)		IncidentTime
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		ies
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constraint: 23:59	

Element Values

• Relevant value for data element

Additional Information

- Reported as HHMM military time.
- Estimates of time of injury should be based upon report by patient, witness, family, or health care provider. Other proxy measures (e.g., 911 call times) should not be used.
- If time of injury is "Not Known/Not Recorded", the null value is unknown.

Data Source

- EMS Run Report
- Triage Form / Trauma Flow Sheet
- History & Physical
- Face Sheet

National Element

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Data Format [text]

ImageTrend Description

The patient's last name.

Element Values

• Relevant value for data element

- Face Sheet
- EMS Run Report
- Billing Sheet / Medical Records Coding Summary Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

Data Format [text]

ImageTrend Description

The patient's first name.

Element Values

• Relevant value for data element

- Face Sheet
- EMS Run Report
- Billing Sheet / Medical Records Coding Summary Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

Data Format [text]

ImageTrend Description

The patient's middle initial.

Element Values

• Relevant value for data element

- Face Sheet
- EMS Run Report
- Billing Sheet / Medical Records Coding Summary Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

Data Format [number]

ImageTrend Description

The patient's social security number.

Element Values

• Relevant value for data element

Additional Information

• Collected as ###-##-###

- Face Sheet
- EMS Run Report
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

National & State Element **Data Format** [date]

NTDB/ImageTrend Description

The patient's date of birth.

XSD Data Type	xs: date	XSD Element / Domain (Complex Type)		DateOfBirth
Multiple Entry Configuration	No	Accepts Null Value Yes, common null value		S
Required in XSD	Yes	Min. Constraint: 1,890	int: 1,890 Max. Constraint: 2,030	

Element Values

• Relevant value for data element

Additional Information

- Reported as MM/DD/YYYY.
- 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

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Triage Form/Trauma Flow Sheet
- EMS Run Report

National Element

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National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		Age
Multiple Entry Configuration	onfiguration No Accepts Null Value Yes, common null va		Yes, common null values	;
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 120	

Element Values

• Relevant value for data element

Additional Information

- Auto calculated to patient's age in years when "Date of Birth" is entered.
- Must also report Age Units.
- If date of birth is equal to the ED/Hospital Arrival date, then the Age & Age Units variables must be completed.
- If date of birth is "Not Known/Not Recorded" complete variables: Age and Age Units
- The null value "Not Applicable" is reported if Date of Birth is reported.

Data Source

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Triage Form/Trauma Flow Sheet
- EMS Run Report

National Element

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AGE UNITS* TR 1.14

National & State Element **Data Format** [combo] single-choice

NTDB Description

The units used to report the patient's age.

ImageTrend Description

The units used to document the patient's age (Years, Months, Days, Hours, Minutes).

XSD Data Type	xs: integer	XSD Element / Domain (Comple	ex Type)	AgeUnits	
Multiple Entry Configuration	No	Accepts Null Value	Yes, c	common null valu	ues
Required in XSD	Yes				

Element Values

Hours Years

Days Minutes

Months Weeks

Additional Information

- If date of birth is equal to the ED/Hospital Arrival date, then the Age & Age Units variables must be completed.
- If date of birth is "Not Known/Not Recorded" complete variables: Age and Age Units
- Must also complete variable: Age
- The null value "Not Applicable" is reported if Date of Birth is reported.

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form

- Triage Form/Trauma Flow Sheet
- EMS Run Report

National Element

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RACE* TR 1.16

National & State Element **Data Format** [combo] multiple-choice

NTDB/ImageTrend Description

The patient's race.

XSD Data Type	xs: integer	XSD Element / Domain (C	omplex Type)	Race
Multiple Entry Configuration	Yes, max 2	Accepts Null Value	Yes, common null value	
Required in XSD	Yes			

Element Values

Asian Black or African American

Native Hawaiian or Other Pacific Islander White

Other Race

American Indian

Additional Information

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

Data Source

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Triage Form/Trauma Flow Sheet
- EMS Run Report
- History & Physical

National Element

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OTHER RACE TR 1.28

Data Format [text]

ImageTrend Description

The patient's secondary race (if the first race field is insufficient).

Element Values

• Relevant value for data element

Additional Information

- Patient race should be based upon self-report or identified by a family member
- Only completed if Race is "Other Race"

- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

ETHNICITY* TR 1.17

National & State Element **Data Format** [combo] single-choice

ImageTrend Description

The patient's ethnicity.

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type) Ethnicity		
Multiple Entry Configuration	No	Accepts Null Value Yes, common null value		
Required in XSD	Yes			

Element Values

Hispanic or Latino

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

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Triage Form/Trauma Flow Sheet
- History & Physical
- EMS Run Report

National Element

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GENDER* TR 1.15

National & State Element **Data Format** [combo] single-choice

NTDB Description

The patient's sex.

ImageTrend Description

The patient's gender (sex).

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type) Sex		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

Male Female Non-binary (Intersex or Indeterminate)

Additional Information

• Patients who have undergone a surgical and/or hormonal sex reassignment should be coded using the current assignment.

Data Source

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Triage Form/Trauma Flow Sheet
- EMS Run Report
- History & Physical

National Element

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HEIGHT* (in) TR1.6.1

National & State Element **Data Format** [combo] single-choice

NTDB Description

First recorded height after ED/hospital arrival.

ImageTrend Description

Indicate the patient's height in centimeters.

XSD Data Type	xs: Decimal	XSD Element / Domain	Height	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 244 (cm)

Element Values

• Relevant value for data element

Additional Information

- · Recorded in centimeters.
- May be based on family or self-report.
- 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 the patient's Initial ED/Hospital Height was not measured prior to discharge.

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- · Pharmacy Record

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB Description

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

ImageTrend Description

First recorded, measured, or estimated baseline weight upon ED/hospital arrival.

XSD Data Type	xs: decimal	XSD Element / Domain (Complex Type) Weight			Weight
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes	Min. Constraint: 0		Max. Constraint	: 907 (kg)

Element Values

• Relevant value for data element

Additional Information

- · Recorded in kilograms.
- May be based on family or self-report.
- Please note that first recorded/hospital visits do not need to be from the same assessment.
- 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.

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Pharmacy Record

National Element

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Data Format [text]

ImageTrend Description

The home street address of the patient's primary residence.

Element Values

• Relevant value for data element

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

Data Format [text]

ImageTrend Description

The continuation of the street address of the patient's primary residence.

Element Values

• Relevant value for data element

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

The country where the patient resides.

		XSD Element / Domain (Co		
XSD Data Type	xs: string	Type)		HomeCountry
Multiple Entry Configuration	No	Accepts Null Value	Yes, commo	n null values
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- When completed with ZIP code, city, county, and state auto-calculate
- Values are two characters FIPS codes representing the country (e.g., US)
- If Patient's Home Country is not US, then the null value "Not Applicable" is used for: Patient's Home State, Patient's Home County and Patient's Home City
- The null value "Not Applicable" is reported for non-US hospitals.

Data Source

- Face Sheet
- Billing Sheet
- Admission Form

National Element

Page 2 in the 2024 National Trauma Data Standard

National & State Element **Data Format** [text]

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HomeZip		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common nu	ll values
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- May require adherence to HIPAA regulations.
- 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.
- When completed with Country the city, county, and state auto-calculate
- If ZIP code is "Not Applicable", complete variable: Alternate Home Residence
- If ZIP code is "Not Recorded / Not Known", complete variables: Patient's Home State (US only); Patient's Home County (US only); Patient's Home City (US only)
- If ZIP code is reported, must also complete Patient's Home Country

Data Source

- Face Sheet
- Billing Sheet
- Admission Form

National Element

Page 1 in the 2024 National Trauma Data Standard

National & State Element **Data Format** [combo] single-choice

NTDB Description

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

ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HomeCity		
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		
Required in XSD	Yes			

Element Values

• Relevant value for data element (five digit FIPS code)

Additional Information

- Auto Calculated if ZIP code and Country are completed.
- Only complete when ZIP code is "Not Known/Not Recorded" and country is US
- Used to calculate FIPS code.
- The null value "Not Applicable" is used if Patient's Home Zip/Postal Code is reported.
- The null value "Not Applicable" is reported for non-US hospitals.

Data Source

- Face Sheet
- Billing Sheet
- Admission Form

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB Description

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

ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (C	Complex Type) HomeCounty
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

• Relevant value for data element (three digit FIPS code)

Additional Information

- Auto Calculated if ZIP code and Country are completed.
- 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

- Face Sheet
- Billing Sheet
- Admission Form

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HomeState
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

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

Additional Information

- Auto Calculated if ZIP code and Country are completed.
- 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

- Face Sheet
- Billing Sheet
- Admission Form

National Element

Page 3 in the 2024 National Trauma Data Standard

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

Documentation of the type of patient without a home ZIP/Postal Code.

		XSD Element / Doma		
XSD Data Type	xs: integer	Type)		HomeResidence
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null v	ralues .
Required in XSD	Yes			

Element Values

Homeless

Migrant Worker

Undocumented Citizen

Additional Information

- Only complete when Patient's Home ZIP/Postal Codes is "Not Applicable."
- Homeless is defined as a person who lacks housing. The definition also 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 in order to accept seasonal employment in the same or different country.
- The null value "Not Applicable" is used if Patient's Home Zip/Postal Code is reported.
- Report all that apply.

Data Source

- Face Sheet
- Billing Sheet
- Admission Form

National Element

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TR 2.5

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

Primary source of payment for hospital care.

		XSD Element / Domai		
XSD Data Type	xs: string	Type)		PrimaryMethodPayment
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null	values
Required in XSD	Yes			

Element Values

Medicaid Medicare

Not Billed (for any reason) Other Government

Self-Pay Other

Private / Commercial Insurance

Additional Information

- No Fault Automobile, Workers Compensation, and Blue Cross/Blue Shield should be captured as "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 above, which is
 why there a numbering gaps. Refer to the NTDS Change Log for a full list of
 retired Primary Method of Payments.

Data Source

- Billing Sheet
- Admission Form
- Face Sheet

National Element

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Data Format [text]

ImageTrend Description

Other billing source that is not specific in the Primary Method of Payment drop-down menu.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Primary Method of Payment is "Other"

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form
- Face Sheet

REIMBURSED CHARGES

TR 2.8

Data Format [number]

ImageTrend Description

The amount the hospital was reimbursed for services.

Element Values

• Relevant value for data element

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

Data Format [combo] single-choice

ImageTrend Description

Any known secondary source of finance expected to assist in payment of medical bills.

Element Values

Medicare Supp Private / Commercial Insurance

Managed Care Workers Compensation

No Fault Automobile Other

Not Billed (for any reason) Self-Pay

Medicare Other Government

Medicaid

- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Face Sheet

Data Format [text]

ImageTrend Description

Secondary other billing source that is not specific in the Secondary Method of Payment drop-down menu.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Primary Method of Payment is "Other"

- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Face Sheet

Data Format [combo] single-choice

ImageTrend Description

Any known third source of finance expected to assist in payment of medical bills.

Element Values

Medicare Supp Private / Commercial Insurance

Managed Care Workers Compensation

No Fault Automobile Other

Not Billed (for any reason) Self Pay

Medicare Other Government

Medicaid

- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Face Sheet

Data Format [text]

ImageTrend Description

Third other billing source that is not specific in the Third Method of Payment drop-down menu.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Third Method of Payment is "Other"

- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form
- Face Sheet

Data Format [number]

ImageTrend Description

The total amount the hospital charged for the patient's care.

Element Values

• Relevant value for data element

- Billing Sheet / Medical Records Coding Summary Sheet
- Admission Form

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

Indication of whether the injury occurred during paid employment.

		XSD Element / Domain (Complex		
XSD Data Type	xs: string	Type)	WorkRelated	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null	values
Required in XSD	Yes			

Element Values

Yes No

Additional Information

• If work related, two additional data elements must be completed: Patient's Occupational Industry and Patient's Occupation.

Data Source

- EMS Run Report
- Triage/Trauma Flow Sheet
- History & Physical
- Face Sheet
- Billing Sheet

National Element

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National & State Element

Data Format [combo] single-choice

NTDB/ImageTrend Description

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

		XSD Element / Domain	
XSD Data Type	xs: integer	(Complex Type)	PatientsOccupationalIndustry
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

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, also complete Patient's Occupation.
- Based upon US Bureau of Labor Statistics Industry Classification.
- The null value "Not Applicable" is used if Work Related is 2. No.

Data Source

- Billing Sheet
- Face Sheet
- Case Management/Social Services Notes
- EMS Run Report
- Nursing Notes/Flow Sheet

National Element

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Data Format [text]

ImageTrend Description

A description of the occupational industry associated with the patient's work environment.

Element Values

• Relevant value for data element

Additional Information

• Only completed if injury is work-related

- Triage Form / Trauma Flow Sheet
- EMS Run Report
- ED Nurses' Notes
- Other ED Documentation

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

The occupation of the patient.

	-			
XSD Data Type	xs: integer	XSD Element / Domai	n (Complex Type)	PatientsOccupation
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null v	values
Required in XSD	Yes			

Element Values

1	Ducinocc	and Einar	acial One	erations Oc	_
Ι.	Business	and Finar	nciai Obe	erations Oc	n

- 2. Architecture and Engineering Ocp
- 3. Community and Social Services Ocp
- 4. Education, Training, and Library Ocp
- 5. Healthcare Practitioners and Technical Ocp
- 6. Protective Service Ocp
- 7. Building and Grounds Cleaning and Maintenance
- 8. Sales and Related Ocp
- 9. Farming, Fishing, and Forestry Ocp
- 10. Installation, Maintenance, and Repair Ocp
- 11. Transportation and Material Moving Ocp
- 12. Management Ocp
- 13. Computer and Mathematical Ocp

- 14. Life, Physical, and Social Science Ocp
- 15. Legal Ocp
- 16. Arts, Design, Entertainment, Sports, and
- Media
- 17. Healthcare Support Ocp
- 18. Food Prep & Serving Related
- 19. Personal Care & Service Ocp
- 20. Office & Admin Support Ocp
- 21. Construction and Extraction Ocp
- 22. Production Ocp
- 23. Military Specific Ocp

Additional Information

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

Data Source

- Billing Sheet
- EMS Run Report
- Face Sheet
- Nursing Notes/Flow Sheet
- Case Management/Social Service Notes

National Element

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PATIENT'S OCCUPATION DESCRIPTION

TR2.12

Data Format [text]

ImageTrend Description

The description of the occupation of the patient.

Element Values

• Relevant value for data element

Additional Information

• Only completed if injury is work-related

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED documentation
- EMS Run Report

Injury Information

National & State Element **Data Format** [text]

NTDB/ImageTrend Description

The ZIP/Postal code of the incident location.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) InjuryZip		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Stored as a 5 or 9 digit code for US and CA or can be stored in the postal code format of the applicable country
- If "Not Known/Not Recorded," complete variables: Incident Country, Incident State (US ONLY) and Incident City (US ONLY)
- May require adherence to HIPAA regulations
- If ZIP/Postal code is reported, then must complete Incident Country
- When completed with Country, the city, county, and state auto-calculate

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

		XSD Element / Domain (Complex		
XSD Data Type	xs: string	Type)		IncidentCountry
Multiple Entry Configuration	No	Accepts Null Value Yes, common null y		values
Required in XSD	Yes			

Element Values

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

Additional Information

- Values are two characters FIPS codes representing the country (e.g., US)
- If Incident Country is not US, then the null value "Not Applicable" is used for: Incident State, Incident County, and Incident Home City

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet

National Element

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AGE UNITS TR 5.10

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) IncidentCi		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null	l values
Required in XSD	Yes			

Element Values

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

Additional Information

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

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Doma	IncidentCounty	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null value		lues
Required in XSD	Yes			

Element Values

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

Additional Information

- Only complete when Incident Location Zip/Postal Code is "Not Applicable", or "Not Known/Not Recorded"
- Used to calculate FIPS code
- The null value "Not Applicable" is used if Incident Location Zip/Postal Code is reported
- If Incident Country is not US, report the null value "Not Applicable"
- Auto-Calculated if ZIP code and Country are completed

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) IncidentState		
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		ies
Required in XSD	Yes			

Element Values

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

Additional Information

- Only complete when Incident Location Zip Code is "Not Applicable", or "Not Known/Not Recorded" and country is US
- Used to calculate FIPS code
- The null value "Not Applicable" is used if Incident Location Zip/Postal Code is reported
- If Incident Country is not US, report the null value "Not Applicable"
- Auto-Calculated if ZIP code and Country are completed

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet

National Element

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National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		PlaceOfInjuryCode
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		ull values
Required in XSD	Yes			

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 will be accepted for ICD-10 Place of Occurrence External Cause Code
- Multiple Cause Coding Hierarchy: If two or more events cause separate injuries, an external cause code should 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 external cause codes except cataclysmic events, and child and adult abuse, and terrorism
- The first listed external cause code should 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

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- History & Physical
- Progress Notes

National Element

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(Complaint) SUPPLEMENTAL CAUSE OF INJURY

TR 5.8

Data Format [combo] single-choice

ImageTrend Description

The event that occurred to cause injury to the patient.

Element Values

Accident	Fire	Rollerblading
Aircraft	Fireworks Related	Roller-skating
All-Terrain Vehicle	Frostbite	Scooter
Assault	Gunshot Wound	Skateboarding
Bicycle Crash	Hanging	Skydiving
Boating	Heat Related	Sledding
Burn	Industrial Incident	Snowboarding
Child Abuse	Injured by Animal	Snowmobile
Cut/Pierce	Jet Ski	Sport Related
Dirt Bike	Lightning	Stab Wound
Diving	Motor Pedestrian Crash	Struck By / Against
Domestic Abuse	Motor Vehicle Crash	Tornado
Drowning	Motorcycle Crash	Train
Electrical Injury	Police	Waterskiing
Fall	Rape	
Farm/Heavy	Recreational	
Equipment/Machine		

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

Data Format [text]

ImageTrend Description

The description of the injury. This can be any supporting or supplemental data about the injury, other circumstances, etc.

Element Values

• Relevant value for data element

- EMS Run Report
- History & Physical Documentation
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

		XSD Element / Domain		
XSD Data Type	xs: string	Type)		PrimaryECodelcd10
Multiple Entry Configuration	No	Accepts Null Value	Yes, common nu	ll values
Required in XSD	Yes			

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
- External cause codes are used to auto-generate two calculated elements: Trauma Type (Blunt, Penetrating, Burn) and Intentionality (based upon CDC matrix)
- ICD-10-CM or ICD 10-CA codes are accepted for this data element. Activity codes are not reported under the NTDS and should not be reported for this data element.
- Multiple Cause Coding Hierarchy

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- History & Physical
- Progress Notes

National Element

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ICD-10 ADDITIONAL EXTERNAL CAUSE CODE*

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

Additional External Cause Code used in conjunction with the Primary External Cause Code if multiple external cause codes are required to describe the injury event

		XSD Element / Domain (Complex		
XSD Data Type	xs: string	Type)		AdditionalECodelcd10
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

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 will be accepted for ICD-10 Additional External Cause Code.
- Activity codes should not be reported in this element or under the NTDS and should not be reported for this data element.
- The null value "Not Applicable" is used if no additional external cause codes are used
- Report all that apply (maximum two)
- 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 should 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

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- History & Physical
- Progress Notes

National Element

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Data Format [number]

ImageTrend Description

Intentionality.

Element Values

Relevant ICD-10-CM code value for intentionality.

- Assault
- Other
- Self-Inflicted
- Unintentional
- Undetermined

ICD-10 TRAUMA TYPE

TR 200.3.3

Data Format [number]

ImageTrend Description

Type of Injury.

XSD Data Type	xs: string	XSD Element / Domain (Co	omplex Type)	TraumaType
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		ull values
Required in XSD	Yes			

Element Values

Relevant ICD-10-CM code value for intentionality.

- Blunt
- Penetrating
- Burn
- Other

Data Format [combo] multiple-choice

ImageTrend Description

Indication of whether or not there were any patient specific barriers to serving the patient at the scene.

Element Values

Developmentally Impaired Unattended or Unsupervised (including minors)

Physically Impaired Not Known

Speech Impaired Language

Not Applicable Physically Restrained

Hearing Impaired Unconscious

None Not Known/Not Recorded

- EMS Run Report
- Other ED Documentation

Pre-Hospital Information

ARRIVED FROM

TR 16.22

Data Format [combo] single-choice

ImageTrend Description

Location the patient arrived from.

Element Values

Clinic / MD Office Nursing Home

Home Referring Hospital

Jail Scene

Additional Information

• Used to auto-generate an additional calculated element: Inter-Facility Transfer (patient transferred from another acute care facility to your facility)

- EMS Run Report
- 911 or Dispatch Center
- Other ED Documentation

TRANSPORTED TO YOUR FACILITY BY (EMS Transport Party) *

TR 8.8

National & State Element **Data Format [combo]** single-choice

NTDB Description

The mode of transport delivering the patient to your hospital.

ImageTrend Description

The mode of transport delivering the patient to the hospital.

XSD Data Type	xs: integer	XSD Element / Domain	(Complex Type)	TransportMode
Multiple Entry Configuration	No	Accepts Null Value Yes, common null va		values
Required in XSD	Yes			

Element Values

Ground Ambulance Private/Public Vehicle/Walk-In

Helicopter Ambulance Police
Fixed-wing Ambulance Other

Data Source

• EMS Run Report

National Element

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OTHER TRANSPORT MODE

TR 8.9

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend 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.

XSD Data Type	xs: integer	XSD Element / Domain	(Complex Type)	OtherTransportMode
Multiple Entry Configuration	Yes, max 5	Accepts Null Value	Yes, common null	values
Required in XSD	Yes			

Element Values

Ground Ambulance Private/Public Vehicle/Walk-In

Helicopter Ambulance Police
Fixed-wing Ambulance 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

• EMS Run Report

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

• Patients who require physical transfer from a free-standing emergency department (ED) to an affiliated trauma center.

EXCLUDE:

• Patients transferred from a private doctor's office or stand-alone ambulatory surgery center.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		InterFacilityTransfer
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		alues
Required in XSD	Yes			

Element Values

Yes No

Additional Information

- Outlying facilities purporting to provide emergency care services or utilized to stabilize a patient are considered acute care facilities.
- 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
 (accessed Jan. 15, 2019).

Data Source

- EMS Run Report
- Triage/Trauma Flow Sheet
- History and Physical

National Element

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Data Format [combo] single-choice

ImageTrend Description

Indicator if this event would be considered a mass casualty incident (overwhelmed existing EMS resources).

Element Values

No Yes

- EMS Run Report
- Trauma Flow Sheet
- 911 or Dispatch Center
- Other ED Documentation

PREGNANCY TR 14.38

Data Format [combo] single-choice

ImageTrend Description

Indication of the possibility that the patient is currently pregnant.

Element Values

No Yes

- EMS Run Report
- 911 or Dispatch Center
- Other ED Documentation

ESTIMATED BODY WEIGHT (Initial ED/Hospital Weight)*

TR 1.6.5

National & State Element **Data Format** [combo] single-choice

NTDB Description

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

ImageTrend Description

First recorded, measured or estimated baseline weight upon ED/Hospital arrival (in kilograms).

Element Values

• Relevant value for data element

Additional Information

- Recorded 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 that first recorded/hospital vitals do not need to be from the same assessment.

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nursing Notes/Flow Sheet
- Pharmacy Record

National Element

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LAW ENFORCEMENT / CRASH REPORT NUMBER

TR 14.40

Data Format [text]

ImageTrend Description

The unique number associated with the law enforcement or crash report.

Element Values

• Relevant value for data element

- EMS Run Report
- Other ED Documentation

Data Format [combo] single-choice

ImageTrend Description

The kind of risk factor predictors associated with the vehicle involved in the incident.

Element Values

Dash Deformity Side Post Deformity

DOA Same Vehicle Space Intrusion > 1 Foot

Ejection Steering Wheel Deformity

Fire Windshield Spider / Star

Rollover / Roof Deformity

- EMS Run Report
- Other ED Documentation

SEAT ROW LOCATION (of Patient in Vehicle)

TR 14.43

Data Format [number]

ImageTrend Description

The seat row location of the patient in vehicle at the time of the crash with the front seat numbered as 1.

Element Values

• Relevant value for data element

- EMS Run Report
- Other ED Documentation

POSITION OF PATIENT (in the seat of the vehicle) TR 14.44

Data Format [combo] single-choice

ImageTrend Description

The seat position of the patient in the vehicle at the time of the crash.

Element Values

Driver Middle Right

Left (Non-driver) Other

- EMS Run Report
- Other ED Documentation

Data Format [number]

ImageTrend Description

The distance in feet the patient fell, measured from the lowest point to the ground.

Element Values

• Relevant value for data element

- EMS Run Report
- Other ED Documentation

State Element

Data Format [combo] single-choice

ImageTrend Description

Physiologic and anatomic EMS trauma triage criteria for transport to a trauma center as defined by the Centers for Disease Control and Prevention and the American College of Surgeons-Committee on Trauma. This information must be found on the scene of injury EMS Run Report

XSD Data Type	xs: integer	XSD Element/Domain (Complex Type)	TraumaCenterCriterion
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		ıll values
Required in XSD	Yes			

Element Values

- Glasgow Coma Score <=13
- Systolic blood pressure < 90 mmHg
- Respiratory rate
 - < 10 or > 29 breaths per minute

(<20 in infants aged < 1 year) or need for ventilatory support.

- All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee
- Paralysis
- Chest wall instability or deformity (e.g. flail chest)
- Two or more proximal long-bone fractures
- Pelvic fracture
- Open or depressed skull fracture
- Crushed, degloved, mangled, or pulseless extremity.
- Amputation proximal to wrist or ankle

Additional Information

- The null value "Not Applicable" should be reported to indicate that the patient did not arrive by EMS.
- The null value "Not Applicable" should be reported if EMS Run Report indicates patient did not meet any Trauma Triage Criteria.
- The null value "Not Known/Not Recorded" should be reported if this information
 is not indicated, as an identical response choice, on the EMS Run Report or if the
 EMS Run Report is not available.
- Element Values must be determined by the EMS provider and must not be assigned by the index hospital.
- Report all that apply.
- Consistent with NEMSIS v3.

Data Source

State Element

Data Format [combo] single-choice

ImageTrend Description

EMS trauma triage mechanism of injury criteria for transport to a trauma center as defined by the Centers for Disease Control and Prevention and the American College of Surgeons-Committee on Trauma. This information must be found on the scene of injury EMS Run Report

Element Values

- Fall adults: > 20 ft. (one story is equal to 10 ft.)
- Motorcycle crash > 20 mph
- Fall
 - o For children: > 10 ft. or 2-3 times the height of the child
 - o For adults > 65; SBP < 110
- Crash intrusion, including roof: >12 in. occupant site; >18 in. any site
- Patients on anticoagulants and bleeding disorders ventilatory support
- Pregnancy > 20 weeks
- Crash ejection (partial or complete) from automobile
- EMS provider judgement
- Crash death in same passenger compartment
- Rurns
- Crash vehicle telemetry data (AACN) consistent
- Burns with Trauma with high risk injury
- Auto v. pedestrian/bicyclist thrown, run over, or > 20 MPH impact

Additional Information

- The null value "Not Applicable" should be reported to indicate that the patient did not arrive by EMS.
- The null value "Not Applicable" should be reported if EMS Run Report indicates patient did not meet any Trauma Triage Criteria.
- The null value "Not Known/Not Recorded" should be reported if this information
 is not indicated, as an identical response choice, on the EMS Run Report or if the
 EMS Run Report is not available.
- Element Values must be determined by the EMS provider and must not be assigned by the index hospital.
- Report all that apply.
- Consistent with NEMSIS v3.

Data Source

PROTECTIVE DEVICES (Safety Device Used)*

TR 29.24

National & State Element **Data Format** [combo] single-choice

NTDB Description

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

ImageTrend Description

The use (or lack of use) of safety equipment relevant to the injury cause.

XSD Data Type	xs: integer	XSD Element / Domain (ProtectiveDevice	
Multiple Entry Configuration	No	Accepts Null Value	pts Null Value Yes, common null values	
Required in XSD	Yes			

Element Values

- 1. None
- 2. Lap Belt TR 29.11
- 3. Personal Floatation Device TR29.8
- 4. Protective Non-Clothing Gear (e.g., shin guard) TR29.12
- 5. Eye Protection TR29.6
- 6. Child Restraint (booster seat or child car seat) TR29.13
- 7. Helmet (e.g., bicycle, skiing, motorcycle) –
- 8. Airbag Present TR29.3
- Protective Clothing (e.g., padded leather pants) – TR29.7
- 10. Shoulder Belt TR29.14
- 11. Other TR29.9

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

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes/Flow Sheet
- History & Physical

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		ChildSpecificRestraint
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null	values
Required in XSD	Yes			

Element Values

1. Not Applicable

- 4. Infant Car Seat (TR29.16)
- 2. Child Booster Seat (TR29.17)
- 5. Not Known/Not Recorded
- 3. Child Car Seat (TR29.15)

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

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes/Flow Sheet
- History & Physical

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

Indication of airbag deployment during a motor vehicle crash.

XSD Data Type	xs: integer	XSD Element / Domain (C	Complex Type)	AirbagDeployment
Multiple Entry Configuration	No	Accepts Null Value	Yes, common nu	II values
Required in XSD	Yes	-		

Element Values

1. Not Applicable

4. Airbag Deployed Side (TR29.19)

2. Airbag Deployed Front (TR29.21)

5. Airbag Not Deployed (TR29.20)

3. Airbag Deployed Other (TR29.22)

6. Not Known/Not Recorded

Additional Information

- Only completed when 'Airbag Present' is marked "Yes"
- Evidence of the use of airbag deployment may be reported or observed
- The null value "Not Applicable" is used if no "Airbag Present" is reported under Protective Devices

Data Source

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes/Flow Sheet
- History & Physical

National Element

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Data Format [text]

ImageTrend Description

Other protective equipment in use or worn by the patient at the time of the injury

Element Values

• Relevant value for data element

Additional Information

- Evidence of the use of safety equipment may be reported or observed
- Only completed if Other is "Yes"

- EMS Run Report
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes/Flow Sheet

Data Format [text]

ImageTrend Description

The EMS Run number is assigned by the EMS agency that generated the incident. The NEMSIS data section is eResponse.03 (Incident Number).

Element Values

• Relevant value for data element

- EMS Run Report
- Other ED Documentation

EMS PATIENT CARE REPORT (PCR) NUMBER

TR9.11

Data Format [text]

ImageTrend Description

The run number assigned and entered on the run sheet of the primary emergency service, specific to the individual run/patient.

Element Values

• Relevant value for data element

- EMS Run Report
- Other ED Documentation

NAME OF EMS SERVICE

TR7.3

Data Format [combo] single-choice

ImageTrend Description

The name of the EMS service that transferred the patient.

Element Values

• Relevant value for data element

- EMS Run Report
- Other ED Documentation

Data Format [date]

ImageTrend Description

The date the unit transporting to your hospital was notified by dispatch.

XSD Data Type	xs: date	XSD Element / Domain (Complex Type)		EMSNotifyDate
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 1990	Max. Constraint: 2030	

Element Values

• Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- For inter facility transfer patients, this is the date on which the unit transporting the patient to your facility from the transferring facility was notified by dispatch or assigned to this transport.
- For patients transported from the scene of injury to your hospital, this is the date on which the unit transporting the patient to your facility from the scene was dispatched.
- The null value "Not Applicable" is used for patients who were not transported by EMS

Data Source

Data Format [time]

ImageTrend Description

The time the unit transporting to your hospital was notified by dispatch.

XSD Data Type	xs: time	XSD Element / Domain (Co	EMSNotifyTime	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		alues
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constraint: 23	3:59

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM military time
- For inter-facility transfer patients, this is the time at which the unit transporting the patient to your facility from the transferring facility was notified by dispatch.
- For patients transported from the scene of injury to your hospital, this is the time at which the unit transporting the patient to your facility from the scene was dispatched.
- The null value "Not Applicable" is used for patients who were not transported by EMS

Data Source

(EMS Unit) ARRIVAL DATE AT SCENE OR TRANSFERRING FACILITY

TR 9.2

Data Format [time]

ImageTrend Description

The date the unit transporting to the hospital arrived on the scene (the date the vehicle stopped moving).

XSD Data Type	xs: date	XSD Element / Domain (Complex Type)		EMSArrivalDate	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constrain	t: 23:59	

Element Values

- Relevant value for data element
- Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

Additional Information

- Collected as HH:MM military time
- For inter facility transfer patients, this is the time at which the unit transporting the patient to your facility from the transferring facility arrived at the transferring facility (arrival is defined as date/time when the vehicle stopped moving)
- For patients transported from the scene of injury to your hospital, this is the time at which the unit transporting the patient to your facility from the scene arrived at the scene (arrival is defined as date/time when the vehicle stopped moving)
- The null value "Not Applicable" is used for patients who were note transported by EMS.

Data Source

(EMS Unit) ARRIVAL TIME AT SCENE OR TRANSFERRING FACILITY

TR 9.2.1

Data Format [time]

ImageTrend Description

The time the unit transporting to the hospital arrived on the scene (the time the vehicle stopped moving).

XSD Data Type	xs: time	XSD Element / Domain (Cor	EMSArrivalTime	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		n null values
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constr	raint: 23:59

Element Values

- Relevant value for data element
- Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

Additional Information

- Collected as HH:MM military time
- For inter facility transfer patients, this is th]e time at which the unit transporting the patient to your facility from the transferring facility arrived at the transferring facility (arrival is defined as date/time when the vehicle stopped moving)
- For patients transported from the scene of injury to your hospital, this is the time at which the unit transporting the patient to your facility from the scene arrived at the scene (arrival is defined as date/time when the vehicle stopped moving)
- The null value "Not Applicable" is used for patients who were note transported by EMS.

Data Source

(EMS Unit) DEPARTURE DATE FROM SCENE OR TRANSFERRING FACILITY TR 9.3

Data Format [time]

ImageTrend Description

The date the unit transporting to the hospital left the scene.

XSD Data Type	xs: date	XSD Element / Domain (Complex Type) EMSLeftDate		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constraint	:: 23:59

Element Values

• Relevant value for data element

Additional Information

- Reported as YYYY-MM-DD
- For inter-facility transfer patients, this is the date at which the unit transporting
 the patient to your facility from the transferring facility departed from the
 transferring facility (departure is defined as date/time when the vehicle started
 moving).
- For patients transported from the scene of injury to your hospital, this is the date
 at which the unit transporting the patient to your facility from the scene departed
 from the scene (departure is defined as date/time when the vehicle started
 moving).
- The null value "Not Applicable" is used for patients who were not transported by EMS

Data Source

(EMS Unit) DEPARTURE TIME FROM SCENE OR TRANSFERRING FACILITY TR 9.3.1

Data Format [time]

ImageTrend Description

The time the unit transporting to the hospital left the scene.

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)	EMSLeftTime
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constraint	:: 23:59

Element Values

- Relevant value for data element
- Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

Additional Information

- Collected as HH:MM military time
- For inter facility transfer patients, this is the time at which the unit transporting
 the patient to your facility from the transferring facility departed from the
 transferring facility (departure is defined as date/time when the vehicle started
 moving).
- For patients transported from the scene of injury to your hospital, this is the time
 at which the unit transporting the patient to your facility from the scene departed
 from the scene (departure is defined as date/time when the vehicle started
 moving).
- The null value "Not Applicable" is used for patients who were not transported by EMS

Data Source

Data Format [time]

ImageTrend Description

The date the EMS Agency arrived with the patient at the destination of EMS transport.

Element Values

• Relevant value for data element

Additional Information

- Reported as YYYY-MM-DD
- Scene may be defined as "initial hospital" for inter-facility transfers

- EMS Run Report
- 911 or Dispatch Center

Data Format [time]

ImageTrend Description

The time the EMS Agency arrived with the patient at the destination of EMS transport.

XSD Data Type	xs: string	Element / Domain (Simple Type)		TimeUnitAtDestination
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Collected as HH:MM
- Scene may be defined as "initial hospital" for inter-facility transfers
- HH:MM should be collected as military time

- EMS Run Report
- 911 or Dispatch Center

EMS PATIENT CARE REPORT UNIVERSALLY UNIQUE IDENTIFIER (UUID)

TR7.7

Description

The universally unique identifier (UUID) of the patient care report (PCR) of each emergency medical service (EMS) unit treating the patient from the time of injury to arrival at your 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}-[afA-F0-9]{12}

ADDITIONAL INFORMATION

- A sample UUID is: e48cd734-01cc-4da4-ae6a-915b0b1290f6
- Assigned by any applicable transporting EMS agency in accordance with the IETF RFC 4122 standard.
- 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.
- Report all that apply (maximum 20).
- Consistent with NEMSIS v3.5.0.

DATA SOURCE HIERARCHY GUIDE

1. EMS Run Report

National Element

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(Pre-Hospital) DESTINATION DETERMINATION

TR 15.32

Data Format [combo] single-choice

ImageTrend Description

Major reason for transferring the patient to the facility chosen.

Element Values

Closet Facility On-Line Medical Direction

Diversion Other

Hospital of Choice Specialty Resource Center

- EMS Run Report
- Other ED Documentation

Data Format [time]

ImageTrend Description

Indicates whether the out of hospital triage destination protocol was used to determine patient needed resources of this trauma care facility.

Element Values

• Relevant value for data element

- EMS Run Report
- 911 or Dispatch Center

Data Format [time]

ImageTrend Description

Indicates criterion (a) used to triage patient criteria that may be selected are those in the adult out of hospital trauma triage criteria decision protocol of the EMS Bureau of the IDPH up to 20 criteria may be chosen (if EMS run sheet unavailable, give best estimate of circumstances of injury).

Element Values

• Relevant value for data element

- EMS Run Report
- 911 or Dispatch Center

(Pre-Hospital Thoracentesis) / TUBE THORACOSTOMY TR 18.9

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of EMS.

Element Values

Not Performed

Performed

- EMS Run Report
- Other ED Documentation

(Pre-Hospital) CPR PERFORMED

TR 15.39

Data Format [combo] single-choice

ImageTrend Description

Indication as to if CPR management was conducted while under the care of EMS.

Element Values

Performed

Not Performed

- EMS Run Report
- Other ED Documentation

EMS STATUS TR 15.38

Data Format [combo] single-choice

ImageTrend Description

Status of the EMS run sheet or Patient Care Report (PCR).

Element Values

Complete Missing
Incomplete Pending

Data Source

• EMS Run Report

• Other ED Documentation

Data Format [combo] single-choice National & State Element

NTDB Description

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

ImageTrend Description

Whether the person suffered a cardiac arrest at any stage prior to arrival at the definitive care hospital.

XSD Data Type	xs:integer	Element/Domain (Simple Type)		cardiac_arrest	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes				

Element Values

Yes 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 advance cardiac life support must have been initiated.

Data Source

- EMS Run Report
- Other ED Documentation

National Element

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(Pre-Hospital) NEEDLE THORACOSTOMY

TR 18.96

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of EMS.

Element Values

Not Performed

Performed

- EMS Run Report
- Other ED Documentation

(Pre-Hospital) AIRWAY MANAGEMENT

TR 15.40

Data Format [combo] single-choice

ImageTrend Description

Indication as to whether a device or procedure was used to prevent or correct obstructed respiratory passage while under the care of EMS.

Element Values

CPAP Cricoid EOA

Nasal Cannula LMA Nasal Trumpet

Non-rebreather mask Nasal ETT Supplemental Oxygen

Bag & Mask Oral Airway King Airway

Combitube Oral ETT Airway cleared

Trach Alternative Airway Device

- EMS Run Report
- Other ED Documentation

Data Format [combo] single-choice

ImageTrend Description

Indication as to the amount of IV fluids that were administered to the patient while under the care of EMS.

Element Values

- Saline lock
- < 500
- 500-2000
- IVF Attempted
- IVF Unknown Amount

- EMS Run Report
- Other ED Documentation

Data Format [combo] multiple-choice

ImageTrend Description

Medications given to the patient while under the care of EMS.

Element Values

• Relevant value for data element

- EMS Run Report
- Other ED Documentation

Data Format [date]

ImageTrend Description

Date of first recorded vital signs in the Pre-Hospital setting.

Element Values

• Collected as MM/DD/YYYY

- EMS Run Report
- Other ED Documentation

Data Format [time]

ImageTrend Description

Time of first recorded vital signs in the Pre-Hospital setting.

Element Values

- Collected as HHMM
- HHMM should be collected as military time

- EMS Run Report
- Other ED Documentation

ImageTrend Description

First recorded Glasgow Coma Score (Eye) at the scene of injury

XSD Data Type	xs: integer	XSD Element / Domain	EmsGcsEye		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 4		

Element Values

- No eye movement when assessed
- Opens eyes in response to painful stimulation
- Opens eyes in response to verbal stimulation
- Opens eyes spontaneously

Additional Information

- The null value "Not Known/Not Recorded" is reported if Initial Field GCS 40 Eye is reported.
- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS Run Report from the scene of injury
- If 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 listed. E.g. the chart indicates: "patients pupils are PERRL," an Eye GCS of 4 may be recorded, IF there is no other contradicting documentation
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field GCS Eye was NOT measured at the scene of injury.

Data Source

• EMS Run Report

ImageTrend Description

First recorded Glasgow Coma Score (Verbal) measured at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Domain	(Simple Type)	EmsGcsVerbal	
Multiple Entry Configuration	No	Accepts Null Value	s Null Value Yes, common null values		
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 5		

Element Values

Pediatric (≤ 2 years):

No vocal response Cries but is consolable, inappropriate interactions
Inconsolable, agitated Smiles, oriented to sounds, follows objects, interacts

Inconsistently consolable, moaning

Adult:

No vocal response Inappropriate words Oriented

Incomprehensible sounds Confused

Additional Information

- 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 listed.
 E.g. the chart indicates: "patient is oriented to person place and time," a Verbal
 GCS of 5 may be recorded, IF there is no other contradicting documentation. The
 null value "Not Known/Not Recorded" is used if the patient is transferred to your
 facility with no EMS Run Report from the scene of injury
- If a patient is intubated, then the GCS Verbal score is equal to 1.
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field GCS - Verbal was NOT measured at the scene of injury.
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in
- The null value "Not Known/Not Recorded" is reported if Initial Field GCS 40 Verbal is reported.

Data Source

• EMS Run Report

ImageTrend Description

First recorded Glasgow Coma Score (Motor) measured setting at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Doma	EmsGcsMotor	
Multiple Entry Configuration	No	Accepts Null Value	Yes,	, common null values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 6	

Element Values

Pediatric (≤ 2 years):

No motor response Withdrawal from pain

Extension to pain Localizing pain

Flexion to pain Appropriate response to stimulation

Adult:

No motor response Flexion to pain Localizing pain

Extension to pain Withdrawal from pain Obeys commands

Additional Information

- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field GCS Motor was NOT measured at the scene of injury.
- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS Run Sheet from the scene of injury
- 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 function within the GCS scale, the appropriate numeric score may be listed.
 E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS
 of 4 may be recorded, IF there is no other contradicting documentation
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in
- The null value "Not Known/Not Recorded" is reported if Initial Field GCS 40 -Motor is reported.

Data Source

• EMS Run Report

(Initial Field) GCS QUALIFIER (UP TO 3)

TR 18.63

Data Format [combo] multiple-choice

ImageTrend Description

Documentation of factors potentially affecting the first assessment of GCS before arrival in the ED/hospital.

XSD Data Type	xs: integer	XSD Element / Domain (Simple Type) EmsGcsQualifier			
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values			
Required in XSD	Yes				

Element Values

- Patient chemically sedated or paralyzed
- Obstruction to the Patient's Eye
- Patient Intubated
- Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to the eye

Additional Information

- To select more than 1, hold down the Shift Key
- Identifies treatments given to the patient that may affect the first assessment of GCS. This element does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.)

Data Source

ImageTrend Description

First recorded systolic blood pressure measured at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Domain	EmsSbp		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 300		

Element Values

• Relevant value for data element

Additional Information

- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS Run Report from the scene of injury
- Measurement recorded must be without the assistance of CPR or any type of mechanical chest compression device. For those patients who are receiving CPR or any type of mechanical chest compressions, report the value obtained while compressions are paused.
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in.
- Used to auto-generate an additional calculated element: Revised Trauma Score -EMS (adult & pediatric)
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial element systolic blood pressure was NOT measured at the scene of injury

Data Source

(Initial Field) DIASTOLIC BLOOD PRESSURE

TR 18.68

Data Format [number]

ImageTrend Description

First recorded diastolic blood pressure in the pre-hospital setting.

XSD Data Type	xs: string	Element/Domain (Complex Type)		EMSDbp
Multiple Entry Configuration		No	Accepts Null Value	Yes, common null values
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

• If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, leave blank to record as "Not Known / Not Recorded"

Data Source

ImageTrend Description

First recorded pulse measured at the scene of injury (palpated or auscultated), expressed as a number per minute.

XSD Data Type	xs: integer	XSD Element / Domain	(Complex Type)	EmsPulseRate	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 300		

Element Values

• Relevant value for data element

Additional Information

- The null value "Not Known / Not Recorded" is used if the patient is transferred to (Initial ED/Hospital) SP02 (Oxygen Saturation) *
- Measurement recorded must be without the assistance of CPR or any type of mechanical chest compression device. For those patients who are receiving CPR or any type of mechanical chest compressions, report the value obtained while compressions are paused.
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in.
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field pulse rate was NOT measured at the scene of injury.

Data Source

(Initial Field) RESPIRATORY RATE*

TR 18.70

Data Format [number]

ImageTrend Description

First recorded respiratory rate measured at the scene of injury (expressed as a number per minute).

XSD Data Type	xs: integer	XSD Element / Domain (Co	mplex Type)	EmsRespiratoryRate	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes	Min. Constraint: 0	Max. Constra	aint: 100	

Element Values

• Relevant value for data element

Additional Information

- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS Run Report from the scene of injury
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field respiratory rate was NOT measured at the scene of injury

Data Source

(Initial Field) SP02 (Oxygen Saturation) *

TR 18.82

Data Format [number]

ImageTrend Description

First recorded oxygen saturation at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		EmsPulseOximetry	
Multiple Entry Configuration	No	Accepts Null Value Yes, co		ommon null values	
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 100		

Element Values

• Relevant value for data element

Additional Information

- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS Run Report from the scene of injury
- Value should be based upon assessment before administration of supplemental oxygen
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in.
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field oxygen saturation was NOT measured at the scene of injury

Data Source

ImageTrend Description

First recorded Glasgow Coma Score (total) measured at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)			EmsTotalGcs
Multiple Entry Configuration	No	Accepts Null Value Yes, commo		non null values	
Required in XSD	Yes	Min. Constraint: 3	Max. Constraint: 15		

Element Values

• Relevant value for data element

Additional Information

- The null value "Not Known/Not Recorded" is used if the patient is transferred to your facility with no EMS Run Report from the scene of injury
- If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such a "AAOx3," "awake alert and oriented," or "patient with normal mental status," interpret this as GCS of 15 IF there is no other contradicting documentation
- The null value "Not Applicable" is used for patients who arrive by 4. Private/Public Vehicle/Walk-in
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field GCS Total was NOT measured at the scene of injury.
- The null value "Not Known/Not Recorded" is used if Initial Field GCS 40 Total is reported.

Data Source

• EMS Run Report

ImageTrend Description

First recorded Glasgow Coma Score 40 (Eye) measured at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Domain	(Comp	olex Type)	EmsGcs40Eye
Multiple Entry Configuration	No	Accepts Null Value		Yes, comn	non null values
Required in XSD	Yes	Min. Constraint: 3	Max. Constraint: 15		:: 15

Element Values

Adults:

None

To Pressure

To Sound

Spontaneous

Not Testable

Pediatric <5 years:

None

To Pain

To Sound

Spontaneous

Not Testable

Additional Information

- The null value "Not Known/Not Recorded" is reported if the patient is transferred to your facility with no EMS Run Report from the scene of injury.
- 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 40 scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient's eyes open spontaneously," an Eye GCS 40 of 4 may be recorded, IF there is no other contradicting documentation.
- The null value "Not Applicable" is reported for patients who arrive by "4. Private/Public Vehicle/Walk-in".
- Report Field Value "5. Not Testable" if unable to assess (e.g. swelling to eye(s)).
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field GCS 40 – Eye was NOT measured at the scene of injury.
- The null value "Not Known/Not Recorded" is reported if Initial Field GCS Eye is reported.

Data Source

• EMS Run Report

Description

First recorded Glasgow Coma Score 40 (Verbal) measured at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Doma	EmsGcs40Verbal	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 3	Max. Constraint: 15	

Element Values

Adults:

None

Sounds

Words

Confused

Oriented

Not Testable

Pediatric < 5 years:

None

Cries

Vocal Sounds

Words

Talks Normally

Not Testable

Additional Information

- The null value "Not Known/Not Recorded" is reported if the patient is transferred to your facility with no EMS Run Report from the scene of injury.
- 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 scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient
 correctly gives name, place and date" a Verbal GCS of 5 may be recorded, IF there is no other
 contradicting documentation.
- The null value "Not Applicable" is reported for patients who arrive by "4. Private/Public Vehicle/Walk-in".
- Report Field Value "6. Not Testable" if unable to assess (e.g. patient is intubated).
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field GCS 40-Verbal was not measured at the scene of injury.
- The null value "Not Known/Not Recorded" is reported if Initial Field GCS Verbal is reported.

Data Source

• EMS Run Report

Description

First recorded Glasgow Coma Score 40 (Motor) measured at the scene of injury.

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		EmsGcs40Motor
Multiple Entry Configuration	No	71: -7	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 3	Max. Constraint: 15	5

Element Values

Adults:

None

Extension

Abnormal Flexion

Normal Flexion

Localizing

Obeys Commands

Not Testable

Pediatric <5 years:

None

Extension to Pain

Flexion to Pain

Localizing Pain

Talks Normally

Obeys Commands

Not Testable

Additional Information

- The null value "Not Known/Not Recorded" is reported if the patient is transferred to your facility with no EMS Run Report from the scene of injury.
- 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 listed. 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 recorded, IF there
 is no other contradicting documentation.
- The null value "Not Applicable" is reported for patients who arrive by "4. Private/Public Vehicle/Walk-in".
- Report Field Value "7. Not Testable" if unable to assess (e.g. neuromuscular blockade).
- The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field GCS 40 motor was NOT measured at the scene of injury.
- The null value "Not Known/Not Recorded" is reported if Initial Field GCS Motor is reported.

Data Source

• EMS Run Report

(Pre-Hospital Revised Trauma Score) RTS (Total) TR 18.66

Data Format [number]

ImageTrend Description

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the pre-hospital setting.

Element Values

• Relevant value for data element

Data Source

(Pre-Hospital) RESPIRATORY ASSISTANCE

TR 18.80

Data Format [combo] single-choice

ImageTrend Description

The determination of mechanical and/or external support of respiration.

XSD Data Type	xs: integer	Element/Domain (Co	RespiratoryAssistance	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

Unassisted Respiratory Rate

Assisted Respiratory Rate

Additional Information

- Only completed if a value is provided for Initial ED/Hospital Respiratory Rate
- Respiratory Assistance is defined as mechanical and/or external support of respiration.
- Please note that first recorded hospital vitals do not need to be from the same assessment.
- The null value "Not Applicable" is used if "Initial ED/Hospital Respiratory Rate" is "Not Known/Not Recorded"

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Respiratory Therapy Notes/Flow Sheet

Referring Hospital Information

TRANSPORTED TO REFERRING FACILITY BY

TR 33.48

Data Format [combo] single-choice

ImageTrend Description

The mode of transport delivering the patient to the referring hospital

Element Values

- ALS Ground Ambulance
- Charter Fixed-Wing
- Charter Helicopter
- ALS Helicopter
- BLS Ground Ambulance
- BLS Helicopter
- Other
- Police
- Private/Public Vehicle/Walk-In

Data Source

REFERRING HOSPITAL NAME

TR 33.1

Data Format [combo] single-choice

ImageTrend Description

Name of the referring hospital.

Element Values

• Relevant value for data element

Data Source

REFERRING HOSPITAL ARRIVAL DATE

TR 33.2

Data Format [date]

ImageTrend Description

The date the patient arrived at the referring hospital.

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

Data Source

Data Format [time]

ImageTrend Description

The time the patient arrived at the referring hospital

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

Data Source

REFERRING HOSPITAL DISCHARGE DATE

TR 33.30

Data Format [date]

Description

The date the patient was discharged from the referring hospital.

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

Data Source

Data Format [time]

ImageTrend Description

The time the patient was discharged from the referring hospital.

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

Data Source

REFERRING HOSPITAL PHYSICIAN NAME

TR 33.4

Data Format [text]

ImageTrend Description

The name of the patient's referring physician.

Element Values

• Relevant value for data element

Data Source

REFERRING HOSPITAL VITALS DATE

TR 33.54

Data Format [number]

ImageTrend Description

The referring hospital vitals date.

Element Values

• Relevant value for data element

ImageTrend Description

First recorded Glasgow Coma Score (Motor) at the referring hospital.

Element Values

Pediatric (≤ 2 years):

No motor response Extension to pain

Withdrawal from pain Localizing pain

Flexion to pain Appropriate response to stimulation

Adult:

No motor response Flexion to pain Localizing pain

Extension to pain Withdrawal from pain Obeys commands

Additional Information

- Used to calculate Overall GCS Referring Hospital Score
- 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 function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

• Referring Hospital Medical Record Information

Data Format [number]

ImageTrend Description

First recorded Glasgow Coma Score (Eye) at the referring hospital.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 4

Element Values

- No eye movement when assessed
- Opens eyes in response to painful stimulation
- Opens eyes in response to verbal stimulation
- Opens eyes spontaneously

Additional Information

- Used to calculate Overall GCS Referring Hospital Score
- 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 function within the GCS scale, the appropriate numeric score may be listed.
 E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS
 of 4 may be recorded, IF there is no other contradicting documentation

Data Source

• Referring Hospital Medical Record Information

Data Format [number]

ImageTrend Description

First recorded Glasgow Coma Score (Verbal) at the referring hospital

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 5

Element Values

Pediatric (≤ 2 years):

- No vocal response
- Inconsolable, agitated
- Inconsistently consolable, moaning
- Cries but is consolable, inappropriate interactions
- Smiles, oriented to sounds, follows objects, interacts

Adult:

- No vocal response
- Inappropriate words
- Oriented
- Incomprehensible sounds
- Confused

Additional Information

- Used to calculate Overall GCS Referring Hospital Score
- 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 function within the GCS scale, the appropriate numeric score may be listed.
 E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS
 of 4 may be recorded, IF there is no other contradicting documentation

Data Source

• Referring Hospital Medical Record Information

(Referring Hospital) GCS - MOTOR

TR 33.14.2 / TR 33.14.0 (ped)

Data Format [number]

ImageTrend Description

First recorded Glasgow Coma Score (Motor) at the referring hospital.

XSD Data Type	xs: string		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 6

Element Values

Pediatric (≤ 2 years):

No motor response Withdrawal from pain

Extension to pain Localizing pain

Flexion to pain Appropriate response to stimulation

Adult:

No motor response Flexion to pain Localizing pain

Extension to pain Withdrawal from pain Obeys commands

Additional Information

- Used to calculate Overall GCS Referring Hospital Score
- 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 function within the GCS scale, the appropriate numeric score may be listed.
 E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS
 of 4 may be recorded, IF there is no other contradicting documentation

Data Source

• Referring Hospital Medical Record Information

(Referring Hospital) GCS ASSESSMENT QUALIFIERS (UP TO 3) TR 33.16

Data Format [combo] multiple-choice

ImageTrend Description

Documentation of factors potentially affecting the first assessment of GCS upon arrival to the referring hospital.

Element Values

- · Patient chemically sedated
- Patient Intubated
- Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to the eye
- Obstruction to the Patient's Eye

Additional Information

- Identifies treatments given to the patient that may affect the first assessment of GCS. This element does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.)
- To select more than 1, hold down the Shift Key

Data Source

(Referring Hospital) TEMPERATURE

TR 33.7

Data Format [number]

ImageTrend Description

Referring Temp Celsius.

Element Values

- Relevant value for data element
- Used to auto-generate an additional calculated element: Temperature in degrees Fahrenheit

Data Source

(Referring Hospital) SYSTOLIC BLOOD PRESSURE

TR 33.5

Data Format [number]

ImageTrend Description

Referring Systolic Blood Pressure.

Element Values

• Relevant value for data element

Additional Information

• Used to auto-generate an additional calculated element: Revised Trauma Score - Referring Hospital (adult and pediatric)

Data Source

Data Format [number]

ImageTrend Description

First recorded pulse at the referring hospital (palpated or auscultated), expressed as a number per minute.

Element Values

• Relevant value for data element

Data Source

Data Format [number]

ImageTrend Description

First recorded respiratory rate at the referring hospital (expressed as a number per minute).

Element Values

• Relevant value for data element

Additional Information

 Used to auto-generate an additional calculated element: Revised Trauma Score -Referring Hospital (adult and pediatric)

Data Source

(Referring Hospital) SP02 (Oxygen Saturation)

TR 33.11

Data Format [number]

ImageTrend Description

Referring Oxygen Saturation.

Element Values

• Relevant value for data element

Data Source

Data Format [number]

ImageTrend Description

First recorded Glasgow Coma Score (total) at the referring hospital.

Element Values

Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Used to auto-generate an additional calculated element: Revised Trauma Score -Referring Hospital (adult and pediatric)
- If a patient does not have a numeric GCS score recorded, but with documentation related to their level of consciousness such as "AAOx3", "awake alert and oriented", or "patient with normal mental status", interpret this as GCS of 15, IF there is no other contradicting documentation
- 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 function within the GCS scale, the appropriate numeric score may be listed.
 E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS
 of 4 may be recorded, IF there is no other contradicting documentation

Data Source

• Referring Hospital Medical Record Information

(Referring Hospital Revised Trauma Score) MANUAL RTS TR 33.17

Data Format [number]

ImageTrend Description

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient at the referring hospital setting.

Element Values

• Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Auto-generated if Manual GCS Total is entered

Data Source

(Referring Hospital) Supplemental Oxygen

TR 33.10

Data Format [combo] single-choice

ImageTrend Description

Supplemental Oxygen.

Element Values

No Yes

Data Source

(Referring) HOSPITAL ICU

TR 33.18

Data Format [combo] single-choice

ImageTrend Description

Determination of whether or not the patient went to the ICU at the referring hospital.

Element Values

Yes No

- Referring Hospital Medical Record Information
- Other ICU Documentation

(Referring) HOSPITAL OR

TR 33.19

Data Format [combo] single-choice

ImageTrend Description

Referring Operating Room.

Element Values

Yes No

- Referring Hospital Medical Record Information
- Other OR Documentation

(Referring) CPR PERFORMED

TR 33.20

Data Format [combo] single-choice

ImageTrend Description

Indication as to if CPR management was conducted while under the care of the referring hospital.

Element Values

Yes No

Data Source

(Referring Hospital) CT HEAD (Results)

TR 33.21

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of the referring hospital.

Element Values

Positive Negative Not Performed

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) CT CERVICAL (Results)

TR 33.33

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of the referring hospital.

Element Values

Positive Negative Not Performed

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) CT ABD/PELVIS (Results)

TR 33.22

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of the referring hospital.

Element Values

Positive Negative Not Performed

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) CT CHEST (Results)

TR 33.23

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of the referring hospital.

Element Values

Positive Negative Not Performed

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) ABDOMINAL ULTRASOUND (Results) TR 33.24

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of the referring hospital.

Element Values

Positive Negative Not Performed

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) AORTOGRAM (Results)

TR 33.25

Data Format [combo] single-choice

ImageTrend Description

Indication as to if this procedure was performed while under the care of the referring hospital.

Element Values

Positive Negative

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) AIRWAY MANAGEMENT

TR 33.27

Data Format [combo] single-choice

ImageTrend Description

Indication as to whether a device or procedure was used to prevent or correct an obstructed airway passage while under the care of the referring hospital.

Element Values

Bag & Mask LMA

CPAP Nasal ETT

King Airway Not Performed

Nasal Cannula Oral Airway

Non-Rebreather Mask Oral ETT

Combi tube Supplemental Oxygen

Crico Trach

Data Source

(Referring Hospital) DESTINATION DETERMINATION

TR 33.29

Data Format [combo] single-choice

ImageTrend Description

The reason the facility transferred this patient to another acute care hospital.

Element Values

- Hospital of Choice
- Specialty Resource Center

Data Source

(Referring Hospital) MEDICATIONS

TR 33.28

Data Format [combo] multiple-choice

ImageTrend Description

Indication as to which, if any, medications were administered to the patient while under the care of the referring hospital

Element Values

• Relevant value for data element

- Referring Hospital Medical Record Information
- Other ED Documentation

ED/Acute Care Information

DIRECT ADMIT TO HOSPITAL

TR 17.30

Data Format [combo] single-choice

ImageTrend Description

Indicates if the patient was a direct admission.

Element Values

No Yes

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Registration
- Hospital Discharge Summary

DATE ARRIVED IN ED/ACUTE CARE*

TR 18.55

National & State Element **Data Format** [date]

NTDB/ImageTrend Description

The date the patient arrived in the ED/Hospital.

XSD Data Type	xs: date	XSD Element / Domain (Complex Type)		Hospital Arrival Date
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		l values
Required in XSD	Yes	Min. Constraint: 1990	Max. Constraint	: 2030

Element Values

- Relevant value for data element
- Total EMS Time: (elapsed time from EMS dispatch to hospital arrival) and Total Length of Hospital Stay (elapsed time from ED/Hospital Arrival to ED/Hospital Discharge)

Additional Information

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

Data Source

- Triage Form/Trauma Flow Sheet
- Other ED Documentation
- ED Record
- Face Sheet
- Billing Sheet
- Discharge Summary

National Element

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TIME ARRIVED IN ED/ACUTE CARE*

TR 18.56

National & State Element **Data Format** [time]

NTDB/ImageTrend Description

The time the patient arrived at the ED/Hospital.

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)		HospitalArrivalTime
Multiple Entry Configuration	No	Accepts Null Value	Yes, common nul	ll values
Required in XSD	Yes	Min. Constraint: 1990	Max. Constraint	: 23:59

Element Values

- Relevant value for data element
- Total EMS Time: (elapsed time from EMS dispatch to hospital arrival) and Total Length of Hospital Stay (elapsed time from ED/Hospital Arrival to ED/Hospital Discharge).

Additional Information

- If the patient was brought to the ED, enter time patient arrived at ED. If patient
 was directly admitted to the hospital, enter time patient was admitted to the
 hospital.
- Collected as HH:MM military time.

Data Source

- Triage Form / Trauma Flow Sheet
- ED Record
- Fact Sheet
- Billing Sheet
- Discharge Summary

National Element

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TRAUMA TEAM ACTIVATED

TR 17.21

Data Format [radio]

ImageTrend Description

Level of Trauma Team activated.

Element Values

- Not Activated
- Level 1
- Level 2
- Level 3
- Level 4

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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DATE TRAUMA TEAM ACTIVATED

TR 17.31

Data Format [date]

ImageTrend Description

The date the trauma team was activated.

Element Values

• Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

Data Format [time]

ImageTrend Description

The time the trauma team was activated

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

Data Format [combo] single-choice

ImageTrend Description

Physician or staff member's name to which the patient is designated upon admission to the facility

Element Values

• Relevant value for data element

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

Data Format [combo] single-choice

ImageTrend Description

Name of the team member called when trauma team was activated

Element Values

• Relevant value for data element

Additional Information

• Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

ADMITTING SERVICE

TR 18.99

Data Format [combo] single-choice

ImageTrend Description

The department within the hospital that admitted the patient after being discharged from the ED.

Element Values

Cardiology Medicine
Cardiovascular Surgery Nephrology
Ears, Nose, Throat (ENT) Ophthalmology
Family Practice Orthopedics
Gastrointestinal (GI) Pediatric Surgery

General Surgery Plastic Surgery

Hem-Onc Surgery Subspecialty

Hospitalist Trauma

Infection Control
Internal Medicine

Additional Information

• Burn, OMFS, Hand, etc. fall under "Surgery Subspecialty"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

(Trauma Team Member) SERVICE TYPE

TR 17.13

Data Format [combo] single-choice

Vascular Surgery

ImageTrend Description

The specialty of the team member (physician) called for the Trauma Team Activation.

Element Values

Anesthesia	Internal Medicine	Pediatric Surgery
Crisis RN	Maxillofacial Surgery	Pediatric Hospitalist
CRNA	Nephrologist	Pediatric Intensivist
Dental	Nephrology	Physician Assistant
Emergency Medicine	Neurosurgery	Plastic Surgery
ENT	Nurse Practitioner	Pulmonology
Family Practice	Obstetrics & Gyn	Social Work
Hospitalist	Ophthalmology	Surgery Senior Resident
Infectious Diseases	Organ Retrieval	Surgery/Trauma

Orthopedic Surgery Urology

Additional Information

Intensive Care Unit

• Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

DATE (Trauma Team Member) CALLED

TR 17.10

Data Format [date]

ImageTrend Description

The date the team member (physician) was called when the trauma team was activated.

Element Values

• Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

Data Format [time]

ImageTrend Description

The time the team member (physician) was called when the trauma team was activated.

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

DATE (Trauma Team Member) ARRIVED

TR 17.15

Data Format [date]

ImageTrend Description

The date the team member (physician) arrived when the trauma team was activated.

Element Values

• Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

Data Format [time]

ImageTrend Description

The time the team member (physician) arrived when the trauma team was activated.

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Trauma Team) TIMELY ARRIVAL

TR 17.12

Data Format [combo] single-choice

ImageTrend Description

Was the (ED physician) respond to the call to see the patient in a timely manner?

Element Values

Yes No

Additional Information

- Only completed if Trauma Team is activated
- Criteria for timely arrival is defined by the facility

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

		XSD Element	
XSD Data Type	xs:date	Name:	TraumaSurgeonHighestActivationArrivalDate
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes	XSD ComplexType:	Date19902030
Minimum Value:	1990-01-01	Maximum Value:	2030-01-01

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 the data element *Highest Activation* is reported as *Element Value* "2. No."

Data Source

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

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: time	XSD Element Name:	TraumaSurgeonHighestActivationArrivalTime
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values	
Required in XSD	Yes	XSD Complex Type:	Time

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

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

National Element

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CONSULTING SERVICES

TR 17.29

Data Format [combo] single-choice

ImageTrend Description

The determination that consulting services were provided.

XSD Data Type	xs: integer	XSD Element/Domain (Simple	Type)	ConsultingService
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

Yes No

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

Data Format [combo] single-choice

ImageTrend Description

The specialty of any consults made during the patient's time at the hospital.

Element Values

Acute Rehabilitation Medicine Infectious Disease Pediatric Hospitalist Internal Medicine Pediatric Infectious Disease Anesthesia Bariatric Interventional Radiology Pediatric Intensivist Burn Kidney Transplant Pediatric Nephrology Cardiology Liver Pediatric Neurology **Pediatric Orthopedic** Cardiothoracic Surgery Neonatal **Chemical Dependency** Nephrology **Pediatric Pulmonary** Colo-Rectal **Neurointensive Care Pediatric Surgery** Critical Care Medicine Neurology Physical Med & Rehab **Critical Care Surgery** Neurosurgery Plastic Surgeon Dentistry Obstetric Psychiatry Dermatology Oculoplastic Psychology Electrophysiology Oncology Rheumatology Social Work Endocrinology Ophthalmology Ear Nose Throat Oral Maxilla Facial Surgery Trauma Surgeon Family Medicine Orthopedic Surgeon Urology

Gastroenterology Pain Vascular Surgery

General Surgery Pediatric Cardiology

Geriatric Pediatric Critical Care Medicine

Gynecology Pediatric Dentistry
Hand Pediatric Gastroenterology

Hematology Oncology Pediatric Hematology Oncology

Additional Information

• Only completed if Consulting Services is "Yes"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

Data Format [combo] single-choice

ImageTrend Description

Name of staff member that consulted on the patient.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Consulting Services is "Yes"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

DATE (Consulting Practitioner Requested)

TR 17.7

Data Format [date]

ImageTrend Description

The date the consultant was called.

Element Values

• Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Consulting Services is "Yes"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

Data Format [time]

ImageTrend Description

The time the consultant was called.

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Consulting Services is "Yes"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

DATE DISCHARGED FROM ED (ORDERS WRITTEN) * TR 17.41

National & State Element **Data Format** [date]

NTDB/ImageTrend Description

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

XSD Data Type	xs: date	XSD Element / Doma	ain (Complex Type)	EdDischargeOrdersWr	ittenDate
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null valu	ues	
Required in XSD	Yes				

Element Values

• Relevant value for data element

Additional Information

- Reported as MM/DD/YYYY.
- Used to auto-generate an additional calculated element: Total ED Time: (elapsed time from ED admit to ED discharge).
- If multiple orders were written, report the final disposition order date.
- The null value "Not Applicable" is used if the patient is directly admitted to the hospital.
- If ED Discharge Disposition is 5 Deceased/Expired, then ED Discharge Date is the date of death as indicated on the patient's death certificate.

Data Source

- Physician Order
- ED Record
- Triage/Trauma/Hospital Flow Sheet
- Nursing Notes/Flow Sheet
- Discharge Summary
- Billing Sheet
- Progress Notes

National Element

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TIME DISCHARGED FROM ED (ORDERS WRITTEN) * TR 17.42

National & State Element **Data Format** [time]

NTDB/ImageTrend Description

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

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)		EdDischargeOrdersWrittenTime
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Reported as HHMM military time.
- Used to auto-generate an additional calculated element: Total ED Time (elapsed time from ED admit to ED discharge)
- If multiple orders were written, report the final disposition order time.
- The null value "Not Applicable" is used if the patient is directly admitted to the hospital.
- If ED Discharge Disposition is 5 Decreased/Expired, then ED Discharge Time is the time of death as indicated on the patient's death certificate.

Data Source

- Physician Order
- ED Record
- Triage/Trauma/Hospital Flow Sheet
- Nursing Notes/Flow Sheet
- Discharge Summary
- Billing Sheet
- Progress Notes

National Element

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DATE DISCHARGED FROM ED (PHYSICAL EXIT)

TR 17.25

Data Format [date]

ImageTrend Description

The date the patient physically left the ED.

XSD Data Type	xs: date	XSD Element / Domain	EdDischargePhysicalDate	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		
Required in XSD	Yes	Min. Constraint: 1990		Max. Constraint: 2030

Element Values

- Relevant value for data element
- Total ED Time (elapsed time from ED admit to ED discharge)

Additional Information

- Collected as MM/DD/YYYY
- The null value "Not Applicable" is used if the patient is directly admitted to the hospital.

- ED Record
- Triage/Trauma/Hospital Flow Sheet
- Nursing Notes/Flow Sheet
- Discharge Summary
- Billing Sheet
- Progress Notes

TIME DISCHARGED FROM ED (PHYSICAL EXIT)

TR 17.26

Data Format [time]

ImageTrend Description

The time the patient physically left the ED.

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)	EdDischargePhysicalTime
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 1990	Max. Constraint: 23:59

Element Values

- Relevant value for data element
- Total ED Time (elapsed time from ED admit to ED discharge)

Additional Information

- Collected as HH:MM military time
- The null value "Not Applicable" is used if the patent is directly admitted to the hospital

- ED Record
- Triage/Trauma/Hospital Flow Sheet
- Nursing Notes/Flow Sheet
- Discharge Summary
- Billing Sheet
- Progress Notes

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

	xs:			
XSD Data Type	integer	XSD Element / Domain (Co	mplex Type)	EdDischargeDisposition
Multiple Entry Configuration	No	Accepts Null Value Yes, com		nmon null values
Required in XSD	Yes			

Element Values

- Floor bed (general admission, non-specialty unit bed)
- Observation Unit
- Telemetry / step-down unit (less acuity than ICU)
- Home with Services
- Deceased/Expired
- Other (jail, institutional care, mental health, etc.)
- Operating Room
- Intensive Care Unit (ICU)
- Home without services
- Left against medical advice.
- Transferred to another hospital.

Additional Information

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

Data Source

- Physician Order
- Discharge Summary
- Nursing Notes/Flow Sheet
- Case Management/Social Services Notes
- ED Record
- History & Physical

National Element

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Data Format [combo] single-choice

ImageTrend Description

The type of transportation used to transfer the patient. For 2020 per NTDS, patients who are transferred by private vehicle are included in the trauma registry.

Element Values

- Ground Ambulance
- Helicopter Ambulance
- Fixed Wing Ambulance
- Private/Public Vehicle/Walk-In
- Police
- Other

Additional Information

- Include in "Other" unspecified modes of transport.
- The null value "Not Applicable" is used to indicate that a patient had a single mode of transport and therefor this element does not apply to the patient.
- Check all that apply with a maximum of 5.

Data Source

• EMS Run Report

^{*}Patients transferred from one acute care hospital to another acute care hospital by private vehicle are to be included in the trauma registry per the 2021 NTDS Data Dictionary. *

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element/Domain (Complex Type)		PrimaryTraumaServiceType
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null	values
Required in XSD	Yes			

Element Values

Adult 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

- Triage Form / Trauma Flow Sheet
- History and Physical
- Discharge Summary

National Element

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State Element (Only for Non-Trauma Centers) Data Format [combo] single-choice

ImageTrend Description

Indicate whether or not there was a delay transferring a patient to a hospital.

Element Values

No Yes

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Communication Issue

TR 17.44. Communication

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Communication Issue - Detailed Reason for Transfer Delay.

Element Values

- Miscommunication between sending and receiving facility
- Nursing delay in calling for/arranging transportation
- Nursing delay in contacting EMS
- Physician response delay

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Delay Issue

TR 17.44. Delay

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Delay Issue - Detailed Reason for Transfer Delay.

Element Values

- Delay in diagnosis
- Delay in Emergency Department disposition decision
- Delay in trauma team activation

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - EMS Issue

TR 17.44. EMS

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

EMS Issue - Detailed Reason for Transfer Delay.

Element Values

- Air transport ETA greater than ground transport ETA
- Air transport not available due to weather
- ALS transportation delay
- No ALS available
- No hospital staff available to accompany BLS EMS personnel
- Out of county
- Shortage of available ground transportation

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Equipment Issue

TR 17.44. Equipment

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Equipment Issue - Detailed Reason for Transfer Delay.

Element Values

Equipment broken

Equipment missing/unavailable

Not Known

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Error Issue

TR 17.44. Error

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Error Issue - Detailed Reason for Transfer Delay.

Element Values

Error in judgement

Error in technique

Error in treatment

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Patient Issue

TR 17.44. Patient

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Family, Legal Guardian, or Patient Issue - Detailed Reason for Transfer Delay.

Element Values

Change in patient condition

Child Protective Services (CPS)

Family requested transfer

Patient requested transfer

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Receiving Facility Issue

TR 17.44. Receiving

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Receiving Facility Issue - Detailed Reason for Transfer Delay.

Element Values

Bed availability

Difficulty obtaining accepting facility/hospital

New ED staff

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Referring Facility Issue

TR 17.44. Referring

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Referring Facility Issue - Detailed Reason for Transfer Delay.

Element Values

Physician decision making

Priority of transfer

Radiology workup delay

Surgeon availability

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Transportation Issue

TR 17.44. Transportation

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Transportation Issue - Detailed Reason for Transfer Delay.

Element Values

Transportation issue

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY - Weather or Natural Issue

TR 17.44. Weather

State Element (Only for Non-Trauma Centers)

Data Format [combo] single-choice

ImageTrend Description

Weather or Natural Factors Issue - Detailed Reason for Transfer Delay.

Element Values

- Flooding
- Rain
- Snow
- Tornado

Additional Information

• Only completed if ED Disposition is "Transferred to another Hospital"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

State Element (Only for Non-Trauma Centers) Data Format [text]

ImageTrend Description

Reason for delay in transferring the patient.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Reason for Transfer Delay is "Other"

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

Initial Assessment Information

Data Format [date]

ImageTrend Description

The date of the first recorded vitals in the ED/Hospital setting.

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

Data Format [time]

ImageTrend Description

The time of the first recorded vitals in the ED/Hospital setting.

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

(Initial ED/Hospital) SYSTOLIC BLOOD PRESSURE* TR 18.11

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		SBP
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		5
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 300	

Element Values

• Relevant value for data element

Additional Information

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

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Physician Notes
- History & Physical

National Element

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(Initial ED/Hospital) DIASTOLIC BLOOD PRESSURE TR 18.13

Data Format [number]

ImageTrend Description

First recorded diastolic blood pressure in the ED/hospital within 30 minutes or less of ED/hospital arrival.

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		DBP
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	;
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 299	

Element Values

• Relevant value for data element

Additional Information

• Please note that the first recorded hospital vitals do not need to be from the same assessment

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Nurses' notes

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		PulseRate
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 300	

Element Values

• Relevant value for data element

Additional Information

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

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet

National Element

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(Initial ED/Hospital) TEMPERATURE*

TR 18.30

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: decimal	XSD Element / Domain	(Complex Type)	Temperature
Multiple Entry Configuration	No	Accepts Null Value	s Null Value Yes, common null values	
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 45.	0°C

Element Values

• Relevant value for data element

Additional Information

- Please note that the first recorded hospital vitals do not need to be from the same assessment
- Used to auto-generate an additional calculated element: Temperature in degrees Fahrenheit

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet

National Element

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(Initial ED/Hospital) TEMPERATURE ROUTE

TR 18.147

Data Format [number]

ImageTrend Description

Indicates the initial emergency department/hospital temperature measurement route.

Element Values

Axillary Rectal

Foley Temporal Artery

Oral Tympanic

Other

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Nurses' notes

(Initial ED/Hospital) SP02 (Oxygen Saturation) * TR 18.31

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		PulseOximetry
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 100	

Element Values

• Relevant value for data element

Additional Information

- If reported, complete additional element: "Initial ED/Hospital Supplemental Oxygen"
- Please note that the first recorded hospital vitals do not need to be from the same assessment

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Respiratory Therapy Notes/Flow Sheet

National Element

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(Initial ED/Hospital) RESPIRATORY RATE*

TR 18.7

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

	xs:			
XSD Data Type	integer	XSD Element / Domain (Cor	mplex Type)	RespiratoryRate
Multiple Entry Configuration	No	Accepts Null Value	Yes, commo	n null values
Required in XSD	Yes	Min. Constraint: 0	Max. Constraint: 1	20

Element Values

• Relevant value for data element

Additional Information

- If recorded, complete additional element: "Initial ED/Hospital Respiratory Assistance"
- Please note that the first recorded hospital vitals do not need to be from the same assessment

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Respiratory Therapy Notes/Flow Sheet

National Element

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(Initial ED/Hospital) SUPPLEMENTAL OXYGEN*

TR 18.109

National & State Element **Data Format** [combo] single-choice

ImageTrend 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.

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		Supplement	alOxygen
		Accepts Null			
Multiple Entry Configuration	No	Value	Yes, commo	n null values	
Required in XSD	Yes				

Element Values

- No Supplemental Oxygen
- Supplemental Oxygen

Additional Information

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

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet

National Element

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(Initial ED/hospital Revised Trauma Score) RTS (Total) TR 18.28

Data Format [number]

ImageTrend Description

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the ED or hospital setting.

Element Values

• Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Auto-generated if Manual GCS Total is entered

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/hospital Pediatric Trauma Score) PTS (Total) TR 21.10

Data Format [number]

ImageTrend Description

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the ED or hospital setting for a pediatric patient.

Element Values

• Relevant value for data element

Additional Information

• Use only if total score is available without component score

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (C	GcsEye	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 4	

Element Values

- No eye movement when assessed
- Opens eyes in response to painful stimulation
- Opens eyes in response to verbal stimulation
- Opens eyes spontaneously

Additional Information

- The null value "Not Known/Not Recorded" is reported if Initial Field GCS 40 Eye is documented.
- 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 listed. E.g. the chart indicates: "patient's pupils are PERRL," an Eye GCS of 4 may be recorded, IF there is no other contradicting documentation.
- Please note that first recorded hospital vitals do not need to be from the same assessment
- The null value "Not Known/Not Recorded" is reported if the patient's Initial ED/Hospital GCS - Eye was not measured within 30 minutes or less of ED/hospital arrival.

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

National Element

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National & State Element

Data Format [number]

NTDB/ImageTrend Description

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

	xs:			
XSD Data Type	integer	XSD Element / Domain (Com	plex Type)	GcsVerbal
Multiple Entry Configuration	No	Accepts Null Value Yes, common null val		values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 6	

Element Values

Pediatric (≤ 2 years):

- No vocal response
- Cries but is consolable, inappropriate interactions
- Inconsolable, agitated
- Smiles, oriented to sounds, follow objects, interacts
- Inconsistently consolable, moaning

Adult:

- No verbal response
- Incomprehensible sounds
- Inappropriate words

- Confused
- Oriented

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

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

National Element

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(Initial ED/Hospital) GCS - MOTOR*

TR 18.16.2 /TR 18.16.0 (ped)

National & State Element **Data Format** [number]

NTDB/Imagetrend Description

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

arrival.

	XS:			
XSD Data Type	integer	XSD Element / Domain (Con	ıplex Type)	GcsMotor
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null	values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 6	

Element Values

Pediatric (≤ 2 years):

No motor response Withdrawal from pain

Extension to pain Localizing pain

Flexion to pain Appropriate response to stimulation

Adult:

No motor response Withdrawal from pain
Extension to pain Localizing pain
Flexion to pain Obeys commands

Additional Information

- The null value "Not Known/Not Recorded" is reported if Initial ED/Hospital GCS 40 Motor is reported.
- 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 function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation
- 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 the patient's Initial ED/Hospital GCS Motor was not measured within 30 minutes or less of ED/Hospital arrival.

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

National Element

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(Initial ED/Hospital) MANUAL GCS TOTAL*

TR 18.19

National & State Element **Data Format** [number]

NTBD/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domai	TotalGcs	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 15	

Element Values

• Relevant value for data element

Additional Information

- If a patient does not have a numeric GCS score recorded, but with documentation related to their level of consciousness such as "AAOx3", "awake alert and oriented", or "patient with normal mental status", interpret this as GCS of 15, IF there is no other contradicting documentation
- 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 Initial ED/Hospital GCS –
 Eye, Initial ED/Hospital GCS Motor, Initial ED/Hospital GCS Verbal was not
 measured within 30 minutes or less of ED/Hospital arrival.

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Nursing notes
- Physician Notes

National Element

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*Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient
from admission to discharge.

(Initial ED/Hospital) GCS ASSESSMENT QUALIFIERS (UP TO 3)* TR 18.21

National & State Element

Data Format [combo] multiple-choice

NTDB Description

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

ImageTrend Description

First recorded Glasgow Coma Score (total) in the ED/hospital within 30 minutes or less of ED/hospital arrival.

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)	GcsQualifier
Multiple Entry Configuration	Yes, max 3	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

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

Additional Information

- Identifies treatments given to the patient that may affect the first assessment of GCS.
 This element does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.)
- 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 should be selected
- 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 or less of ED/Hospital arrival.

• Report all that apply

Data Source

- Triage/Trauma/Hospital Flow SheetNurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

National Element

Page 50 in the 2024 National Trauma Data Standard *Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.

National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type) Gcs40Eye		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common nul	l values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint	: 4

Element Values

Adult:

- None
- To Pressure
- To Sound
- Spontaneous
- Not Testable

Pediatric <5 years:

- None
- To Pain
- To Sound
- Spontaneous
- Not Testable

Additional Information

- 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 40 scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient's eyes open spontaneously," an Eye GCS 40 of 4 may be recorded, IF there is no other contradicting documentation.
- Report Field Value "5. Not Testable" if unable to assess (e.g. swelling to eye(s)).
- The null value "Not Known/Not Recorded" is reported if Initial Field GCS Eye is reported.
- The null value "Not Known/Not Recorded" is reported if the patient's Initial ED/Hospital GCS 40- Eye was not measured within 30 minutes or less of ED/hospital arrival.

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

National Element

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National & State Element **Data Format** [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (C	Gcs40Verbal	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 4	

Element Values

Adult:

- None
- Sounds
- Words
- Confused
- Oriented
- Not Testable

Pediatric <5 years:

- None
- Cries
- Vocal Sound
- Words
- Talks Normally
- Not Testable

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 scale, the appropriate numeric score may be listed. E.g. the chart indicates:
 "patient correctly gives name, place and date" a Verbal GCS of 5 may be recorded, IF
 there is no other contradicting documentation.
- Report Field Value "6. Not Testable" if unable to assess (e.g. patient is intubated).
- The null value "Not Known/Not Recorded" is reported if Initial Field 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

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

National Element

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National & State Element

Data Format [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type) Gcs40M		Gcs40Motor
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 4	

Element Values

Adult:

- None
- Extension
- Abnormal Flexion
- Normal Flexion
- Localizing
- Obeys Commands
- Not Testable

Pediatric <5 years:

- None
- Extension to Pain
- Flexion to Pain
- Localizing Pain
- Talks Normally
- Obeys Commands
- Not Testable

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 scale, the appropriate numeric score may be listed. 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 recorded, IF there is no other contradicting documentation.
- Report Field Value "7. Not Testable" if unable to assess (e.g. neuromuscular blockade).
- The null value "Not Known/Not Recorded" is reported if Initial Field 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

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

National Element

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(Initial ED/Hospital) RESPIRATORY ASSISTANCE* TR 18.10

National & State Element **Data Format** [combo] single-choice

NTDB Description

Determination of respiratory assistance associated with the Initial ED/hospital respiratory rate within 30 minutes of ED/hospital arrival.

XSD Data Type	xs: integer	XSD Element / Domain (Simple Type)		Respiratory Assis	tance
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes				

Element Values

- Unassisted Respiratory Rate
- Assisted Respiratory Rate

Additional Information

- Only completed if a value is provided for "Initial ED/Hospital Respiratory Rate"
- Respiratory assistance is defined as mechanical and/or external support of respiration
- Please note that the first recorded hospital vitals do not need to be from the same assessment
- The null value "Not Applicable" is used if "Initial ED/Hospital Respiratory Rate" is "Not Known/Not Recorded"

Data Source

- Triage/Trauma/Hospital Flow Sheet
- Nurses Notes/Flow Sheet
- Respiratory Therapy Notes/Flow Sheet

National Element

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(Initial ED/Hospital) AIRWAY MANAGEMENT

TR 14.36

Data Format [combo] single-choice

ImageTrend Description

Indication as to whether a device or procedure was performed to prevent or correct an obstructed respiratory passage while under the care of the ED/Hospital.

Element Values

1 Bag & Mask Oral Airway

BiPAP Oral ETT

Combitude Trach

Cricoid Not Performed

King Airway Supplemental Oxygen

LMA Simple Mask

Nasal Cannula

Non-rebreather mask

Nasal ETT

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED / Hospital) CPR PERFORMED

TR 18.71

Data Format [combo] single-choice

ImageTrend Description

 $\label{localization} \mbox{Indication as to if CPR management was conducted while under the care of the $ED/Hospital.}$

Element Values

CPR in Progress, continued Not Performed Performed

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

UNITS OF BLOOD

TR 22.13

Data Format [number]

ImageTrend Description

Total units of blood given.

Element Values

• Relevant value for data element

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

Data Format [date]

ImageTrend Description

Date and time the blood was ordered for the patient in the ED/Hospital

Element Values

• Collected as MM/DD/YYYY

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

Data Format [date]

ImageTrend Description

Date and time the blood was crossmatched for the patient in the ED/Hospital.

Element Values

• Collected as MM/DD/YYYY

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

BLOOD ADMINISTERED DATE

TR 22.16

Data Format [date]

ImageTrend Description

Date and time the blood was administered to the patient in the ED/Hospital.

Element Values

• Collected as MM/DD/YYYY

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) CT HEAD (Results)

TR 18.72

Data Format [combo] single-choice

ImageTrend Description

Indication as to if the procedure was performed while under the care of the ED/Hospital.

Element Values

Positive Negative Not Performed

Additional Information

- "Positive" is defined as "any traumatic injury"
- "Negative" is defined as "no traumatic injury"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) CT ABD/PELVIS (Results)

TR 18.73

Data Format [combo] single-choice

ImageTrend Description

Indication as to if the procedure was performed while under the care of the ED/Hospital.

Element Values

Positive Negative Not Performed

Additional Information

- "Positive" is defined as "any traumatic injury"
- "Negative" is defined as "no traumatic injury"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) CT CHEST (Results)

TR 18.74

Data Format [combo] single-choice

ImageTrend Description

Indication as to if the procedure was performed while under the care of the ED/Hospital.

Element Values

Positive Negative Not Performed

Additional Information

- "Positive" is defined as "any traumatic injury"
- "Negative" is defined as "no traumatic injury"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) CT CERVICAL (Results)

TR 18.105

Data Format [combo] single-choice

ImageTrend Description

Indication as to if the procedure was performed while under the care of the ED/Hospital.

Element Values

Positive Negative Not Performed

Additional Information

- "Positive" is defined as "any traumatic injury"
- "Negative" is defined as "no traumatic injury"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) DATE SENT TO CT

TR 18.101

Data Format [date]

ImageTrend Description

The date the patient had a CT performed while under the care of the ED/Hospital.

Element Values

• Collected as MM/DD/YYYY

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) TIME SENT TO CT

TR 18.111

Data Format [time]

ImageTrend Description

The time the patient had a CT performed while under the care of the ED/Hospital.

Element Values

• Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) ABDOMINAL ULTRASOUND DATE TR 18.102

Data Format [date]

ImageTrend Description

The date and time abdominal ultrasound was performed on the patient while under the care of the ED/Hospital.

Element Values

• Collected as MM/DD/YYYY

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) ABDOMINAL ULTRASOUND TIME TR18.112

Data Format [time]

ImageTrend Description

The time the abdominal ultrasound was performed on the patient while under the care of the ED/Hospital.

Element Values

- Collected as HHMM
- HHMM should be collected in military time

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) ARTERIOGRAM (Results)

TR 18.76

Data Format [combo] single-choice

ImageTrend Description

Indication as to if the procedure was performed while under the care of the ED/Hospital.

Element Values

Positive

Negative

Additional Information

- "Positive" is defined as "any traumatic injury"
- "Negative" is defined as "no traumatic injury"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) AORTOGRAM (Results)

TR 18.77

Data Format [combo] single-choice

ImageTrend Description

Indication as to if the procedure was performed while under the care of the ED/Hospital.

Element Values

Positive

Negative

Additional Information

- "Positive" is defined as "any traumatic injury"
- "Negative" is defined as "no traumatic injury"

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

ALCOHOL SCREEN*

TR 18.46

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	AlcoholScreen
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

Yes No

Additional Information

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

Data Source

- Lab results (facility specific; inter-facility data not valid)
- Transferring Facility Records

National Element

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ALCOHOL SCREEN RESULTS (Blood Alcohol Content)*

TR 18.46

National & State Element **Data Format** [combo] single-choice

NTDB Description

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

XSD Data Type	xs: decimal	XSD Element / Domain (Complex Type) AlcoholScreen	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

• Relevant value for data element

Additional Information

- Collect 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

- Lab results (facility specific; inter-facility data not valid)
- Transferring Facility Records

National Element

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(Initial ED / Hospital) BASE DEFICIT

TR 18.93

Data Format [number]

ImageTrend Description

The first recorded base deficit (the arterial blood gas component showing the degree of acid/base imbalance), measured in mEq/L.

Element Values

• Relevant value for data element

Data Source

• Lab results (facility specific; inter-facility data not valid)

National & State Element **Data Format** [combo] multiple-choice

NTDB Description

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

XSD Data Type	xs: integer	XSD Element / Domain (S	DrugScreen	
Multiple Entry Configuration	Yes, max 2	Accepts Null Value Yes, common null value		null values
Required in XSD	Yes			

Element Values

AMP (Amphetamine) OXY (Oxycodone)
BAR (Barbiturate) PCP (Phencyclidine)

BZO (Benzodiazepines) TCA (Tricyclic Antidepressant)

COC (Cocaine) THC (Cannabinoid)

mAMP (Methamphetamine) Other
MDMA (Ecstasy) None
MTD (Methadone) Not Tested

OPI (Opioid)

Additional Information

- Record positive drug screen results within 24 hours after first hospital encounter, at either your facility or the transferring facility
- "None" is reported 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

- Lab results (facility specific; inter-facility data not valid)
- Transferring Facility Records

National Element

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Diagnosis Information

National & State Element **Data Format** [combo] multiple-choice

NTDB Description

Diagnoses related to all identified injuries.

ImageTrend Description

Diagnoses related to all identified injuries. Injury diagnoses as defined by (ICD-10-CM) codes.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	DiagnosisIcd10	
Multiple Entry Configuration	Yes, max 100	Accepte Night Volume Von communi		
Required in XSD	Yes	Accepts Null Value Yes, commor	i null values	

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, comorbidities, etc.) may also be included in this element.

Data Source

- Autopsy/Medical Examiner Report
- Operative Reports
- Radiology Reports
- Physician's Notes
- Trauma Flow Sheet
- History & Physical
- Nursing Notes/Flow Sheet
- Progress Notes
- Discharge Summary

National Element

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AIS CODE* TR 200.14.1

Data Format [combo] multiple-choice

NTDB Description

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

ImageTrend Description

ICD 10 code view.

XSD Data Type	xs: integer	XSD Element / Doma	AISCODE	
Multiple Entry Configuration	Yes, max 50	Accepts Null Value		
Required in XSD	Yes			

Element Values

• The code is the 8-digit AIS code.

Data Source

• AIS Coding Manual

National Element

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TR 21.25

Data Format [text]

NTDB Description

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

ImageTrend Location

This information may be found under the ImageTrend Diagnosis tab.

XSD Data Type	xs: integer	XSD Element / Domain (0	AisVersion	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

- AIS 05, Update 08
- AIS 2015

National Element

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ISS (Body) REGION

Data Format [number]

Description

The Injury Severity Score (ISS) body region codes that reflects the patient's injuries.

ImageTrend Location

This information may be found under the ImageTrend Diagnosis tab.

XSD Data Type	xs: integer	XSD Element / Domain (Simple Type) IssReg		
Multiple Entry Configuration	Yes, max 50	Accepts Null Value	Yes, common null values	
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 6	

Element Values

Head or Neck Abdominal or pelvic contents
Face Extremities or pelvic girdle

Chest External

Additional Information

- Auto-calculated once AIS code is typed in
- This variable is considered optional and is not required as part of the State dataset
- Head or neck injuries include injury to the brain or cervical spine, skull or cervical spine fractures
- Facial injuries include those involving mouth, ears, nose and facial bones
- Chest injuries include all lesions to internal organs. Chest injuries also include those to the diaphragm, rib cage, and thoracic spine
- Abdominal or pelvic contents injuries include all lesions to internal organs.
 Lumbar spine lesions are included in the abdominal or pelvic region
- Injuries to the extremities or to the pelvic or shoulder girdle include sprains, fractures, dislocations, and amputations, except for the spinal column, skull, and rib cage
- External injuries include lacerations, contusions, abrasions, and burns, independent of their location on the body surface

Data Source

- Hospital Discharge Summary
- History and Physical
- Physician's Documentation / Nurses' Notes
- Other Hospital Documentation

National Element

National Element IS_03 from the 2024 National Trauma Data Standard

AIS BASED INJURY SEVERITY SCORES BY DIAGNOSIS*

Data Format [number]

Description

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

ImageTrend Location

This information may be found in a table under the ImageTrend Diagnosis tab.

XSD Data Type	xs: integer	XSD Element / Domain (Simple Type) AisSeverity		
Multiple Entry Configuration	Yes, max 50	Accepts Null Value Yes, common null values		lues
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 9	

Element Values

Minor Injury Severe Injury

Moderate Injury Critical Injury

Serious Injury6 Maximum Injury, Virtually Insurvivable

Not Possible to Assign

Additional Information

• The element value (9) "Not Possible to Assign" would be chosen if it is not possible to assign a severity to an injury

Data Source

- Hospital Discharge Summary
- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

MANUAL (Locally Calculated ISS)*

Data Format [number]

Description

The Injury Severity Score (ISS) that reflects the patient's injuries.

ImageTrend Location

This information may be found under the ImageTrend Diagnosis tab.

XSD Data Type	xs: integer	XSD Element / Domain (Simple Type)			IssLocal
Multiple Entry Configuration	No	Accepts Null Value Yes, commo		Yes, commor	n null values
Required in XSD	Yes	Min. Constraint: 1	straint: 1 Max. Constraint: 75		

Element Values

- Auto-calculated once AIS scores are typed in
- Relevant ISS value for the constellation of injuries

Additional Information

 This variable is considered optional and is not required as part of the State dataset

Data Source

- Hospital Discharge Summary
- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

Comorbidity Information

ADVANCED DIRECTIVE LIMITING CARE

(Pre-Existing Conditions – Advance Directive Limiting Care)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes 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
- Report Element Value "2. No" for patients with Advanced Directives that did not limit life-sustaining treatments during this patient care event.
- The written request was signed/dated by the patient and/or his/her 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)

Data Source

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

National Element

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ALCOHOL USE DISORDER (Pre-Existing Conditions - Alcohol Use Disorder)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes No

Additional Information

- Present prior to injury
 - Consistent with American Psychiatric Association (APA) DSM 5, 2013.
 - 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

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

National Element

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ANTICOAGULANT THERAPY

(Pre-Existing Conditions -Anticoagulant Therapy)

National & State Optional Element **Data Format** [combo] single-choice

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

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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

(Pre-Existing Conditions – ADD/ADHD)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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

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

National Element

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BIPOLAR I/II DISORDER

(Pre-Existing Conditions – Bipolar Disorder)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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.

Data Source

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

National Element

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BLEEDING DISORDER (Pre-Existing Conditions – Bleeding Disorder)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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CEREBRAL VASCULAR ACCIDENT (CVA)

(Pre-Existing Conditions – Cerebral Vascular Accident)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes 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

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

National Element

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CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

(Pre-Existing Conditions – Chronic Obstructive Pulmonary Disease)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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. and result in any one or more of the following:

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

EXCLUDE:

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

Element Values

Yes No

Additional Information

- Present prior to injury.
- A diagnosis of COPD must be documented in the patient's medical record.
- Consistent with World Health Organization (WHO), 2019.
- 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

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

National Element

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CHRONIC RENAL FAILURE

(Pre-Existing Conditions – Chronic Renal Failure)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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

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

National Element

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National & State Optional Element **Data Format** [combo] single-choice

NTDB 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.

EXCLUDE:

• Patients who no longer have cirrhosis due to a successful liver transplant.

Element Values

Yes No

Additional Information

- Present prior to injury.
- Documentation in the medical record may include CHILD or MELD scores that support evidence of cirrhosis.
- A diagnosis of Cirrhosis, or documentation of Cirrhosis by diagnostic imaging studies or a laparotomy/laparoscopy, must be 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

- History & Physical
- Physician's Notes/ Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet, Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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CONGENITAL ANOMALIES

(Pre-Existing Conditions – Congenital Anomalies)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

XSD Data Type	SD Data Type xs: integer XSD Element / Domain (S		XSD Element / Domain (Simple Type)	ComorbidCondition
Multiple Entry				Yes, common null
Configuration	No	Accepts Nu	ll Value	values
Required in XSD		Yes		

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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CONGESTIVE HEART FAILURE (CHF)

(Pre-Existing Conditions – Congestive Heart Failure)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes 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:
 - o Abnormal limitation in exercise tolerance due to dyspnea or fatigue
 - o Orthopnea (dyspnea or lying supine)
 - o Paroxysmal nocturnal dyspnea (awakening from sleep with dyspnea)
 - o Increased jugular venous pressure
 - o Pulmonary rales on physical examination
 - o Cardiomegaly
 - o Pulmonary vascular engorgement
- The null value "Not Known/Not Recorded" is only reported if no past medical history is available.

Data Source

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

National Element

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CURRENT SMOKER

(Pre-Existing Conditions – Current Smoker)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

EXCLUDE:

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

Element Values

Yes 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

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

National Element

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CURRENTLY RECEIVING CHEMOTHERAPY FOR CANCER

(Pre-Existing Conditions – Currently Receiving Chemotherapy Cancer)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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

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

National Element

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National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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

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

National Element

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DIABETES MELLITUS

(Pre-Existing Conditions - Dementia)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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

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

National Element

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DISSEMINATED CANCER (Pre-Existing Conditions -Disseminated Cancer)

National & State Optional Element

Data Format [combo] single-choice

NTDB 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

Yes No

Additional Information

- Present prior to injury.
- Another term describing disseminated cancer is "metastatic cancer".
- Common sites of metastases include major organs, (e.g., brain, lung, liver, meninges, abdomen, peritoneum, pleura, bone).
- 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

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

National Element

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FUNCTIONALLY DEPENDENT HEALTH STATUS

(Pre-Existing Conditions – Functionally-Dependent Health Status)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes 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, was 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

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

National Element

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HYPERTENSION

(Pre-Existing Conditions - Hypertension)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

History of persistent elevated blood pressure requiring antihypertensive medication.

Element Values

Yes No

Additional Information

- Present prior to injury.
- A diagnosis of Hypertension 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.
- Report Element Value '1. Yes' for patients who were non-compliant with their prescribed antihypertensive medication.

Data Source

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

National Element

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MAJOR DEPRESSIVE DISORDER

(Pre-Existing Conditions – Major Depressive Disorder)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

A major depressive disorder diagnosis documented in the medical record.

XSD Data Type	xs: integer	XSD Element / Domain (Simple Type)		ComorbidCondition
Multiple Entry Configuration	No	Accepts Null Value Yes, common n		ull values
Required in XSD	Yes			

Element Values

Yes 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.

Data Source

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

National Element

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MYOCARDIAL INFARCTION (MI)

(Pre-Existing Conditions - Myocardial Infarction)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes No

Additional Information

- Present prior to injury.
- A diagnosis of MI 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

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

National Element

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OTHER MENTAL/PERSONALITY DISORDERS

(Pre-Existing Conditions – Other Mental Personality Disorders)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes 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.

Data Source

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

National Element

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PERIPHERAL ARTERIAL DISEASE (PAD)

(Pre-Existing Conditions – Peripheral Arterial Disease)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes No

Additional Information

- Present prior to injury.
- Consistent with Centers for Disease Control, 2014 Fact Sheet.
- A diagnosis of PAD 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

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

National Element

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POST-TRAUMATIC STRESS DISORDER

(Pre-Existing Conditions – Post-Traumatic Stress Disorder)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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.

Data Source

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

National Element

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PREGNANCY

(Pre-Existing Conditions - Pregnancy)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

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

Element Values

Yes 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

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

National Element

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(Pre-Existing Conditions - Prematurity)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

Babies born before 37 weeks of pregnancy are completed.

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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<u>SCHIZOAFFECTIVE DISORDER</u> (Pre-Existing Conditions-Schizoaffective Disorder)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

A schizoaffective disorder diagnosis documented in the medical record.

Element Values

Yes 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.

Data Source

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

National Element

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(Pre-ExistingConditions - Schizophrenia)

National & State Optional Element **Data Format** [combo] single-choice

NTDB Description

A schizophrenia diagnosis documented in the medical record.

Element Values

Yes 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.

Data Source

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

National Element

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National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes 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

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

National Element

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SUBSTANCE USE DISORDER

(Pre-Existing Conditions – Substance Use Disorder)

National & State Optional Element **Data Format** [combo] single-choice

NTDB 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

Yes No

Additional Information

- Present prior to injury.
- Consistent with the American Psychiatric Association (APA) DSM 5, 2013.
- 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

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

National Element

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CO-MORBID CONDITION NOTES

TR 21.23

Data Format [text]

ImageTrend Description

Additional information about the pre-existing medical conditions.

Element Values

• Relevant value for data element

- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

Procedures Information

National & State Element **Data Format** [combo] multiple-choice

NTDB/ImageTrend 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.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	HospitalProcedureIcd10
Multiple Entry Configuration	Yes, max 200	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

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

Additional Information

- The null value "Not Applicable" is used if the patient did not have procedures.
- Include only procedures performed at your institution.
- Capture all procedures performed in your operating room.
- Capture all procedures performed 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, capture only the first event. If there is no asterisk, capture each event even if there is more than one.
- Plain radiography of whole body, Plain radiography of whole skeleton, and Plain radiography of infant whole body to the Diagnostic and Therapeutic Imaging.
- Note that the hospital may capture additional procedures.

Diagnostic & Therapeutic Imaging	Musculoskeletal
Computerized tomographic Head *	Soft tissue / bony debridements *
Computerized tomographic Chest *	Closed reduction of fractures
Computerized tomographic Abdomen *	Skeletal and halo traction
Computerized tomographic Pelvis *	Fasciotomy
Diagnostic ultrasound (includes FAST) *	

Doppler ultrasound of extremities* Transfusion		
	Transfusion of red cells * (only capture first 24 hours	
Angiography	after hospital arrival)	
	Transfusion of platelets * (only capture first 24 hours	
Angioembolization	after hospital arrival)	
	Transfusion of plasma * (only capture first 24 hours	
	after hospital arrival)	
IVC filter		
	Respiratory	
Cardiovascular	Insertion of endotracheal tube * (exclude intubations performed in the OR)	
Open cardiac massage	Continuous mechanical ventilation *	
CPR	Chest tube *	
	Bronchoscopy *	
CNS	Tracheostomy	
Insertion of ICP monitor *		
Ventriculostomy *	Gastrointestinal	
Cerebral oxygen monitoring *	Endoscopy (includes gastroscopy, sigmoidoscopy, colonoscopy)	
Genitourinary		
Ureteric catheterization (i.e. Ureteric Gastrostomy / jejunostomy (percutaneous		
stent)	endoscopic)	
Suprapubic cystostomy	Percutaneous (endoscopic) gastrojejunoscopy	

Data Source

- Operative Reports
- Nursing Notes/Flow Sheet
- Procedure Notes
- Radiology Reports
- Trauma Flow Sheet
- Discharge Summary
- ED Record

National Element

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Data Format [combo] single-choice

Description

Indicates if the patient had a procedure performed upon them while in your facility.

Element Values

No Yes

- Operative Reports
- Triage Form / Trauma Flow Sheet
- Nurses' Documentation
- Physician Documentation
- Anesthesia Record
- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Discharge Summary

(Procedure Performed) LOCATION

TR 200.11

Data Format [combo] single-choice

ImageTrend Description

The hospital location where the procedure was performed.

Element Values

Minor Surgery Unit Catherization Lab

Nuclear Medicine ED

Observation Floor

Other GI Lab

Outpatient Clinic ICU

Recovery OR

Rehabilitation Other

Scene Radiology

Special Procedure Unit Readmit OR (planned OR)

Step-Down Tele

Transport from Scene

- Operative Reports
- Triage Form / Trauma Flow Sheet
- Nurses' Documentation
- Physician Documentation
- Anesthesia Record
- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Discharge Summary

(Hospital Procedure) DATE PERFORMED*

TR 200.8

National & State Element **Data Format** [date]

NTDB/ImageTrend Description

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

XSD Data Type	xs: date	XSD Element / Domain (Complex Type)	HospitalProcedureStartDate
Multiple Entry Configuration	Yes	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 1990	Max. Constraint: 2030

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

Data Source

- Operative Reports
- Procedure Notes
- Trauma Flow Sheet
- ED Record
- Nursing Notes/Flow Sheet
- Radiology Reports
- Discharge Summary

National Element

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(Hospital Procedure Start) TIME PERFORMED*

TR 200.9

National & State Element **Data Format** [time]

NTDB/ImageTrend Description

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

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)	HospitalProcedureStartTime
Multiple Entry Configuration	Yes	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constraint: 23:59

Element Values

• Relevant value for data element

Additional Information

- Reported as HH:MM military time.
- Procedure start time is defined as the time the incision was made (or the procedure started).
- If distinct procedures with the same procedure code are performed, their start times must be different

Data Source

- Operative Reports
- Anesthesia Reports
- Procedure Notes
- Trauma Flow Sheet
- ED Record
- Nursing Notes/Flow Sheet
- Radiology Reports
- Discharge Summary

National Element

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(Physician Performing the Procedure) STAFF

TR 200.10

Data Format [combo] single-choice

ImageTrend Description

Physician performing the procedure.

Element Values

• Relevant value for data element

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

SERVICE TYPE (of the Physician)

TR 200.6

Data Format [combo] single-choice

ImageTrend Description

Service type of the physician.

Element Values

Cardiology Ophthalmology

Critical Care Medicine Oral Maxillo Facial Surgery

Ear Nose Throat Orthopedic Surgery

Emergency Medicine Pediatric Orthopedic

Gastroenterology Pediatric Surgery

General Surgery Plastic Surgery

Gynecology Radiology

Hand Surgery Thoracic Surgery

Medicine Trauma Surgery

Neurosurgery Urology

Obstetrics Vascular Surgery

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

(Procedure) COMMENTS

TR 200.7

Data Format [text]

ImageTrend Description

Additional information about the procedure

Element Values

• Relevant value for data element

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

Data Format [combo] single-choice

ImageTrend Description

A list of the resources utilized during the treatment and care of the patient.

Element Values

Adult Protective Service Peripheral Parenteral Nutrition (PPN)

Bi-Pap Physical Therapy

Case Management PICC line

Cerebral Brain Flow Studies PRISMA (CVVHD)

Child Protective Service Respiratory Therapy

CRRT RN accompanied transfer

Dialysis Specialized Bed
Epidural Catheter Speech Therapy
Exceeds LOS TLSO Brace

Factor VIIa (Novoseven) Total Parenteral Nutrition (TPN)

High dose methylprednisolone Traction

Hypertonic Saline Transfusion of FFP
Level-1 Blood/Fluid Warmer Transfusion of Platelets
LiCox Monitor Transfusion of PRBC

Massive Blood Transfusion Tube Feeding

Miama J Collar Uncrossmatched Blood
MRI Vaccine Post-Splenectomy

None Venous Doppler
Nutritionist Wound Care RN
Occupational Therapy Wound Vacuum

Data Source

Pentobarbital Coma

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

Complications/Performance Improvement Information

ACUTE KIDNEY INJURY (AKI)* (Hospital Events - Acute Kidney Injury)

National & State Element

Data Format [combo] single-choice

NTDB Description

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

KDIGO (Stage 3) Table:

(SCr) 3 times baseline

or

Increase in SCr to \geq 4.0 mg/dl (\geq 353.6 μ mol/l)

or

Initiation of renal replacement therapy OR In patient < 18 years decrease in eGFR to <35 ml/min per 1.73m2

or

Urine output <0.3 ml/kg/h for \geq 24 hours

or

Anuria for ≥ 12 hours

EXCLUDE:

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

ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

Yes No

Additional Information

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

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

National Element

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ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS)*

(Hospital Events - Acute Respiratory Distress Syndrome)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend 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 collage, or nodules.

Origin of edema: Respiratory failure not fully explained by cardiac failure of fluid overload. Need objective assessment (e.g., echocardiography) to exclude hydrostatic edema if no risk factor present.

Oxygenation:

- Mild: 200 mm Hg < PaO2/FIO2 < 300 mm Hg with PEEP or CPAP >= 5 cm H2O
- Moderate: 100 mm Hg < PaO2/FIO2 < 200 mm Hg with PEEP >5 cm H2O
- Severe: PaO2/FIO2 < 100 mm Hg with PEEP or CPAP >5 cm H2O

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	Hospital Complication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		values

Element Values

Yes 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

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

National Element

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ALCOHOL WITHDRAWAL SYNDROME*

(Hospital Events - Alcohol Withdrawal Syndrome)

National & State Element **Data Format** [combo] single-choice

NTDB 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).

ImageTrend Description

Characterized by tremor, sweating, anxiety, agitation, depression, nausea, and malaise.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		HospitalCo	omplication
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		alues	
Required in XSD	Yes				

Element Values

Yes 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 2019 World Health Organization (WHO) definition of Alcohol Withdrawal Syndrome.

Data Source Hierarchy Guide

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

National Element

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CARDIAC ARREST WITH CPR* (Hospital Events – Cardiac Arrest CPR)

National & State Element **Data Format** [combo] single-choice

NTDB 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.

ImageTrend Description

Cardiac arrest is the sudden cessation of cardiac activity after hospital arrival.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null v	values .
Required in XSD	Yes			

Element Values

Yes 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

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

National Element

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CATHETER-ASSOCIATED URINARY TRACT INFECTION (CAUTI)*

(Hospital Events - Cath-Associated UTI)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

UPDATED TO: 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:

- Patient had an indwelling urinary catheter in place for the entire day on the date of event and such catheter had been in place for >2 calendar days, on that date (day of device placement = Day 1) 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 with no other recognized cause
 - Costovertebral angle pain or tenderness
 - Urinary urgency
 - Urinary frequency
 - Dysuria
- 3. Patient has a urine culture with no more than two species of organisms, at least one of which is a bacterium $> 10^5$ 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 with no other recognized cause
 - bradycardia with no other recognized cause
 - lethargy with no other recognized cause
 - vomiting with no other recognized cause
 - suprapubic tenderness with no other recognized cause
- 3. Patient has a urine culture with no more than two species of organisms, at least one of which is bacteria of $\geq 10^5$ CFU/ml.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

Yes 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

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

National Element

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CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTION (CLABSI)*

(Hospital Events - Central Line Associated

BSI)

National & State Element **Data Format** [combo] single-choice

NTDB 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

OR

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

January 2016 CDC Criterion LCBI 2:

Patient has at least one of the following signs or symptoms: fever (>38°C), chills, or hypotension

AND

AND

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

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 seven-day time period which includes the collection date of the positive blood, the three calendar days before and the three 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° C), hypothermia (<36°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.

ImageTrend 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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value Yes, commo		on null values
Required in XSD	Yes			

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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DEEP SURGICAL SITE INFECTION*

Hospital Events Deep Surgical Site Infection

National & State Element **Data Format** [combo] single-choice

NTDB 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:

- purulent drainage from the deep incision.
- 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

patient has at least one of the following signs or symptoms: fever (>38°C); localized pain or tenderness. A culture or non-culture-based test that has a negative finding does not meet this criterion.

• an abscess or other evidence of infection involving the deep incision that is detected on gross anatomical or histopathologic exam, or imaging test

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)

ImageTrend Description

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:

- purulent drainage from the deep incision.
- 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

patient has at least one of the following signs or symptoms: fever (>38°C); localized pain or tenderness. A culture or non-culture-based test that has a negative finding does not meet this criterion.

• an abscess or other evidence of infection involving the deep incision that is detected on gross anatomical or histopathologic exam, or imaging test

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		or site incisions			
CBGC	Coronary artery bypass graft with ches	st incision only				
CRAN	Craniotomy					
FUSN	Spinal fusion					
FX	Open reduction of fracture					
HER	<u>Herniorrhaphy</u>					
HPRO	Hip prosthesis					
KPRO	Knee prosthesis					
PACE	Pacemaker surgery					
PVBY	Peripheral vascular bypass surgery					
VSHN	Ventricular shunt					

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HospitalCo		mplication	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes				

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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DEEP VEIN THROMBOSIS (DVT)* (Hospital Events- Deep Vein

Thrombosis)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

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Yes No

Additional Information

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

Data Source

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

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB 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.

ImageTrend 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.

EXCLUDE:

• Patient's whose delirium is due to alcohol withdrawal.

Element Values

Yes No

Additional Information

• Onset of symptoms began after arrival to your ED/hospital

Data Source

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

National Element

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MYOCARDIAL INFARCTION (MI)*

(Hospital Events – Myocardial Infarction)

National & State Element

Data Format [combo] single-choice

NTDB/ImageTrend 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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HospitalComplication		HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	ull Value Yes, common null values	
Required in XSD	Yes			

Element Values

Yes No

Additional Information

• Onset of symptoms began after arrival to your ED/hospital

Data Source

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

National Element

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ORGAN/SPACE SURGICAL SITE INFECTION*

(Hospital Events – Organ Space Surgical Site Infection)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend 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 an aseptically-obtained 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

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	LUNG	Other infections of the respiratory tract
BRST	Breast abscess mastitis	MED	Mediastinitis
CARD	Myocarditis or pericarditis	MEN	Meningitis or ventriculitis
DISC	Disc space	ORAL	Oral cavity (mouth, tongue, or gums)
EAR	Ear, mastoid	OREP	Other infections of the male or female
			reproductive tract
EMET	Endometritis	PJI	Periprosthetic Joint Infection
ENDO	Endocarditis	SA	Spinal abscess without meningitis
EYE	Eye, other than conjunctivitis	SINU	Sinusitis
GIT	GI tract	UR	Upper respiratory tract
HEP	Hepatitis	USI	Urinary System Infection
IAB	Intraabdominal, not specified	VASC	Arterial or venous infection
IC	Intracranial, brain abscess or dura	VCUF	Vaginal cuff
JNT	Joint or bursa		

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HospitalComplication		HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		ues
Required in XSD	Yes			

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

Osteomyelitis must meet at least one of the following criteria:

- 1 Patient has organisms identified from bone by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment (e.g., 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°C), swelling*, pain or tenderness*, heat*, or drainage*

And at least **one** of the following:

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

^{*} With no other recognized cause

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HospitalComple		
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		null values
Required in XSD	Yes			

Element Values

Yes 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

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

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB 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.

ImageTrend 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.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

Yes 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

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

National Element

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PULMONARY EMBOLISM (PE)* (Hospital Events - Pulmonary Embolism)

National & State Element

Data Format [combo] single-choice

NTDB 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 PE's.

ImageTrend Description

A lodging of a blood clot in a pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma.

	•			
XSD Data Type	xs: string	Type) KSD Element / Domain (Complex HospitalComplication		HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, cor	mmon null values
Required in XSD	Yes			

Element Values

Yes 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

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

National Element

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(Hospital Events – Severe Sepsis)

National & State Element **Data Format** [combo] single-choice

NTDB 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.

ImageTrend Description

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

or hypoperiusion (insumerent blood now) to 1 or more organis.					
XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		Hospital Complication	
Multiple Entry	No	Accepts Null	Ves common null	values	
Configuration	140	Value Yes, common null values			
Required in XSD	Yes				

Element Values

Yes 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

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

National Element

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National & State Element **Data Format** [combo] single-choice

NTDB 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 ≥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).

ImageTrend Description

A focal or global neurological deficit of rapid onset and NOT present on admission.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	Hospital Complication	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

Yes 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

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

National Element

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SUPERFICIAL INCISIONAL SURGICAL SITE INFECTION*

(Hospital Events - Superficial Incision Surgical Site Infection)

National & State Element **Data Format** [combo] single-choice

NTDB 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 subcutaneous 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)).
- superficial incision that is deliberately opened by a surgeon, attending physician** or other designee and culture or non-culture-based testing is not performed.

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.

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)

ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Doma	nin (Complex Type)	HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null va	alues
Required in XSD	Yes			

Element Values

Yes

No

Additional Information

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

Data Source

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

National Element

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UNPLANNED ADMISSION TO ICU*

(Hospital Events – Unplanned Admission to ICU)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend 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.

XSD Data Type	xs: string	XSD Element / Domain (Complex Type) HospitalComplication		
Multiple Entry Configuration	No	Accepts Null Value Yes, commo		null values
Required in XSD	Yes			

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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UNPLANNED INTUBATION*

(Hospital Events - Unplanned Intubation)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		HospitalComplication
Multiple Entry Configuration	No			mon null values
Required in XSD	Yes			

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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UNPLANNED VISIT TO THE OPERATING ROOM*

(Hospital Events - Unplanned Visit to OR)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

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

EXCLUDE:

- 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.
- Non-urgent tracheostomy and percutaneous endoscopic gastrostomy

		7 1	1 2	,
XSD Data Type	xs: string	XSD Element / Domain (Complex	x Type)	HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, com	imon null values
Required in XSD	Yes			

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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VENTILATOR-ASSOCIATED PNEUMONIA (VAP)*

(Hospital Events – Ventilator-Associated Pneumonia)

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend 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 one of the following:	At least one of the following:	At least one of the following:
New or progressive and persistent infiltrate	• Fever (>38°C or >100.4°F)	Organism identified from blood Organism identified from pleural fluid Positive quantitative culture from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing.)
Consolidation	Leukopenia (≤4000 WBC/mm²) or leukocytosis (≥12,000 WBC/mm²)	 ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (e.g., Gram's stain)
Cavitation	 For adults ≥70 years old, altered mental status with no other recognized cause 	Positive quantitative culture of lung tissue
		 Histopathologic exam shows at least one of the following evidences of pneumonia:
Ensumatoceles, in infants ≤1 year old NOTE: In patients without	AND at least one of the following:	 Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles and alveoli
underlying pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.	New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements New onset or worsening cough, or dyspnea, or tachypnea Rales or bronchial breath sounds Worsening gas exchange (e.g., 0₂ desaturations (e.g., 2a0₂Fi0₂≤240), increased oxygen requirements, or increased ventilator demand)	Evidence of lung parenchyma invasion by fungal hyphae or pseudohyphae

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

IMAGING TEST EVIDENCE	SIGNS/SYMPTOMS	LABORATORY
Two or more serial chest imaging test results with at least one of the following:	At least one of the following:	At least one of the following:
New or progressive and persistent infiltrate	• Fever (>38°C or >100.4°F)	 Virus, <u>Bordetella Legionella</u>, <u>Chlamydia or Mycoplasma</u> 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 (e.g., not Active Surveillance Culture/Testing (ASC/AST).
Consolidation	Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³)	Fourfold rise in paired sera (IgG) for pathogen (e.g., influenza viruses, Chlamydia)
Cavitation	For adults ≥70 years old, altered mental status with no other recognized cause	 Fourfold rise in Legionella pneumophila serogroup 1 antibody titer to ≥1:128 in paired acute and convalescent sera by indirect IFA.
 Pneumatoceles, in infants ≤1 year old 	AND at least one of the following:	
NOTE: In patients without underlying pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.	New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements New onset or worsening cough, or dyspnea, or tachypnea Rales or bronchial breath sounds Worsening gas exchange (e.g., 0₂ desaturations (e.g., PaO₂/FiO₂≤240), increased oxygen requirements, or increased ventilator demand)	Detection of L. pgeumophila serogroup 1 antigens in urine by RIA or EIA

VAP Algorithm (PNU3 Immunocompromised Patients):

IMAGING TEST EVIDENCE	SIGNS/SYMPTOMS	LABORATORY		
Two or more serial chest imaging test results with at least one of the following:	Patient who is immunocompromised has at least one of the following:	At least one of the following:		
New or progressive and persistent infiltrate	• Fever (>38°C or >100.4°F)	Identification of matching Candida spp. from blood and sputum, endotracheal aspirate, BAL or protected specimen brushing.11,12,13 Evidence of fungi from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing) from one of the following: Direct microscopic exam Positive culture of fungi Non-culture diagnostic laboratory test		
 Consolidation 	For adults ≥70 years old, altered mental status with no other recognized cause New onset of purulent sputum3, or change in character of sputum4, or increased respiratory secretions, or increased suctioning requirements	Any of the following from: LABORATORY CRITERIA DEFINED UNDER PNU2		
Cavitation	New onset or worsening cough, or dyspnea, or tachypnea5 Rales6 or bronchial breath sounds			
 Ensumatoceles, in infants ≤1 year old 				
NOTE: In patients without underlying pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.	Worsening gas exchange (e.g., O2 desaturations [e.g., PaO2/FiO2 <240]7, increased oxygen requirements, or increased ventilator demand) Hemoptysis Pleuritic chest pain			

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

IMAGING TEST EVIDENCE	SIGNS/SYMPTOMS/LABORATORY
Two or more serial chest imaging test results with at least one of the following: New or progressive and persistent infiltrate Consolidation Cavitation Pneumatoceles, in infants ≤1 year old NOTE: In patients without underlying pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease). one definitive imaging test	SIGNS/\$YMPTOMS/LABORATORY Worsening gas exchange (e.g., O₂ desaturation [e.g. pulse oximetry <94%], increased oxygen requirements, or increased ventilator demand) AND at least three of the following: • Temperature instability • Leukopenia (≤4000 WBC/mm²) or leukocytosis (≥15,000 WBC/mm²) and left shift (≥10% band forms) • New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements • Apnea, tachypnea, nasal flaring with retraction of chest wall, or nasal flaring with grunting • Wheezing, rales, or rhonchi • Cough • Bradycardia (<100 beats/min) or tachycardia (>170 beats/min)

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

-				
IMAGING TEST EVIDENCE	SIGNS/SYMPTOMS/LABORATORY			
Two or more serial chest imaging test	At least three of the following:			
results with at least one of the following:				
 New or progressive and persistent infiltrate 	 Fever (>38.0°C or >100.4°F) or hypothermia (<36.0°C or <96.8°F) 			
Consolidation	 Leukopenia (≤4000 WBC/mm²) or leukocytosis (≥15,000 WBC/mm²) 			
Cavitation	 New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements 			
 Pneumatoceles, in infants ≤1 year old 	 New onset or worsening cough, or dyspnea, apnea, or tachypnea 			
NOTE: In patients without underlying	Rales or bronchial breath sounds			
pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive imaging test result is acceptable.	 Worsening gas exchange (e.g., O_z desaturations [e.g., pulse oximetry <94%], increased oxygen requirements, or increased ventilator demand) 			

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		HospitalComplication
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

Yes 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

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

National Element

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(Complication) STATUS

TR 23.15

Data Format [radio]

ImageTrend Description

The status of the complication.

Element Values

Open Close

(Complication) OCCURRENCE DATE

Data Format [date]

ImageTrend Description

The date that the complication was first documented.

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

(Complication) OCCURRENCE TIME

TR 23.20

Data Format [time]

ImageTrend Description

The time that the complication was first documented.

Element Values

• Relevant value for data element

Additional Information

• Collected as HHMM

(Complication) LOCATION OF OCCURRENCE

TR 23.19

Data Format [combo] single-choice

ImageTrend Description

The location that the complication occurred.

Element Values

Burn Unit OR

Catherization Lab Pre-Hospital

ED PTA (Referring Hospital)

Floor Bed Radiology

GI Lab Readmit OR (planned OR)

ICU Telemetry / Step-Down Unit

COMPLICATION STAFF INVOLVED

TR 23.46

Data Format [combo] multiple-choice

ImageTrend Description

Staff involved with the complication.

Element Values

• Relevant value for data element

Additional Information

• Press and hold "CTRL" key to select multiple values

(Complication) PR DATE

TR 23.6

Data Format [date]

ImageTrend Description

Complications peer review date.

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

(Complication) PR TIME

TR23.18

Data Format [time]

ImageTrend Description

Complications peer review time.

Element Values

• Relevant value for data element

Additional Information

• Collected as HHMM

(Complication) CORRECTIVE ACTION

TR 23.9

Data Format [combo] single-choice

ImageTrend Description

The action taken based on the complication.

Element Values

Counseling Privilege/Credentialing

Education Process Improvement Team

Guideline / Protocol Resource Enhancement

Not Indicated Trend

Other Unnecessary

Peer Review Presentation

(Complication) OTHER CORRECTIVE ACTION

TR 23.10

Data Format [text]

ImageTrend Description

Any other action taken based on the complication.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Correction Action is "Other"

(Complication) DETERMINATION

TR 23.11

Data Format [combo] single-choice

ImageTrend Description

Indication as to what was determined to be cause the complication.

- Cannot be Determined
- Disease-Related
- Procedure-Related
- Provider-Related
- System-Related

FURTHER EXPLANATION/ACTION (of Complication)

TR 23.8

Data Format [text]

ImageTrend Description

Further explanation of the complication.

Element Values

• Relevant value for data element

PREVENTABILITY (of Complication)

TR 23.12

Data Format [combo] single-choice

ImageTrend Description

Is the complication preventable?

- Cannot Be Determined
- Non-preventable
- Potentially Preventable
- Preventable

JUDGMENT (of Complication)

TR 23.14

Data Format [combo] single-choice

ImageTrend Description

Outcome of peer review of a complication.

- Acceptable
- Acceptable with Reservations
- Defer Peer Review
- Unacceptable
- Will Never Undergo PR

(COMPLICATION CORRESPONDENCE) STAFF

TR 23.1.14

Data Format [combo] single-choice

ImageTrend Description

Staff involved with the complication correspondence.

Element Values

• Relevant value for data element

(Complication Correspondence) NOTE

TR 23.1.15

Data Format [text]

ImageTrend Description

Complication correspondence note.

Element Values

• Relevant value for data element

Data Format [combo] single-choice

ImageTrend Description

Complication correspondence source.

- Autopsy
- Patient/Family Concern/Comment
- Conversation
- PI Comm
- Daily Rounds
- Referrals
- EMS Run Sheet
- Risk Management Variance report
- Hospital Quality Department
- Staff Concern
- Medical Record

(Complication Correspondence) TYPE

TR 23.1.12

Data Format [combo] single-choice

ImageTrend Description

Complication correspondence type.

- Action Plan
- Process Concern
- Care Concern
- Primary Review
- Secondary Review
- Tertiary Review

(Complication Correspondence) GROUP

TR 23.1.16

Data Format [combo] single-choice

ImageTrend Description

Complication correspondence group.

- Neuro
- Peds
- Ortho
- Trauma
- Other

(Performance Improvement) STATUS

TR 31.9

Data Format [radio]

ImageTrend Description

The status of the QA peer review judgement.

Element Values

Open

Close

(Performance Improvement) OCCURRENCE DATE TR 31.7

Data Format [date]

ImageTrend Description

The date that the performance improvement audit occurred.

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

(Performance Improvement) OCCURRENCE TIME

TR 31.18

Data Format [time]

ImageTrend Description

The time that the performance improvement audit occurred.

Element Values

• Relevant value for data element

Additional Information

• Collected as HHMM

(Performance Improvement) PR DATE

TR 31.8

Data Format [date]

ImageTrend Description

The QA indicator peer review date.

Element Values

• Relevant value for data element

Additional Information

• Collected as MM/DD/YYYY

(Performance Improvement) PR TIME

TR 31.19

Data Format [time]

ImageTrend Description

The QA indicator peer review time.

Element Values

• Relevant value for data element

Additional Information

• Collected as HHMM

FURTHER EXPLANATION/ACTION (of PI)

TR 31.10

Data Format [text]

ImageTrend Description

Further explanation of the Performance Improvement.

Element Values

• Relevant value for data element

(PI CORRESPONDENCE) STAFF

TR31.14

Data Format [combo] single-choice

ImageTrend Description

Staff involved with the performance improvement audit correspondence.

XSD Data Type	xs: string	XSD Element/Domain (Simple	Correspondence_Staff	
Multiple Entry Configuration	No	Accepts Null Value	No	
Required in XSD	Yes		•	

Element Values

• Relevant value for data element

(PI CORRESPONDENCE) NOTE

TR 31.15

Data Format [text]

ImageTrend Description

Performance Improvement audit correspondence note.

Element Values

• Relevant value for data element

ImageTrend Description

Performance Improvement audit correspondence source.

Element Values

- Autopsy
- PI Comm
- Conversation
- Referrals
- Daily Rounds
- Risk Management Variance
- EMS Run Sheet
- Report
- Hospital Quality Department
- Staff Concern
- Medical Record
- Patient/Family Concern/Comment

ImageTrend Description

Performance Improvement audit correspondence type.

Element Values

- Action Plan
- Process Concern
- Care Concern
- Primary Review
- Secondary Review
- Tertiary Review

(PI Correspondence) GROUP

TR 31.16

Data Format [combo] single-choice

ImageTrend Description

Performance Improvement audit correspondence group.

Element Values

- Neuro
- Peds
- Ortho
- Trauma
- Other

Outcome Information

ImageTrend Description

The department that discharged the patient from the hospital.

Element Values

Acute Rehabilitation Medicine

Anesthesia

Neurosurgery

Bariatric

Burn

Oculoplastic

Cardiology

Ophthalmology

Cardiothoracic Surgery Oral Maxillo Facial Surgery
Chemical Dependency Orthopedic Surgery

Critical Care Medicine Pain

Critical Care Surgery Pediatric Cardiology

Dentistry Pediatric Critical Care Medicine

Dermatology Pediatric Dentistry

Ear Nose Throat Pediatric Gastroenterology
Emergency Medicine Pediatric Hematology Oncology

Endocrinology Pediatric Hospitalist
Family Medicine Pediatric Infectious Disease

Gastroenterology Pediatric Neurology **General Pediatrics** Pediatric Orthopedic **General Surgery** Pediatric Pulmonary Geriatric Plastic Surgeon Hand Psychiatry Hematology Oncology Psychology Infectious Disease **Pulmonary** Internal Medicine Rheumatology Trauma Surgeon Kidney Transplant

Liver Urology

Neonatal Vascular Surgery

Nephrology

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

Data Format [date]

ImageTrend Description

Date patient was discharged from the ED (or arrived at the facility if the patient was a direct admit).

XSD Data Type	xs: string	XSD Element/Domain (Simple Type) AdmissionDate		AdmissionDateTime
Multiple Entry Configuration	No	Accepts Null Value	Yes, commo	on null values
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Used to auto-generate an additional calculated element: Total Length of Hospital Stay (time from hospital admission to hospital discharge)

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

Data Format [time]

ImageTrend Description

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

XSD Data Type	xs: string	XSD Element/Domain (Simple Type) AdmissionTime		
Multiple Entry Configuration	No	Accepts Null Value	Yes, comr	non null values
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- · Collected as HHMM
- HHMM should be collected as military time
- Used to auto-generate an additional calculated element: Total Length of Hospital Stay (time from hospital admission to hospital discharge)

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

HOSPITAL DISCHARGE DATE (ORDERS WRITTEN) *

TR 25.93

National & State Element

Data Format [date]

NTDB/ImageTrend Description

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

XSD Data Type	xs: date	XSD Element/Domain (Complex Type) HospitalDischargeOrdersWritter		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

- Relevant value for data element
- Total Length of Hospital Stay (elapsed time from ED/Hospital arrival to hospital discharge)

Additional Information

- Collected as YYYY-MM-DD.
- If multiple orders were written, report the final disposition order date.
- The null value "Not Applicable" is reported if ED Discharge Disposition is 4, 5, 6, 9, 10, or 11.
- If Hospital Discharge Disposition is 5 Deceased/Expired, then Hospital Discharge Date is the date of death as indicated on the patient's death certificate.

Data Source

- Physician Order
- Discharge Instructions
- Nursing Notes/Flow Sheet
- Case Management/Social Services Notes
- Discharge Summary

National Element

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HOSPITAL DISCHARGE TIME (ORDERS WRITTEN) *

TR 25.94

National & State Element

Data Format [time]

NTDB/ImageTrend Description

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

XSD Data Type	xs: time	XSD Element/Domain (Complex Type)	Hospital Discharge Orders Written time
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

- Relevant value for data element
- Total Length of Hospital Stay (elapsed time from ED/Hospital arrival to hospital discharge)

Additional Information

- Collected as HHMM
- If multiple orders were written, report the final disposition order 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 5 Deceased/Expired, then Hospital Discharge Time is the time of death as indicated on the patient's death certificate.

Data Source

- Physician Order
- Discharge Instructions
- Nursing Notes/Flow Sheet
- Case Management/Social Services Notes
- Discharge Summary

National Element

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HOSPITAL DISCHARGE DATE (PHYSICAL EXIT)

TR 25.34

Data Format [date]

ImageTrend Description

The date the patient physically left the hospital.

		XSD Element / Domain (Complex	
XSD Data Type	xs: date	Type)	Hospital Physical Discharge Date
Multiple Entry			
Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 1990	Max. Constraint: 2030

Element Values

• Relevant value for data element

Additional Information

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

- Physician Order
- Discharge Instructions
- Nursing Notes/Flow Sheet
- Case Management/Social Services Notes
- Discharge Summary

HOSPITAL DISCHARGE TIME (PHYSICAL EXIT)

TR 25.48

Data Format [time]

ImageTrend Description

The time the patient physically left the hospital.

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)	Hospital Physical Discharge Time
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes	Min. Constraint: 00:00	Max. Constraint: 23:59

Element Values

• Relevant value for data element

Additional Information

- Collected as HH:MM military time
- Used to auto-generate an additional calculated element: Total Length of Hospital Stay (elapsed time from ED/hospital arrival to hospital discharge)
- The null value "Not Applicable" is used if ED Discharge Disposition = 5 (Deceased/expired)
- The null value "Not Applicable" is used if ED Discharge Disposition = 4,6,9,10 or 11
- If Hospital Discharge Disposition is 5 Deceased/Expired, then Hospital Discharge Time is the time of death as indicated on the patient's death certificate

- Physician Order
- Discharge Instructions
- Nursing Notes/Flow Sheet
- Case Management/Social Services Notes
- Discharge Summary

National & State Element **Data Format** [number]

NTDB Description

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

ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type) Totalicu		TotallcuLos
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null va	lues
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint: 40	0

Element Values

• Relevant value for data element

Additional Information

- Recorded in full day increments with any partial day listed 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.
- The null value "Not Known/Not Recorded" is used if any dates are missing.
- If patient has multiple ICU episodes on the same calendar day, count that day as one calendar day.
- At no time should the Total ICU LOS exceed the Hospital LOS
- The null value "Not Applicable" is used if the patient had no ICU days according to the above definition.

Data Source

- ICU Flow Sheet
- Nursing Notes/Flow Sheet

National Element

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National & State Element **Data Format** [number]

NTDB Description

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

ImageTrend Description

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

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		TotalVentDays
Multiple Entry Configuration	No	Accepts Null Value	Yes, common nu	ll values
Required in XSD	Yes	Min. Constraint: 1	Max. Constraint	: 400

Element Values

• Relevant value for data element

Additional Information

- Excludes mechanical ventilation time associated with OR procedures.
- Non-invasive means of ventilator support (CPAP or BIPAP) should not be considered in the calculation of ventilator hours.
- Recorded in full day increments with any partial calendar day county 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.
- The null value "Not Known/Not Recorded" is used if any dates are missing.
- At no time should the Total Vent Days exceed the Hospital LOS
- The null value "Not Applicable" is used if the patient was not on the ventilator according to the above definition.

Data Source

- Respiratory Therapy Notes/Flow Sheet
- ICU Flow Sheet
- Progress Notes

National Element

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ImageTrend Description

A score calculated to derive a baseline of trauma patient feeding disability at discharge from an acute care facility.

Element Values

Dependent - Total Help Dependent - Partial Help

Independent with Device Independent

Additional Information

- Used to auto-generate an additional calculated element: FIM Score (combination of Feeding, Locomotion, and Motor scores)
- Assess as close to discharge as possible. Includes using suitable utensils to bring food to mouth, chewing, and swallowing (once meal is appropriately prepared).
 Opening containers, cutting meat, buttering bread and pouring liquids are not included as they are often part of meal preparation.
- Dependent-total help required: Either performs less than half of feeding tasks or does not eat or drink full meals by mouth and relies at least in part on other means of alimentation, such as parenteral or gastrostomy feedings.
- Dependent-partial help required: Performs half or more of feeding tasks but requires supervision (e.g., standby, cueing, or coaxing) setup (application of Orthopedics), or other help.
- Independent with device: Uses an adaptive or assisting device such as a straw, spork, or rocking knifes, or requires more than a reasonable time to eat.
- Independent: Eats from a dish and drinks from a cup or glass presented in the customary manner on table or tray. Uses ordinary knife, fork, and spoon.
- Not applicable: (e.g., patient less than 7 years old, patient died, etc.)

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

ImageTrend Description

A score calculated to derive a baseline of trauma patient locomotion (independence) disability at discharge from an acute care facility.

Element Values

Dependent - Total Help Dependent - Partial Help

Independent with Device Independent

Additional Information

- Used to auto-generate an additional calculated element: FIM Score (combination of Feeding, Locomotion, and Motor scores)
- Includes walking once in a standing position, or using a wheelchair, once in a seated position, indoors
- Dependent total help required: Performs less than half of locomotion effort to go a minimum of 50 feet or does not walk or wheel a minimum of 50 feet.
 Requires assistance of one or more persons.
- Dependent partial help required: If walking, requires standby supervision, cueing, or coaxing to go a minimum of 150 feet, or walks independently only short distances (a minimum of 50 feet). If not walking, requires standby supervision, cueing, or coaxing to go a minimum of 150 feet in wheelchair, or operates manual or electric wheelchair independently only short distances (a minimum of 50 feet).
- Independent with Device: Walks a minimum of 150 feet but uses a brace or prosthesis on leg, special adaptive shoes, cane, crutches, or walker; takes more than a reasonable time; or there are safety considerations. If not walking, operates manual or electric wheelchair independently for a minimum of 150 feet; turns around; maneuvers the chair to a table, bed, toilet; negotiates at least a 3% grade; maneuvers on rugs and over doorsills.
- Independent: Walks a minimum of 150 feet without assisting devices. Does not use a wheelchair. Performs safely.
- Not applicable: (e.g., patient less than 7 years old, patient died, etc.)

- Billing Sheet/Medical Records Coding Summary Sheet
- Hospital Admission Form

DISABILITY AT DISCHARGE - EXPRESSION (MOTOR)

TR 26.56

Data Format [combo] single-choice

ImageTrend Description

A score calculated to derive a baseline of trauma patient motor (expression) disability at discharge from an acute care facility.

Element Values

Dependent - Total Help Dependent - Partial Help

Independent with Device Independent

Additional Information

- Used to auto-generate an additional calculated element: FIM Score (combination of Feeding, Locomotion, and Motor scores)
- Includes clear expression of verbal or nonverbal language. This means expressing linguistic information verbally or graphically with appropriate and accurate meaning and grammar
- Dependent total help required: Expresses basic needs and ideas less than half of the time. Needs prompting more than half the time or does not express basic needs appropriately or consistently despite prompting
- Dependent partial help required: Expresses basic needs and ideas about everyday situations half (50%) or more than half of the time. Requires some prompting, but requires that prompting less than half (50%) of the time
- Independent with Device: Expresses complex or abstract ideas with mild difficulty. May require an augmentative communication device or system
- Independent: Expresses complex or abstract ideas intelligibly and fluently, verbal or nonverbal, including signing or writing
- Not applicable: (e.g., patient less than 7 years old, patient died, etc.)

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

National & State Element **Data Format** [combo] single-choice

NTDB/ImageTrend Description

The disposition of the patient when discharged from the hospital.

XSD Data Type	xs:	integer	XSD Element / Domain (Complex Type): HospitalDischargeDispositi		
Multiple Entry Configuration	No	ı	Accepts Null Value Yes, common null values		
Required in XSI	D Yes	5			

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 (AMA) 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.
- 9. Discharged/Transferred to court/law enforcement.
- 10. Discharged/Transferred to inpatient rehab or designated unit.
- 11. Discharged/Transferred to Long Term Care Hospital (LTCH)
- 12. Discharged/Transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital.
- 13. Discharged/Transferred to another type of institution not defined elsewhere.

Additional Information

- If multiple orders were written, report the final disposition order.
- Element value = 6, "Home" refers to the patient's current place of residence (e.g., prison, Child Protective Services, etc.)
- Element values based upon UB-04 disposition coding.
- 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 more than two years before the
 current NTDS version are no longer listed under Element Values above, which is why
 there are number gaps. Refer to the NTDS Change Log for a full list of retired Hospital
 Discharge Dispositions.

Data Source

- Physician Order
- Discharge Instructions
- Nursing Notes/Flow Sheet
- Case Management/Social Services Notes
- Discharge Summary

National Element

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ImageTrend Description

Name of the receiving facility the patient was transferred to.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Hospital Disposition "Acute Care Hospital," "Burn Care Facility," or "Rehab or long-term facility" is selected.

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

Data Format [text]

ImageTrend Description

Any other identifying facility not found on the available list of options to which the patient was discharged.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Hospital Transferred to "Other" is selected

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Other) CITY (Transferred to)

TR 25.40

Data Format [text]

ImageTrend Description

The city in which the transfer facility is located.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Hospital Transferred to "Other" is selected

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

Data Format [text]

ImageTrend Description

The state in which the transfer facility is located.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Hospital Transferred to "Other" is selected

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Discharge) TRANSPORT MODE

TR 25.43

Data Format [combo] single-choice

ImageTrend Description

Hospital discharge transport mode.

Element Values

- Ambulance
- Helicopter
- Fixed Wing
- Police
- Private Vehicle

Additional Information

• Only completed if Hospital Disposition "Acute Care Hospital" is selected

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

Data Format [number]

ImageTrend Description

A score calculated (by adding together the Feeding, Independence, and Motor scores) to derive a baseline of trauma patient disability at discharge from an acute care facility, using three components: Feeding, Locomotion (Independence), and Motor (Expression)

Element Values

- Relevant value for data element
- Auto-calculated by combining Feeding, Locomotion, and Motor scores when entered

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

ImageTrend Description

The location where the patient died.

Element Values

- ICU
- OR
- Floor
- Prior to Arrival
- ER

Additional Information

• Only completed if Hospital Disposition is "Expired"

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

Data Format [Date] [Time]

ImageTrend Description

Date and time the patient died.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Hospital Disposition is "Expired"

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

ImageTrend Description

Indicates patient's primary cause of death.

Element Values

Brain Injury Thoracic Aortic Transection

Burn Shock Trauma Shock
Cardio Failure Treatment Withheld

Drowning Brain Death Electrocution Sepsis

Heart Laceration Cardiac Arrest due to
Liver Laceration Strangulation
Multiple Organ Cardiac Arrest

Failure/Metabolic Family D/C Life Support

Other Medical

Pre-Existing Illness Multisystem Trauma
Pulmonary Failure Trauma Wound

Pulmonary Failure/Sepsis

Additional Information

• Only completed if Hospital Disposition is "Expired"

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary
- Autopsy Report

OTHER (Death Circumstance) DESCRIPTION

TR 25.45

Data Format [text]

ImageTrend Description

The circumstance under which the patient died.

Element Values

• Relevant value for data element

Additional Information

• Only completed if Death Circumstance is "Other"

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary
- Autopsy Report

ImageTrend Description

Were organs/tissue donated? - To make a gift of a differentiated structure (as a heart, kidney, leaf, or stem) consisting of cells and tissues and performing some specific function in an organism.

Element Values

Yes

No

Tissue Donation

Additional Information

• Only completed if Hospital Disposition is "Expired"

Data Source

• Hospital Documentation

ImageTrend Description

Was an autopsy performed? - An examination of a body after death to determine the cause of death or the character and extent of changes produced by disease.

Element Values

Yes No

Additional Information

• Only completed if Hospital Disposition is "Expired"

Data Source

• Hospital Documentation

ADVANCED DIRECTIVE

TR 25.28

Data Format [combo] single-choice

ImageTrend Description

Determination whether the patient had an Advanced Directive.

Element Values

Yes No

Additional Information

• Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

TRAUMA QUALITY IMPROVEMENT PROGRAM

Measures for Processes of Care

The elements in this section should be reported by Level 1 and Level 2 TQIP participating centers **ONLY**. Please contact us at indianatrauma@isdh.IN.gov if you have question or at tqip@facs.org for information about joining TQIP

HIGHEST GCS TOTAL

TR 39.1

Data Format [combo] single-choice

NTDB Description

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

XSD Data Type	xs: integer	XSD Element / Domain	TBIHighestTotalGcs	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Refers to highest total GCS 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 score 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 Motor 40.
- 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

- Neuro Assessment Flow Sheet
- Triage/Trauma/ICU Flow Sheet
- Nursing Notes/Flow Sheet
- Progress Notes

National Element

Page 142 in the 2024 National Trauma Data Standard.

Commented [NT1]: TBI?

NTDB Description

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

** 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). **

XSD Data Type	xs: integer	XSD Element / Domain	TBIGcsMotor	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		lues
Required in XSD	Yes			

Element Values

Pediatric (≤ 2 years):

No motor response Withdrawal from pain

Extension to pain Localizing pain

Flexion to pain Appropriate response to stimulation

<u>Adult</u>

No motor response Withdrawal from pain Extension to pain Localizing pain Flexion to pain Obeys commands

Additional Information

- Refers to highest GCS motor 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 motor on the 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 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 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 Motor 40.
- If reporting Highest GCS Motor, the null value "Not Applicable" is reported if the patient's ED Discharge Date or Hospital Discharge Date is prior to the next calendar day.

Data Source

- Neuro Assessment Flow Sheet
- Triage/Trauma/ICU Flow Sheet
- Nursing Notes/Flow Sheet
- Progress Notes

National Element

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GCS Assessment (Qualifier Component) of Highest GCS TOTAL TR 39.3

Data Format [combo] single-choice

NTDB Description

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

** 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). **

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)	TBIGcsQualifier	Com	mented [NT2]: T
Multiple Entry Configuration	No	Accepts Null Value	Yes, common nu	ıll values	
Required in XSD	Yes				

Element Values

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

Additional Information

- 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 should 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.
- Report all that apply.
- The null value "Not Known/Not Recorded" is reported if reporting Highest GCS Motor 40.
- 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

- Neuro Assessment Flow Sheet
- Triage/Trauma/ICU Flow Sheet
- Nursing Notes/Flow Sheet
- Progress Notes
- Medication Summary

National Element

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*Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.

TR 39.40.2

Data Format [combo] single-choice

NTDB Description

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

** 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). **

XSD Data Type	xs: integer	XSD Element / Domain	TBIGcs40Motor	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		alues
Required in XSD	Yes			

Element Values

Adult:

None Normal Flexion Extension Localizing

Abnormal Flexion Obeys commands

Not Testable

Pediatric < 5 years:

None Localizes Pain
Extension to Pain Obeys Commands
Flexion to Pain Not Testable

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.
- 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 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.)

Commented [NT3]: TBI?

- 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's ED Discharge Date or Hospital Discharge Date is prior to the next calendar day.

Data Source

- Neuro Assessment Flow Sheet
- Triage/Trauma/ICU Flow Sheet
- Nursing Notes/Flow Sheet
- Progress Notes

National Element

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*Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.

INITIAL ED/HOSPITAL PUPILLARY RESPONSE

TR 40.32

Data Format [combo] single-choice

NTDB Description

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

** 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). **

XSD Data Type	xs: integer	XSD Element / Domain	TBIPupillaryResponse	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

Both reactive One reactive

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 PERRL "Pupils Equal Round Reactive to Light" report Element Value "1. Both reactive" IF there is no other contradicting documentation.
- The null value "Not Known/Not Recorded" should 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" should 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. Progress Notes/ Nursing Notes
- 3. History and Physical

National Element

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MIDLINE SHIFT

NTDB Description

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

^{**} 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). **

XSD Data Type	xs: integer	XSD Element / Domain	TBIMidlineShift	
Multiple Entry Configuration	No	Accepts Null Value	ccepts Null Value Yes, common null values	
Required in XSD	Yes			

Element Values

Yes Not Imaged (e.g. CT Scan, MRI)

No

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

National Element

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NTDB 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.

** 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). **

XSD Data Type	xs: integer		XSD Element / Domain (Complex Type)		TBICerebralMonitor
Multiple Entry Configuration		No	Accepts Null Value Yes, common null value		n null values
Required in XSD Yes					

Element Values

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

Additional Information

- 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.
- Report all that apply.

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

National Element

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NTDB Description

Date of first cerebral monitor placement.

** 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). **

XSD Data Type	xs: date	XSD Element / Domain	(Complex Type)	TBI Cerebral Monitor Da	te Com	mented [NT4]: TBI
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null va	llues		
Required in XSD	Yes					

Element Values

• Relevant value for data element

Additional Information

- Reported as YYYY-MM-DD.
- The null value "Not Applicable" is reported if the data element Cerebral Monitor is "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

National Element

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NTDB Description

Time of first cerebral monitor placement.

** 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). **

XSD Data Type	xs: time	XSD Element / Domain	TBICerebralMonitorTime	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Reported as HH:MM military time.
- The null value "Not Applicable" is reported if the data element Cerebral Monitor is "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

National Element

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VENOUS THROMBOEMBOLISM PROPHYLAXIS TYPE

TR40.

Data Format [combo] single-choice

NTDB Description

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

EXCLUDE:

• Sequential compression devices

** Reporting Criterion: Report on all patients**

XSD Data Type	xs: integer	XSD Element / Domain	VteProphylaxisType	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

Xa Inhibitor (Rivaroxaban, etc.)

None

LMWH (Daktarin, Enoxaparin, etc.) Other

Direct Thrombin Inhibitor (Dabigatran, etc.) 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 for patients who refuse VTE 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.
- Element Value "10. Other" is reported if "Coumadin" and/or "aspirin" are given as Venous Thromboembolism Prophylaxis.

Data Source Hierarchy Guide

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

National Element

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VENOUS THROMBOEMBOLISM PROPHYLAXIS DATE TR40.2

Data Format [combo] single-choice

NTDB Description

Date of administration of first dose of VTE prophylaxis administered to patient at your hospital

** Reporting Criterion: Report on all patients**

XSD Data Type	xs: date	XSD Element / Domain	VteProphylaxisDate	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

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 VTE Prophylaxis Type element.
- The null value "Not Applicable" is reported if Venous Thromboembolism Prophylaxis Type is "5. None."

Data Source

- 1. Medication Summary
- 2. Nursing Notes/Flow Sheet

National Element

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VENOUS THROMBOEMBOLISM PROPHYLAXIS TIME TR40.3

Data Format [combo] single-choice

NTDB Description

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

** Reporting Criterion: Report all on patients**

XSD Data Type	xs: time	XSD Element / Domain	VteProphylaxisTime	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Reported as HH:MM military time.
- 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 "5. None."

Data Source

- 1. Medication Summary
- 2. Nursing Notes/Flow Sheet

National Element

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PACKED RED BLOOD CELLS

TR22.22

Data Format [combo] single-choice

NTDB 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.
- ** Reporting Criterion: Report on all patients**

XSD Data Type	xs: integer	XSD Element / Domain (Comple Type)		TransfusionBlood4Hours
Multiple Entry Configuration	No	Accepts Null Value Yes, common null value		lues
Required in XSD	Yes			

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

National Element

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WHOLE BLOOD

Data Format [combo] single-choice

NTDB 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

** Reporting Criterion: Report on all patients**

XSD Data Type	xs: integer	XSD Element / Domain	WholeBlood4Hours	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		lues
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Refers to amount of transfused whole blood (CCs [mLs]) within first four 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

National Element

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PLASMA TR40.5

Data Format [combo] single-choice

NTDB Description

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

EXCLUDE:

- Plasma transfusing upon patient arrival.
- Cell saver blood.
- ** Reporting Criterion: Report on all patients**

XSD Data Type	xs: integer	XSD Element / Domain	TransfusionPlasma4Hours	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		alues
Required in XSD	Yes			

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

National Element

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PLATELETS TR40.6

Data Format [combo] single-choice

NTDB Description

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

EXCLUDE:

- Platelets transfusing upon patient arrival.
- Cell saver blood.

** Reporting Criterion: Report on all patients**

XSD Data Type	xs: integer	XSD Element / Domain	(Complex Type)	TransfusionPlatelets4Hours
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null va	alues
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Refers to amount of transfused platelets (CCs [mLs]) within first four 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

National Element

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CRYOPRECIPTIATE (4 Hours)

TR 40.7

Data Format [combo] single-choice

NTDB Description

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

EXCLUDE:

- Cryoprecipitate transfusing upon patient arrival.
- Cell saver blood.

** Reporting Criterion: Report on all patients**

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type)		Cryoprecipitate4Hours
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null va	llues
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

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

Data Source

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

National Element

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ANGIOGRAPHY

TR 40.12

Data Format [combo] single-choice

NTDB Description

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

EXCLUDE:

• Computerized tomographic angiography (CTA).

^{**} Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival**

XSD Data Type	xs: integer	XSD Element / Domain	Angiography	
Multiple Entry Configuration	No	Accepts Null Value Yes, common null value		lues
Required in XSD	Yes			

Element Values

None Angiogram with embolization

Angiogram only Angiogram with stenting

Additional Information

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

Data Source

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

National Element

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EMBOLIZATION SITE

TR 40.18

Data Format [combo] single-choice

NTDB Description

Organ/site of embolization for hemorrhage control.

** Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival**

XSD Data Type	xs: integer	XSD Element / Domain (EmbolizationSite	
Multiple Entry Configuration	Yes, max 7	Accepts Null Value Yes, common nul		ıll values
Required in XSD	Yes		·	

Element Values

Liver Retroperitoneum (lumbar, sacral)

Spleen Peripheral vascular (neck, extremities)

Kidneys Other

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 more than two 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

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

National Element

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NTDB Description

Date the first angiogram with or without embolization was performed.

** Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival**

XSD Data Type	xs: date	XSD Element / Domain (Complex Type) AngiographyDate		
Multiple Entry Configuration	No	Accepts Null Value Yes, common null value		alues
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Reported as YYYY-MM-DD.
- 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.
- Procedure start date is the date of needle insertion in the groin.

Data Source

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

National Element

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NTDB Description

Time the first angiogram with or without embolization was performed.

** Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival**

XSD Data Type	xs: time	XSD Element / Domain (Complex Type) AngiographyTime		
Multiple Entry Configuration	No	Accepts Null Value Yes, common null values		alues
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Reported as HH:MM military time.
- 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.
- Procedure start time is the time of needle insertion in the groin.

Data Source

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

National Element

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SURGERY FOR HEMORRHAGE CONTROL TYPE

TR 40.19

Data Format [combo] single-choice

NTDB Description

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

^{**} Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival**

XSD Data Type	xs: integer	XSD Element / Domain (Complex Type) HemorrhageControlSurgeryType		
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

None Extremity

Laparotomy Neck

Thoracotomy Mangled extremity/traumatic amputation
Sternotomy Other skin/soft tissue (e.g. scalp laceration)

Extraperitoneal Pelvic Packing

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

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

National Element

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SURGERY FOR HEMORRHAGE CONTROL DATE

TR 40.20

Data Format [combo] single-choice

NTDB Description

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

** Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival**

XSD Data Type	xs: Date	XSD Element / Doma	in (Complex Type)	Hemorrhage Control Surgery Date
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Reported as YYYY-MM-DD.
- 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 "1. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criteria.
- Procedure start date is defined as the date the incision was made (or the procedure started).

Data Source

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

National Element

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SURGERY FOR HEMORRHAGE CONTROL TIME

TR 40.21

Data Format [combo] single-choice

NTDB Description

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

** Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival**

XSD Data Type	xs: Time	XSD Element / Domain	(Complex Type)	HemorrhageControlSurgeryTime
Multiple Entry Configuration	No	Accepts Null Value Yes, common null v		values
Required in XSD	Yes			

Element Values

• Relevant value for data element

Additional Information

- Reported as HH:MM military time.
- 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 "1. None."
- The null value "Not Applicable" is reported for patients that do not meet the reporting criteria.
- Procedure start time is defined as the time the incision was made (or the procedure started).

Data Source

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

National Element

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WITHDRAWAL OF LIFE SUPPORTING TREATMENT TR 40.15

Data Format [combo] single-choice

NTDB 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 to kin.

** Reporting Criterion: Report on all patients **

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)		WithdrawalOfLifeSupportingTreatment	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes				

Element Values

Yes 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" should 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

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

National Element

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WITHDRAWAL OF LIFE SUPPORTING TREATMENT DATE TR 40.16

Data Format [combo] single-choice

NTDB Description

The date treatment was withdrawn

** Reporting Criterion: Report on all patients **

XSD Data Type	xs: Date	XSD Element / Domain (Complex Type)		WithdrawalOfLifeSupportingTreatmentDate	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes				

Element Values

• Relevant value for data element

Additional Information

- Reported as YYYY-MM-DD.
- The null value "Not Applicable" is reported for patients when Withdrawal of Life Supporting Treatment is "2. No."
- 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 time the decision not to proceed with a life supporting intervention(s) occurs (e.g. intubation).

Data Source

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

National Element

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WITHDRAWAL OF LIFE SUPPORTING TREATMENT TIME TR 40.17

Data Format [combo] single-choice

NTDB Description

The time treatment was withdrawn

** Reporting Criterion: Report on all patients **

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)		WithdrawalOfLifeSupportingTreatmentTime	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values		
Required in XSD	Yes				

Element Values

• Relevant value for data element

Additional Information

- Reported as HH:MM military time.
- The null value "Not Applicable" is reported for patients when Withdrawal of Life Supporting Treatment is "2. No."
- 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).

Data Source

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

National Element

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NTDB Description

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

** Reporting Criterion: Report on all patients with any open fracture(s)**

XSD Data Type	xs: string	XSD Element / Doma	AntibioticTherapy	
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null va	lues
Required in XSD	Yes			

Element Values

Yes 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 of Advancement of Automotive Medicine AIS Coding Rules and Guidelines and includes all AIS code descriptors that contain "open" and all AIS extremity/limb code descriptors that contain "amputation."

Data Source

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

National Element

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NTDB Description

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

** Reporting Criterion: Report on all patients with any open fracture(s)**

XSD Data Type	xs: Date	XSD Element / Domain (Complex Type)		AntibioticTherapyDate
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values	
Required in XSD	Yes			

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 of Advancement of Automotive Medicine AIS Coding Rules and Guidelines and includes all AIS code descriptors that contain "open" and all AIS extremity/limb code descriptors that contain "amputation."

Data Source

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

National Element

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NTDB Description

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

** Reporting Criterion: Report on all patients with any open fracture(s)**

XSD Data Type	xs: time	XSD Element / Domain (Complex Type)	AntibioticTherapyTime
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

Element Values

• Relevant value for data element

Additional Information

- Reported HH:MM 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 of Advancement of Automotive Medicine AIS Coding Rules and Guidelines and includes all AIS code descriptors that contain "open" and all AIS extremity/limb code descriptors that contain "amputation."

Data Source

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

National Element

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Surgeon Specific Reporting - Optional

NATIONAL PROVIDER IDENTIFIER (NPI)

Data Format [combo] single-choice

NTDB Description

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

** Reporting Criterion: Report on all patients with any open fracture(s)**

XSD Data Type	xs: string	XSD Element / Domain (Complex Type)	NationalProviderIdentifier
Multiple Entry Configuration	No	Accepts Null Value	Yes, common null values
Required in XSD	Yes		

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

1. Medical Record

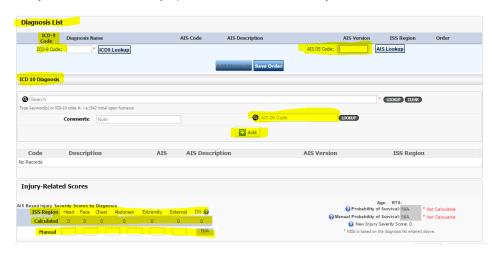
National Element

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Regarding Injury Severity Score (ISS) and Abbreviated Injury Score (AIS)*

In ImageTrend, the ISS is calculated from the AIS codes by using the AIS region and severity that is associated with the AIS code. The AIS codes are entered along with a corresponding ICD-10.

When an ICD-10 code is added to a patient, the ImageTrend Patient Registry can show the registrar the AIS code used frequently with the diagnosis. If the registrar agrees with the stated code, they can click the **add** button. When the Diagnosis and AIS are added, the system will automatically update the ISS and Probability of Survival. (Below)



The ImageTrend Patient Registry use the AIS 05 with updates from 2008. Also, in addition to calculating the ISS, the New Injury Severity Score (NISS) will also be calculated.

Appendix 1: Edit Checks for the National Trauma Data Standard 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 – 4. Level 1 and 2 flags must be resolved, or the entire file cannot be submitted to NTDB. Level 3 and 4 flags serve as recommendations to check data elements associated with the flags. However, level 3 and 4 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: Major logic data consistency checks related to variables commonly used for reporting. Examples include Arrival Date, E-code, etc.
- Level 4: Minor logic data consistency checks (e.g. dates) and blank fields that are
 acceptable to create a "valid" XML record but may cause certain parts of the record
 to be excluded from analysis.

Important Notes:

- 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.

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 Home ZIP/Postal Code 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 (US only)

0202 2 Element cannot be blank (US only)

0204 2 Element must be Not Applicable (Non-US hospitals only)

0205 2 Element must be Not Applicable when patient's home Zip/Postal code 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

PATIENT'S HOME CITY

Rule ID Level Message

0401 1 Invalid value (US only)

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 Patient's Home Zip/Postal Code 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 valid 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 Injury Date

0613 2 Element cannot be Not Applicable

0640 1 Single entry exceeded

AGE

Rule ID Level Message

0701 1 Age is outside the valid range of 0 - 120

0703 2 Element cannot be blank

0705 4 Age is greater than expected for the Age Units 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 Age Units is Not Known/Not Recorded 0709 Element must be and can only be "Not Applicable" if date of Birth is reported unless Date of Birth is the same as ED/Hospital Arrival Date

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 Age is Not Known/Not Recorded

0810 2 Element must be and can only be "Not Applicable" if Age 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 CA 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 CA 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

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 Injury Incident Date is earlier than Date of Birth
- 1211 2 Element cannot be "Not Applicable"
- 1212 3 Injury Incident Date is greater than 14 days earlier than ED/ hospital
- 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

- 1501 1 Value is not a valid menu option
- 1504 2 Element cannot be blank

- 1505 2 If Work-Related is "1. Yes", Patient's Occupational Industry cannot be "Not Applicable"
- 1506 2 "Not Applicable" must be reported if Work-Related is "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 Work-Related is "1. Yes", Patient's Occupation cannot be "Not Applicable"
- 1606 2 "Not Applicable" must be report if Work-Related is "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 Should not be Y92.X/Y92.XXX/Y92.XXX (where X is A-Z or 0-9) (ICD-10 CM only)
- 8905 3 ICD-10 External Cause Code should 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 should be Y92.X/Y92.XXX/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 should be U98X (where X is 0-9) (ICD-10 CA only)
- 9006 2 Element cannot be Not Applicable

ICD-10 ADDITIONAL EXTERNAL CAUSE CODE

- 9101 1 E-Code is not a valid ICD-10-CM code (ICD-10 CM only)
- 9102 3 Additional External Cause Code ICD-10 should not be equal to Primary External
- Cause Code ICD-10
- 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 Incident Location ZIP/Postal Code is any response other than "Not Known/Not Recorded" Code is not "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 Incident Location Zip/Postal Code is documented
- 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 Incident Location Zip/Postal code 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 Incident Location Zip/Postal Code is reported
- 2440 1 Single Entry Max exceeded

PROTECTIVE DEVICES

- 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 "1. None" along with element values

2,3,4,5,6,7,8,9,10, and/ or 11

2550 1 Multiple Entry Max exceeded

CHILD SPECIFIC RESTRAINT

2601 1 Value is not a valid menu option

2603 2 Element cannot be blank

2604 2 Element cannot be "Not Applicable" when Protective Device is "6. Child Restraint"

2640 1 Single Entry Max exceeded

AIRBAG DEPLOYMENT

2701 1 Value is not a valid menu option

2703 2 Element cannot be blank

2704 2 Element cannot be "Not Applicable" when Protective Device is "8. Airbag Present"

2705 2 Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other valid value

2750 1 Multiple Entry Max exceeded

Pre-hospital Information

EMS DISPATCH DATE

Rule ID Level Message

2801 1 Date is not valid

2802 1 Date out of range

2803 3 EMS Dispatch Date is earlier than Date of Birth

2804 3 EMS Dispatch Date is later than EMS Unit Arrival on Scene Date

2805 3 EMS Dispatch Date is later than EMS Unit Scene Departure Date

2806 3 EMS Dispatch Date is later than ED/Hospital Arrival Date

2807 3 EMS Dispatch Date is later than ED Discharge Date

2808 3 EMS Dispatch Date is later than Hospital Discharge Date

2809 2 Element cannot be blank

2840 1 Single Entry Max exceeded

EMS DISPATCH TIME

Rule ID Level Message

2901 1 Time is not valid

2902 1 Time out of range

2903 3 EMS Dispatch Time is later than EMS Unit Arrival on Scene Time

2904 3 EMS Dispatch Time is later than EMS Unit Scene Departure Time

2905 3 EMS Dispatch Time is later than ED/Hospital Arrival Time

- 2906 3 EMS Dispatch Time is later than ED Discharge Time
- 2907 3 EMS Dispatch Time is later than Hospital Discharge Time
- 2908 2 Element cannot be blank
- 2940 1 Single Entry Max exceeded

EMS UNIT ARRIVAL DATE AT SCENE OR TRANSFERRING FACILITY

Rule ID Level Message

- 3001 1 Date is not valid
- 3002 1 Date out of range
- 3003 3 EMS Unit Arrival on Scene Date is earlier than Date of Birth
- 3004 3 EMS Unit Arrival on Scene Date is earlier than EMS Dispatch Date
- 3005 3 EMS Unit Arrival on Scene Date is later than EMS Unit Scene Departure Date
- 3006 3 EMS Unit Arrival on Scene Date is later than ED/Hospital Arrival Date
- 3007 3 EMS Unit Arrival on Scene Date is later than ED Discharge Date
- 3008 3 EMS Unit Arrival on Scene Date is later than Hospital Discharge Date
- 3009 3 EMS Unit Arrival on Scene Date minus EMS Dispatch Date is greater than 7 days
- 3010 2 Element cannot be blank
- 3040 1 Single Entry Max exceeded

EMS UNIT ARRIVAL TIME AT SCENE OR TRANSFERRING FACILITY

Rule ID Level Message

- 3101 1 Time is not valid
- 3102 1 Time out of range
- 3103 3 EMS Unit Arrival on Scene Time is earlier than EMS Dispatch Time
- 3104 3 EMS Unit Arrival on Scene Time is later than EMS Unit Scene Departure Time
- 3105 3 EMS Unit Arrival on Scene Time is later than ED/Hospital Arrival Time
- 3106 3 EMS Unit Arrival on Scene Time is later than ED Discharge Time
- 3107 3 EMS Unit Arrival on Scene Time is later than Hospital Discharge Time
- 3108 2 Element cannot be blank
- 3140 1 Single Entry Max exceeded

EMS UNIT DEPARTURE DATE FROM SCENE OR TRANSFERRING FACILITY

- 3201 1 Date is not valid
- 3202 1 Date out of range
- 3203 3 EMS Unit Scene Departure Date is earlier than Date of Birth
- 3204 3 EMS Unit Scene Departure Date is earlier than EMS Dispatch Date
- 3205 3 EMS Unit Scene Departure Date is earlier than EMS Unit Arrival on Scene Date

- 3206 3 EMS Unit Scene Departure Date is later than ED/Hospital Arrival Date
- 3207 3 EMS Unit Scene Departure Date is later than ED Discharge Date
- 3208 3 EMS Unit Scene Departure Date is later than Hospital Discharge Date
- 3209 3 EMS Unit Scene Departure Date minus EMS Unit Arrival on Scene Date is greater than 7 days
- 3210 2 Element cannot be blank
- 3240 1 Single Entry Max exceeded

EMS UNIT DEPARTURE TIME FROM SCENE OR TRANSFERRING FACILITY

Rule ID Level Message

- 3301 1 Time is not valid
- 3302 1 Time out of range
- 3303 3 EMS Unit Scene Departure Time is earlier than EMS Dispatch Time
- 3304 3 EMS Unit Scene Departure Time is earlier than EMS Unit Arrival on Scene Time
- 3305 3 EMS Unit Scene Departure Time is later than ED/Hospital Arrival Time
- 3306 3 EMS Unit Scene Departure Time is later than the ED Discharge Time
- 3307 3 EMS Unit Scene Departure Time is later than Hospital Discharge Time
- 3308 2 Element cannot be blank
- 3340 1 Single Entry Max exceeded

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

9940 1 Multiple Entry Max exceeded

90000 1 Invalid value

90001 2 Element cannot be blank

90002 2 Rule ID 90002 Element cannot be "Not Known/Not Recorded" along with any other value

INITIAL FIELD SYSTOLIC BLOOD PRESSURE

Rule ID Level Message

- 3601 1 Invalid value
- 3602 2 Element cannot be blank
- 3603 3 The value is above 220
- 3606 2 The value submitted falls outside the valid range of 0-380
- 3607 3 The value is below 30
- 3640 1 Single Entry Max exceeded

INITIAL FIELD PULSE RATE

Rule ID Level Message

- 3701 1 Invalid value
- 3702 2 Element cannot be blank
- 3703 3 The value submitted is above 220
- 3706 2 The value submitted falls outside the valid of 0 300
- 3707 3 The value submitted is below 30
- 3740 1 Single Entry Max exceeded

INITIAL FIELD RESPIRATORY RATE

Rule ID Level Message

- 3801 1 Invalid value
- 3802 2 Element cannot be blank
- 3806 2 The value submitted falls outside the valid range of 0-100
- 3807 3 The value is below 5
- 3808 3 The value is above 75
- 3840 1 Single Entry Max exceeded

INITIAL FIELD OXYGEN SATURATION

Rule ID Level Message

- 3901 1 Invalid value
- 3902 2 Element cannot be blank
- 3906 2 The value submitted falls outside the valid range 0-100
- 3907 3 The value is below 40
- 3940 1 Single Entry Max exceeded

INITIAL FIELD GCS - EYE

Rule ID Level Message

4001 1 Value is not a valid menu option

4003 2 Element cannot be blank

4006 2 Element must be "Not Known/Not Recorded" when Initial Field GCS 40 – Eye is reported.

4040 1 Single Entry Max exceeded

INITIAL FIELD GCS - VERBAL

Rule ID Level Message

4101 1 Value is not a valid menu option

4103 2 Element cannot be blank

4106 2 Element must be "Not Known/Not Recorded" when Initial Field GCS 40 – Verbal is reported.

4140 1 Single Entry Max exceeded

INITIAL FIELD GCS - MOTOR

Rule ID Level Message

4201 1 Value is not a valid menu option

4203 2 Element cannot be blank

4206 2 Element must be "Not Known/Not Recorded" when Initial Field GCS 40 – Motor is reported.

4240 1 Single Entry Max exceeded

INITIAL FIELD GCS - TOTAL

Rule ID Level Message

4301 1 GCS Total is outside the valid range of 3 – 15

4303 3 Initial Field GCS - Total does not equal the sum of Initial Field GCS - Eye, Initial

Field GCS - Verbal, and Initial Field GCS - Motor, unless any of these values are

"Not Known/Not Recorded"

4304 2 Element cannot be blank

4306 2 Element must be "Not Known/Not Recorded" when Initial Field GCS 40 - Eye,

Initial Field GCS 40 – Verbal, or Initial Field GCS 40 – Motor are reported.

4340 1 Single Entry Max exceeded

INITIAL FIELD GCS 40 - EYE

Rule ID Level Message

15001 1 Value is not a valid menu option

15003 2 Element cannot be blank

15006 2 Element must be "Not Known/Not Recorded" when Initial Field GCS – Eye is reported

15040 1 Single Entry Max exceeded

INITIAL FIELD GCS 40 - Verbal

Rule ID Level Message

- 15101 1 Value is not a valid menu option
- 15103 2 Element cannot be blank
- 15106 2 Element must be "Not Known/Not Recorded" when Initial Field GCS Verbal is reported
- 15140 1 Single Entry Max exceeded

INITIAL FIELD GCS 40 - Motor

Rule ID Level Message

- 15201 1 Value is not a valid
- 15203 2 Element cannot be blank
- 15205 2 Element must be "Not Known/Not Recorded" when Initial Field GCS Motor is reported
- 15240 1 Single 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

TRAUMA CENTER CRITERIA (Steps 1 and 2)

Rule ID Level Message

- 9501 1 Value is not a valid menu option
- 9502 2 Element cannot be blank
- 9506 2 Element cannot be "Not Applicable" or "Not Known/Not recorded" along with any other valid value
- 9550 1 Multiple Entry Max exceeded

TRAUMA CENTER CRITERIA (Steps 3 and 4)

Rule ID Level Message

- 9601 1 Value is not a valid menu option
- 9602 2 Element cannot be blank
- 9607 2 Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other valid value
- 9650 1 Multiple Entry Max exceeded

PRE-HOSPITAL CARDIAC ARREST

- 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

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 ED/Hospital Arrival Date is earlier than Date of Birth
- 4513 2 ED/Hospital Arrival Date minus Injury Incident Date occurs more than 14 days after Injury Incident Date
- 4515 2 Element cannot be "Not Applicable"
- 4516 3 ED/Hospital Arrival Date is earlier than Injury Incident Date
- 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 ED/Hospital Arrival Time is earlier than Injury Incident Time
- 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

HIGHEST TRAUMA 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 is out of range
- 14303 2 Element cannot be blank
- 14304 Trauma Surgeon Arrival Date is earlier than Injury Incident Date
- 14340 1 Single Entry Max exceeded

TRAUMA SURGEON ARRIVAL TIME

Rule ID Level Message

- 14401 1 Time is not valid
- 14402 1 Time is out of range
- 14403 2 Element cannot be blank
- 14404 Trauma Surgeon Arrival Time is earlier than Injury Incident Time
- 14440 1 Single Entry Max exceeded

INITIAL ED/HOSPITAL RESPIRATORY RATE

- 5001 1 Invalid value.
- 5002 2 Element cannot be blank

- 5005 3 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 Initial ED/Hospital Respiratory Rate 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 Initial ED/Hospital Oxygen Saturation is
- "Not Known/Not Recorded"
- 5340 1 Single Entry Max exceeded

INITIAL ED/HOSPITAL GCS - EYE

- 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 Initial ED/Hospital GCS 40 Eye 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 Initial ED/Hospital GCS 40 -

Verbal 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 Initial ED/Hospital GCS 40 –

Motor 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 Initial ED/Hospital GCS - Total does not equal the sum of Initial ED/Hospital GCS

Eye, Initial ED/Hospital GCS - Verbal, and Initial ED/Hospital GCS - Motor, 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 Initial ED/Hospital GCS 40 -

Eye, Initial ED/Hospital GCS 40 – Verbal, or Initial ED/Hospital GCS 40 – Motor 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 Initial ED/Hospital GCS 40 -

Eye, Initial ED/Hospital GCS 40 – Verbal, or Initial ED/Hospital GCS 40 – Motor are reported.

5805 2 Element cannot be "Not Known/Not Recorded" along with any other valid 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 Initial ED/Hospital GCS Eye is reported.
- 15340 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 Initial ED/Hospital GCS 40 -

Motor is reported

- 15506 If patient age is less than 5, element value 6 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 Height exceeds the max of 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

- 8601 1 Invalid value
- 8602 2 Element cannot be blank
- 8603 3 Weight exceeds the max of 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", or "15. Not Tested" along with element
- values 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 Element must be and can only be "Not Applicable" when Alcohol Screen 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

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

- 6301 1 Date is not valid
- 6302 1 Date out of range
- 6303 2 Element cannot be blank
- 6307 2 ED Discharge Date is earlier than ED/Hospital Arrival Date
- 6310 3 ED Discharge Date occurs more than 365 days after ED/Hospital Arrival Date
- 6311 2 Element must be and can only be "Not Applicable" when *ED Discharge Disposition* is "Not Applicable"
- 6312 3 ED Discharge Date is earlier than Injury Incident Date

6313 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Date* cannot be earlier than *Hospital Procedure Start Date*

6314 3 *Hospital Discharge Disposition* is "Not Applicable" and *ED Discharge Date* is earlier than *Cerebral Monitor Date*

6315 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Date* cannot be earlier than *Venous Thromboembolism Prophylaxis Date*

6316 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Date* cannot be earlier than *Angiography Date*

6317 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Date* cannot be earlier than *Surgery For Hemorrhage Control Date*

6318 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Date* cannot be earlier than *Withdrawal of Life Supporting Treatment Date*

6319 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Date* cannot be earlier than *Antibiotic Therapy Date*

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 4 ED Discharge Time is earlier than ED/Hospital Arrival Time

6409 2 Element must be and can only be "Not Applicable" when **ED Discharge Date** is "Not Applicable"

6410 3 Element must be "Not Known/6Not Recorded" when *ED Discharge Date* is "Not Known/Not Recorded"

6411 3 ED Discharge Time is earlier than Injury Incident Time

6412 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Time* cannot be earlier than *Hospital Procedure Start Time*

6413 3 *Hospital Discharge Disposition* is "Not Applicable" and *ED Discharge Time* is earlier than *Cerebral Monitor Time*

6414 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Time* cannot be earlier than *Venous Thromboembolism Prophylaxis Time*

6415 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Time* cannot be earlier than *Angiography Time*

6416 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Time* cannot be earlier than *Surgery For Hemorrhage Control Time*

6417 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Time* cannot be earlier than *Withdrawal of Life Supporting Treatment Time*

6418 2 If *Hospital Discharge Disposition* is "Not Applicable" then *ED Discharge Time* cannot be earlier than *Antibiotic Therapy Time*

6440 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 Hospital Procedure Start Date is earlier than ED/Hospital Arrival Date
- 6609 2 Element cannot be blank
- 6610 2 Element must be and can only be "Not Applicable" when ICD-10 Hospital

Procedures is "Not Applicable"

6611 2 Element must be "Not Known/Not Recorded" when *ICD-10 Hospital Procedures* is "Not Known/Not Recorded"

6650 1 Multiple Entry Max exceeded

HOSPITAL PROCEDURE START TIME

Rule ID Level Message

- 6701 1 Time is not valid
- 6702 1 Time out of range
- 6706 3 Hospital Procedure Start Time is earlier than ED/Hospital Arrival Time
- 6708 2 Element cannot be blank
- 6709 2 Element must be and can only be "Not Applicable" when Hospital Procedure

Start Date is "Not Applicable"

6710 2 Element must be "Not Known/Not Recorded" when Hospital Procedure

Start Date is "Not Known/Not Recorded"

6750 1 Multiple Entry Max Exceeded

Diagnosis Information

ICD-10 INJURY DIAGNOSES

- 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)
- 8704 4 Element should not be Not Known/Not Recorded

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

Hospitals 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 WITHDRAWL SYNDROME

- 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

CATHETER-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 BLOODSTREAM 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)

- 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

- 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

Outcome Information

TOTAL ICU LENGTH OF STAY

Rule ID Level Message

7501 1 Total ICU Length of Stay is outside the valid range of 1 - 575

7502 2 Element cannot be blank

7503 3 Total ICU Length of Stay is greater than the difference between ED/Hospital Arrival Date and Hospital Discharge Date

7504 3 Value is greater than 365, please verify this is correct

TOTAL VENTILATOR DAYS

Rule ID Level Message

7601 1 Total Ventilator Days is outside the valid range of 1 - 575

7602 2 Element cannot be blank

7603 4 Total Ventilator Days should not be greater than the difference between

ED/Hospital Arrival Date and Hospital Discharge Date

7604 4 Value is greater than 365, please verify this is correct

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

7704 3 Hospital Discharge Date is earlier than EMS Dispatch Date

7705 3 Hospital Discharge Date is earlier than EMS Unit Arrival on Scene Date

7706 3 Hospital Discharge Date is earlier than EMS Unit Scene Departure Date

7707 2 Hospital Discharge Date is earlier than ED/Hospital Arrival Date

7708 2 Hospital Discharge Date is earlier than ED Discharge Date

7709 3 Hospital Discharge Date is earlier than Date of Birth

7710 3 Hospital Discharge Date minus Injury Incident Date is greater than 365 days

7711 3 Hospital Discharge Date minus ED/Hospital Arrival Date is greater than 365 days

7712 2 Element must be "Not Applicable" when ED Discharge Disposition = 4, 5, 6, 9, 10, or 11

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
- 7804 4 Hospital Discharge Time is earlier than EMS Dispatch Time
- 7805 4 Hospital Discharge Time is earlier than EMS Unit Arrival on Scene Time
- 7806 4 Hospital Discharge Time is earlier than EMS Unit Scene Departure Time
- 7807 4 Hospital Discharge Time is earlier than ED/Hospital Arrival Time
- 7808 4 Hospital Discharge Time is earlier than ED Discharge Time
- 7809 2 Element must be Not Applicable when ED Discharge Disposition = 4, 5, 6, 9, 10, or 11
- 7840 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
- 7903 2 Element must be Not Applicable when ED Discharge Disposition = 5 (Died)
- 7907 2 Element must be Not Applicable when ED Discharge Disposition = 4, 6,9,10, or 11
- 7908 2 Element cannot be Not Applicable
- 7909 2 Element cannot be "Not Known/Not Recorded" when Hospital Arrival Date and Hospital Discharge Date are not "Not Applicable" or "Not Known/Not Recorded"

Outcome Information

TOTAL ICU LENGTH OF STAY

Rule ID Level Message

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

TOTAL VENTILATOR DAYS

- 7601 1 Invalid Value
- 7602 2 Element cannot be blank
- 7603 2 Total Ventilator Days should not be greater than the difference between
- ED/Hospital Arrival Date and Hospital Discharge Date
- 7604 3 The value is above 60
- 7605 2 Total Ventilator Days is outside the valid range of 1 575

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 Hospital Discharge Date cannot be earlier than ED/Hospital Arrival Date
- 7708 2 Hospital Discharge Date cannot be earlier than ED Discharge Date
- 7711 3 Hospital Discharge Date occurs more than 365 days after ED/Hospital Arrival Date
- 7713 2 Element must be Not Applicable when ED Discharge Disposition = 5 (Died)
- 7713 2 Element must be and can only be "Not Applicable" when Hospital Discharge

Disposition is "Not Applicable"

- 7714 3 Hospital Discharge Date is earlier than Injury Incident Date
- 7715 2 Hospital Discharge Date is earlier than Hospital Procedure Start Date
- 7716 2 Hospital Discharge Date is earlier than Cerebral Monitor Date
- 7717 2 Hospital Discharge Date is earlier than Venous Thromboembolism Prophylaxis Date
- 7718 2 Hospital Discharge Date is earlier than Angiography Date
- 7719 2 Hospital Discharge Date is earlier than Surgery for Hemorrhage Control Date
- 7720 2 Hospital Discharge Date cannot be earlier than Withdrawal of Life

Supporting Treatment Date

7721 3 Hospital Discharge Date is earlier than Antibiotic Therapy Date

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 4 Hospital Discharge Time cannot be earlier than ED/Hospital Arrival Time
- $7808\,4$ Hospital Discharge Time cannot be earlier than or equal to ED Discharge Time
- 7810 2 Element must be Not Applicable when ED Discharge Disposition = 5 (Died)
- 7810 2 Element must be and can only be "Not Applicable" when **Hospital Discharge Date** is "Not Applicable"
- 7811 2 Element must be "Not Known/Not Recorded" when **Hospital Discharge Date** is "Not Known/Not Recorded"
- 7812 3 Hospital Discharge Time is earlier than Injury Incident Time
- 7813 2 Hospital Discharge Time is earlier than Hospital Procedure Start Time
- 7814 2 Hospital Discharge Time is earlier than Cerebral Monitor Time
- 7815 2 Hospital Discharge Time is earlier than Venous Thromboembolism Prophylaxis Time
- 7816 2 Hospital Discharge Time is earlier than Angiography Time
- 7817 2 Hospital Discharge Time is earlier than Surgery for Hemorrhage Control Time
- 7818 2 Hospital Discharge Time cannot be earlier than Withdrawal of Life

Supporting Treatment Time

7819 3 Hospital Discharge Time is earlier than Antibiotic Therapy Time

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 "Not Applicable" when ED Discharge Disposition is 4, 5, 6, 9, 10, or 11

7908 2 Element cannot be "Not Applicable" if ED Discharge Disposition is not 4, 5, 6, 9, 10. or 11

7909 2 Element cannot be "Not Known/Not Recorded" when Hospital Arrival Date and Hospital Discharge Date are not "Not Applicable" or "Not Known/Not Recorded"

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

Hospital Complications Information

HOSPITAL COMPLICATIONS

Rule ID Level Message

8101 1 Value is not a valid menu option

8102 2 Element cannot be blank

8103 3 Hospital Complications include Ventilator Associated Pneumonia although Total Ventilator Days is Not Applicable. Please verify.

TQIP Measures for Processes 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 Highest GCS Total is less than GCS Motor Component of Highest GCS Total

10004 2 Element must be "Not Applicable" as the AIS codes provided do not meet the reporting criteria

10005 2 Element must not be "Not Applicable" as the AIS codes provided meet the reporting criteria, unless the patients ED Discharge Disposition Date or Hospital Discharge Date is prior to the next calendar day

10006 2 Element must be "Not Known/Not Recorded" when Highest GCS 40 – Motor is reported.

10007 1 Invalid Value

10008 2 Element must be "Not Applicable" as the patient was discharged on the same date as **ED/Hospital Arrival Date**

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

10105 2 Element must not be "Not Applicable" as the AIS codes provided meet the reporting criteria, unless the patients ED Discharge Disposition Date or Hospital Discharge Date is prior to the next calendar day

10106 2 Element must be "Not Known/Not Recorded" when Highest GCS 40 – Motor is reported.

10107 2 Element must be "Not Applicable" as the patient was discharged on the same date as **ED/Hospital Arrival Date**

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 criteria

10204 2 Element must not be "Not Applicable" as the AIS codes provided meet the reporting criteria, unless the patients ED Discharge Disposition Date or Hospital Discharge Date is prior to the next calendar day

10206 2 Element must be "Not Known/Not Recorded" when Highest GCS 40 – Motor is reported.

10207 2 Element cannot be "Not Applicable" or "Not Known/Not Recorded" along with any other valid value

10208 2 Element must be "Not Applicable" as the patient was discharged on the same date as **ED/Hospital Arrival Date**

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 criteria

20605 2 Element must not be "Not Applicable" as the AIS codes provided meet the reporting criteria, unless the patients ED Discharge Disposition Date or Hospital Discharge Date is prior to the next calendar day

20606 2 Element must be "Not Known/Not Recorded" when Highest GCS - Motor is reported

20607 2 Element must be "Not Applicable" as the patient was discharged on the same

date as **ED/Hospital Arrival Date**

20608 If patient age is less than 5, Element Value 6 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 criteria
- 13604 2 Element must not be "Not Applicable" as the AIS codes provided meet the reporting criteria.
- 13640 1 Single Entry Max exceeded

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 criteria
- 13704 2 Element must not be "Not Applicable" as the AIS codes provided meet the reporting criteria
- 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 criteria
- 10305 2 Element must not be "Not Applicable" as the AIS codes provided meet the reporting criteria
- 10306 2 Element cannot be "Not Applicable" or "Not Known/Not Recorded", or "5. None" along with element values 1, 2, 3, any/ 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 Cerebral Monitor is 1, 2, 3, and/or 4

10407 3 Cerebral Monitor Date should not be earlier than ED/Hospital Arrival Date unless placed at referring facility and used for monitoring

10409 2 Element must be and can only be "Not Applicable: when Cerebral Monitor is "Not Applicable" or "5 None"

10410 2 Element must be "Not Known/Not Recorded" when **Cerebral Monitor** 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 Cerebral Monitor is 1, 2, 3, and/or 4

10506 3 Cerebral Monitor Time should not be earlier than ED/Hospital Arrival Time unless placed at referring facility and used for monitoring

10509 2 Element must be and can only be "Not Applicable" when **Cerebral Monitor Date** is "Not Applicable"

10510 2 Element must be "Not Known/Not Recorded" when **Cerebral Monitor Date** 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 VTE Prophylaxis Date is earlier than ED/Hospital Arrival Date

10708 2 Element must be and can only be "Not Applicable" when VTE Prophylaxis Type is "5.

10709 2 Element must be "Not Known/Not Recorded" when Venous

Thromboembolism Prophylaxis Type 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 VTE Prophylaxis Time is earlier than ED/Hospital Arrival Time

10809 2 Element must be and can only be "Not Applicable" when Venous

Thromboembolism Prophylaxis Date is "Not Applicable"

10810 2 Element must be "Not Known/Not Recorded" when Venous Thromboembolism

Prophylaxis Date 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

EXCLUDE: Cell Saver blood

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

EXCLUDE: Cell Saver blood

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

EXCLUDE: Cell Saver blood

PLATELETS

Rule ID Level Message

21301 1 Invalid value

21302 2 Element cannot be blank

21304 3 Value exceeds 40,000 for CC

21308 2 Element cannot be "Not Applicable"

21340 1 Single Entry Max exceeded

EXCLUDE: Cell Saver blood

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

EXCLUDE: Cell Saver blood

ANGIOGRAPHY

Rule ID Level Message

11701 1 Value is not a valid menu option

11702 2 Element cannot be blank

11704 2 Element must be and can only be "Not Applicable" when Packed Red Blood Cells and Whole Blood are 0

11705 2 Element must be "Not Known/Not Recorded" when Packed Red Blood Cells and Whole Blood 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 Angiography is "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 valid 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 Angiography is "Not Applicable" or "1. None"

11906 2 Angiography Date is earlier than ED/Hospital Arrival Date

11908 2 Angiography Date occurs more than 24 hours after ED Hospital Arrival Date

11909 2 Element must be "Not Known/Not Recorded" when **Angiography** 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 Angiography is "2. 'Angiogram only',
- 3.'Angiogram with embolization', or 4. 'Angiogram with stenting'"
- 12005 2 Element must be and can only be "Not Applicable" when Angiography is "Not Applicable" or "1. None"
- 12006 2 Angiography Time is earlier than ED/Hospital Arrival Time
- 12008 2 Angiography Time occurs more than 24 hours after ED/Hospital Arrival Time
- 12009 2 Element must be "Not Known/Not Recorded" when Angiography Date 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 Packed Red Blood Cells and Whole Blood are 0 $\,$
- 12105 2 Element must be "Not Known/Not Recorded" when Packed Red Blood Cells and Whole Blood 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 Surgery for Hemorrhage Control Date is earlier than ED/Hospital Arrival Date
- 12206 2 Element must be and can only be "Not Applicable" when Surgery For Hemorrhage Control Type is "Not Applicable" or "1. None"
- 12207 2 Element cannot be blank
- 12208 2 Surgery for Hemorrhage Control Date occurs more than 24 hours after ED Hospital Arrival Date
- 12209 2 Element must be "Not Known/Not Recorded" when Surgery For Hemorrhage

Control Type 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 Surgery for Hemorrhage Control Time is earlier than ED/Hospital Arrival Time
- 12307 2 Element cannot be blank
- 12308 2 Surgery for Hemorrhage Control Time occurs more than 24 hours after ED/Hospital Arrival Time
- 12309 2 Element must be and can only be "Not Applicable" when Surgery For

Hemorrhage Control Date is "Not Applicable"

12310 2 Element must be "Not Known/Not Recorded" when Surgery For

Hemorrhage Control Date 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 Withdrawal of Life Supporting Treatment Date is earlier than ED/Hospital Arrival Date
- 13906 2 Element must be and can only be "Not Applicable" when Withdrawal of Life Supporting

Treatment is "2. No"

- 13907 2 Element cannot be blank
- 13908 2 Element must be "Not Known/Not Recorded" when Withdrawal of Life

Supporting Treatment 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 Withdrawal of Life Supporting Treatment Time is earlier than ED/Hospital Arrival Time
- 14007 2 Element cannot be blank
- 14008 2 Element must be and can only be "Not Applicable" when Withdrawal of Life

Supporting Treatment Date is "Not Applicable"

14009 2 Element must be "Not Known/Not Recorded" when Withdrawal of Life

Supporting Treatment Date is "Not Known/Not Recorded"

14040 1 Single Entry Max exceeded

ANTIBIOTIC THERAPY

Rule ID Level Message

20701 2 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 Antibiotic Therapy is "Not Applicable" or "2. No"

20808 2 Element cannot be blank

20809 2 Element must be "Not Known/Not Recorded" when Antibiotic Therapy 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 **Antibiotic Therapy Date** is "Not Applicable"

20910 2 Element must be "Not Known/Not Recorded" when **Antibiotic Therapy Date** is "Not Known/Not Recorded"

20940 1 Single Entry Max exceeded

Appendix 2: Indiana Hospitals

See below for a list of Indiana's 123 acute care hospitals with Emergency Departments, as of 2023.

Zip Code	Facility Name	Trauma Level	District
46733	Adams Memorial Hospital	Non-Trauma Centers	3
46016	Ascension St. Vincent Anderson	Trauma Level III	6
46123	Ascension St. Vincent- Avon (Neighborhood Hospital)	Non-Trauma Centers	5
46250	Ascension St. Vincent- Castleton (Neighborhood Hospital)	Non-Trauma Centers	5
47714	Ascension St. Vincent Evansville	Trauma Levels I & II	10
46260	Ascension St. Vincent Hospital - Indianapolis	Trauma Levels I & II	5
46237	Ascension St. Vincent- Indianapolis South (Neighborhood Hospital)	Non-Trauma Centers	5
46901	Ascension St. Vincent Kokomo	Non-Trauma Centers	6
46036	Ascension St. Vincent Mercy Hospital	Non-Trauma Centers	6
46168	Ascension St. Vincent- Plainfield (Neighborhood Hospital)	Non-Trauma Centers	5
47394	Ascension St. Vincent Randolph	Non-Trauma Centers	6
47167	Ascension St. Vincent Salem Hospital	Non-Trauma Centers	8
47601	Ascension St. Vincent Warrick	Non-Trauma Centers	10
47993	Ascension St. Vincent Williamsport	Non-Trauma Centers	4
46032	Ascension St. Vincent-Carmel	Non-Trauma Centers	5
47834	Ascension St. Vincent-Clay	Non-Trauma Centers	7
46037	Ascension St. Vincent-Fishers	Non-Trauma Centers	5
47265	Ascension St. Vincent-Jennings	Non-Trauma Centers	9
47150	Baptist Health Floyd	Non-Trauma Centers	9
46714	Bluffton Regional Medical Center	Non-Trauma Centers	3
46703	Cameron Memorial Community Hospital	Non-Trauma Centers	3
47130	Clark Memorial Hospital	Non-Trauma Centers	9
47201	Columbus Regional Hospital	Non-Trauma Centers	8
46219	Community EAST Health Network Comm Hosp	Non-Trauma Centers	5

46011	Community Hosp of Anderson and Madison Co	Trauma Level III	6
46321	Community Hospital Munster	Non-Trauma Centers	1
46506	Community Hospital of Bremen	Non-Trauma Centers	2
46902	Community Howard Regional Health	Non-Trauma Centers	6
46256	Community NORTH Health Network Comm Hosp	Non-Trauma Centers	5
46227	Community SOUTH Health Network Comm Hosp	Non-Trauma Centers	5
47501	Daviess Community Hospital	Non-Trauma Centers	10
47630	Deaconess Gateway Hospital	Non-Trauma Centers	10
47670	Deaconess Gibson Hospital	Non-Trauma Centers	10
47747	Deaconess Midtown Hospital	Trauma Levels I & II	10
47240	Decatur County Memorial Hospital	Non-Trauma Centers	9
46970	Dukes Memorial Hospital	Non-Trauma Centers	3
46825	Dupont Hospital	Non-Trauma Centers	3
46514	Elkhart General Hospital	Trauma Level III	2
46202	Eskenazi Health	Trauma Levels I & II	5
47933	Franciscan Health Crawfordsville	Non-Trauma Centers	4
46307	Franciscan Health Crown Point	Trauma Level III	1
46311	Franciscan Health Dyer	Non-Trauma Centers	1
46237	Franciscan Health Indianapolis	Trauma Level III	5
47095	Franciscan Health Lafayette East	Trauma Level III	4
46360	Franciscan Health Michigan City	Non-Trauma Centers	1
46158	Franciscan Health Mooresville	Non-Trauma Centers	5
46321	Franciscan Health Munster	Non-Trauma Centers	1
47978	Franciscan Health Rensselaer	Non-Trauma Centers	1
47591	Good Samaritan Hospital	Trauma Level III	10
46526	Goshen Health	Non-Trauma Centers	2
47441	Greene County General Hospital	Non-Trauma Centers	7
46140	Hancock Health	Non-Trauma Centers	5
47112	Harrison County Hospital	Non-Trauma Centers	9
46122	Hendricks Regional Health	Non-Trauma Centers	5

47362	Henry Community Health	Non-Trauma Centers	6
47905	IU Health Arnett Hospital	Trauma Level III	4
47303	IU Health Ball Memorial Hospital	Trauma Level III	6
47421	IU Health Bedford Hospital	Non-Trauma Centers	8
47403	IU Health Bloomington Hospital	Trauma Level III	8
46041	IU Health Frankfort Hospital	Non-Trauma Centers	4
47371	IU Health Jay	Non-Trauma Centers	6
46202	IU Health Methodist Hospital	Trauma Levels I & II	5
46151	IU Health Morgan Hospital	Non-Trauma Centers	5
46032	IU Health North Hospital	Non-Trauma Centers	5
47454	IU Health Paoli Hospital	Non-Trauma Centers	8
46202	IU Health Riley Hospital for Children	Trauma Levels I & II	5
46037	IU Health Saxony Hospital	Non-Trauma Centers	5
46072	IU Health Tipton Hospital	Non-Trauma Centers	6
46123	IU Health West Hospital	Non-Trauma Centers	5
47960	IU Health White Memorial Hospital	Non-Trauma Centers	4
47371	Jay County Hospital	Non-Trauma Centers	6
46131	Johnson Memorial Hospital	Non-Trauma Centers	5
46802	Lutheran Downtown	Non-Trauma Centers	3
46804	Lutheran Hospital of Indiana	Trauma Levels I & II	3
46580	Lutheran Kosciusko Hospital	Non-Trauma Centers	2
46176	Major Hospital	Non-Trauma Centers	5
47006	Margaret Mary Health	Non-Trauma Centers	9
46952	Marion Health	Non-Trauma Centers	6
47546	Memorial Hospital and Health Care Center	Trauma Level III	10
46947	Memorial Hospital Logansport	Non-Trauma Centers	4
46601	Memorial Hospital of South Bend	Trauma Levels I & II	2
46402	Methodist Hospitals Inc Northlake Campus	Non-Trauma Centers	1
46410	Methodist Hospitals Inc Southlake Campus	Non-Trauma Centers	1
47403	Monroe Hospital	Non-Trauma Centers	8

46350	Northwest Health La Porte	Non-Trauma Centers	1
46368	Northwest Health Portage	Non-Trauma Centers	1
46383	Northwest Health Porter	Non-Trauma Centers	1
46383	Northwest Health Valparaiso Medical Center (VMC)	Non-Trauma Centers	1
47250	Norton King's Daughters' Health	Non-Trauma Centers	9
46706	Parkview DeKalb Hospital	Non-Trauma Centers	3
46750	Parkview Huntington Hospital	Non-Trauma Centers	3
46761	Parkview LaGrange Hospital	Non-Trauma Centers	3
46755	Parkview Noble Hospital	Non-Trauma Centers	3
46805	Parkview Randallia	Non-Trauma Centers	3
46845	Parkview Regional Medical Center	Trauma Levels I & II	3
46992	Parkview Wabash	Non-Trauma Centers	3
	Parkview Warsaw	Non-Trauma Centers	3
46725	Parkview Whitley	Non-Trauma Centers	3
47586	Perry County Memorial Hospital	Non-Trauma Centers	10
46260	Peyton Manning Childrens Hospital at St Vincent	Non-Trauma Centers	5
46996	Pulaski Memorial Hospital	Non-Trauma Centers	2
46135	Putnam County Hospital	Non-Trauma Centers	7
47374	Reid Health	Trauma Level III	6
47331	Reid Health Connersville	Non-Trauma Centers	6
46060	Riverview Health	Non-Trauma Centers	5
46074	Riverview Health Westfield	Non-Trauma Centers	5
46173	Rush Memorial Hospital	Non-Trauma Centers	6
46545	Saint Joseph Regional Medical Center (Mishawaka)	Non-Trauma Centers	2
46563	Saint Joseph Regional Medical Center (Plymouth)	Non-Trauma Centers	2
47274	Schneck Medical Center	Non-Trauma Centers	8
47170	Scott Memorial Health	Non-Trauma Centers	9
46312	St. Catherine Hospital East Chicago	Non-Trauma Centers	1
47025	St. Elizabeth Dearborn	Non-Trauma Centers	9
46342	St. Mary Medical Center (Hobart)	Non-Trauma Centers	1

46534	Starke Hospital	Non-Trauma Centers	2
47882	Sullivan County Community Hospital	Non-Trauma Centers	7
47802	Terre Haute Regional Hospital	Trauma Level III	7
47842	Union Hospital Clinton	Non-Trauma Centers	7
47804	Union Hospital Terre Haute	Trauma Level III	7
46052	Witham Health Services	Non-Trauma Centers	5
46077	Witham Health Services at Anson	Non-Trauma Centers	5
46975	Woodlawn Hospital	Non-Trauma Centers	2

Appendix 3: Glossary of Terms

Glossary

CO-MORBID CONDITIONS

Advanced Directive Limiting Care: The patient had a written request limiting life sustaining therapy, or similar advanced directive, present prior to arrival at your center.

Alcohol Use Disorder: (Consistent with the American Psychiatric Association (APA) DMS 5, 2013.

Always use the most recent definition provided by the APA.) Diagnosis of alcohol use disorder documented in the patient's medical record, present prior to injury.

Angina Pectoris: (Consistent with the American Heart Association (AHA), May 2015. Always use the most recent definition provided by the AHA.) Chest pain or discomfort due to coronary heart disease present prior to injury. Usually causes uncomfortable pressure, fullness, squeezing or pain in the center of the chest. Patient may also feel the discomfort in the neck, jaw, shoulder, back or arm. Symptoms may be different in women than men. A diagnosis of angina or chest pain must be documented in the patient's medical record.

Anticoagulant Therapy: Documentation in the medical record of the administration of medication (anticoagulants, antiplatelet agents, thrombin inhibitors, thrombolytic agents) that interferes with blood clotting, present prior to injury. Exclude patients who are on chronic Aspirin therapy. Some examples are:

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

Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD):

A disorder involving inattention, hyperactivity, or impulsivity requiring medication for treatment, present prior to ED/Hospital arrival. A diagnosis of ADD/ADHD must be documented in the patient's medical record.

Bleeding Disorder: (Consistent with the American Society of Hematology, 2015. Always use the most recent definition provided by the American Society of Hematology.) A group of conditions that result when the blood cannot clot properly, 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.)

Cerebral Vascular Accident (CVA): 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). A diagnosis of CVA must be documented in the patient's medical record.

Chronic Obstructive Pulmonary Disease (COPD): (Consistent with World Health Organization (WHO), 2015. Always use the most recent definition provided by the WHO.) Lung ailment that is characterized by a persistent blockage of airflow from the lungs, present prior to injury. It is not one single disease, but an umbrella term used to describe chronic lung diseases that cause limitations in lung airflow. The more familiar terms "chronic bronchitis" and "emphysema" are no longer used, but are now included within the COPD diagnosis and result in any one or more of the following:

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

A diagnosis of COPD must be documented in the patient's medical record. Do not include patients whose only pulmonary disease is acute asthma, and/or diffuse interstitial fibrosis or sarcoidosis.

Chronic Renal Failure: Chronic renal failure prior to injury that was requiring periodic peritoneal dialysis, hemodialysis, hemofiltration, or hemodiafiltration, present prior to injury. A diagnosis of chronic renal failure must be documented in the patient's medical record.

Cirrhosis: Documentation in the medical record of cirrhosis, which might also be referred to as end stage liver disease, present prior to injury. If there is documentation of prior or present esophageal or gastric varices, portal hypertension, previous hepatic encephalopathy, or ascites with notation of liver disease, then cirrhosis should be

considered present. A diagnosis of cirrhosis, or documentation of cirrhosis by diagnostic imaging studies or a laparotomy/laparoscopy, must be in the patient's medical record.

Congenital Anomalies: Documentation of a cardiac, pulmonary, body wall, CNS/spinal, GI, renal, orthopedic, or metabolic anomaly, present prior to injury. A diagnosis of a Congenital Anomaly must be documented in the patient's medical record.

Congestive Heart Failure (CHF): The inability of the heart to pump enough blood to meet the metabolic needs of the body or can do so only at an increased ventricular filling pressure, present prior to injury. 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

Current Smoker: A patient who reports smoking cigarettes every day or some days within the last 12 months, prior to injury. Excludes patients who smoke cigars or pipes or smokeless tobacco (chewing tobacco or snuff).

Currently Receiving Chemotherapy for Cancer: A patient who is currently receiving any chemotherapy treatment for cancer, 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.

Dementia: Documentation in the patient's medical record of dementia including senile or vascular dementia (e.g., Alzheimer's) present prior to injury.

Diabetes Mellitus: Diabetes mellitus that requires exogenous parenteral insulin or an oral hypoglycemic agent, present prior to injury. A diagnosis of diabetes mellitus must be documented in the patient's medical record.

Disseminated Cancer: Patients who have cancer that has spread to one or more sites in addition to the primary site AND in whom the presence of multiple metastases indicates the cancer is widespread, fulminant, or near terminal, present prior to injury. Other terms describing disseminated cancer include: "diffuse," "widely metastatic," "widespread," or "carcinomatosis." Common sites of metastases include major organs, (e.g., brain, lung, liver, meninges, abdomen, peritoneum, pleura, and/or bone). A diagnosis of cancer that has spread to one or more sites must be documented in the patient's medical record.

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

Hypertension: History of persistent elevated blood pressure requiring medical therapy, present prior to injury. A diagnosis of hypertension must be documented in the patient's medical record.

Mental/Personality Disorder: (Consistent with American Psychiatric Association (APA) DSM 5, 2013. Always use the most recent definition provided by the APA.) Documentation of the presence of pre-injury depressive disorder, bipolar disorder, schizophrenia, borderline or antisocial personality disorder, and/or adjustment disorder/post-traumatic stress disorder. A diagnosis of Mental/Personality Disorder must be documented in the patient's medical record.

Myocardial Infarction: History of a MI in the six months prior to injury. A diagnosis of MI must be documented in the patient's medical record.

Peripheral Arterial Disease (PAD): The narrowing or blockage of the vessels that carry blood from the heart to the legs, present prior to injury. It is primarily caused by the buildup of fatty plaque in the arteries, which is called atherosclerosis. PAD can occur in any blood vessel, but it is more common in the legs than the arms. A diagnosis of PAD must be documented in the patient's medical record. (Consistent with Centers for Disease Control, 2014 Fact Sheet. Always use the most recent definition provided by the CDC.)

Prematurity: Infants delivered before 37 weeks from the first day of the last menstrual period, and a history of bronchopulmonary dysplasia, or ventilator support for greater

than seven days after birth. A diagnosis of prematurity, or delivery before 37 weeks gestation, must be documented in the patient's medical record.

Steroid Use: Patients that require the regular administration of oral or parenteral corticosteroid medications within 30 days prior to injury for a chronic medical condition. Examples of oral or parenteral corticosteroid medications are prednisone and dexamethasone. Examples of chronic medical conditions include COPD, asthma, rheumatologic disease, rheumatoid arthritis, and inflammatory bowel disease. Exclude topical corticosteroids applied to the skin, and corticosteroids administered by inhalation or rectally.

Substance Abuse Disorder: (Consistent with American Psychiatric Association (APA) DSM 5, 2013. Always use the most recent definition provided by the APA.) Documentation of substance abuse disorder documented in the patient medical record, present prior to injury. A diagnosis of Substance Abuse Disorder must be documented in the patient's medical record.

HOSPITAL COMPLICATIONS

Acute Kidney Injury: (Consistent with the March 2012 Kidney Disease Improving Global Outcome (KDIGO) Guideline. Always use the most recent definition provided by the KDIGO.) Acute Kidney Injury, AKI (stage 3), is an abrupt decrease in kidney function that occurred during the patient's initial stay at your hospital.

KDIGO (Stage 3) Table:

(SCr) 3 times baseline

OR

Increase in SCr to \geq 4.0 mg/dl (\geq 353.6 μ mol/l)

OR

Initiation of renal replacement therapy OR, in patients < 18 years, decrease in eGFR to <35 ml/min per 1.73 m²

OR

Urine output <0.3 ml/kg/h for > 24 hours

OR

Anuria for > 12 hours

A diagnosis of 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 oliquria and creatinine are present.

Commented [BB(5]: Should this now be called "substance use disorder?"

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

Acute Respiratory Distress Syndrome (ARDS):

Timing: Within one week of known clinical insult or new or worsening respiratory symptoms.

Chest imaging: Bilateral opacities – not fully explained by effusions, lobar/lung collage, or Nodules Origin of edema: Respiratory failure not fully explained by cardiac failure of fluid overload. Need objective assessment (e.g., echocardiography) to exclude hydrostatic edema if no risk factor present.

Oxygenation: 200<Pa02/Fi02<=300 (at a minimum) With PEEP or CPAP>=5 cmH20c A diagnosis of ARDS must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital. (Consistent with the 2012 New Berlin Definition. Always use the most recent New Berlin definition provided.)

Alcohol Withdrawal Syndrome: Characterized by tremor, sweating, anxiety, agitation, depression, nausea, and malaise. It occurs six to 48 hours after cessation of alcohol consumption, and when uncomplicated, abates after two to five days. It may be complicated by grand mal seizures and may progress to delirium (known as delirium tremens). Must have occurred during the patient's initial stay at your hospital, and documentation of alcohol withdrawal must be in the patient's medical record. (Consistent with the 2016 World Health Organization (WHO) definition of Alcohol Withdrawal Syndrome. Always use the most recent definition provided by the WHO.)

Cardiac Arrest with CPR: 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. Cardiac arrest must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital. EXCLUDE patients who are receiving CPR on arrival to your hospital. INCLUDE patients who have had an episode of cardiac arrest evaluated by hospital personnel and received compressions or defibrillation or cardioversion or cardiac pacing to restore circulation.

Catheter-Associated Urinary Tract Infection (CAUTI) (Consistent with the January 2016 CDC defined CAUTI. Always use the most recent definition provided by the CDC.) A 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 > 2 calendar days and then removed, the date of event for the UTI must be the day of discontinuation or the next day for the UTI to be catheter-associated.)

January 2016 CDC CAUTI Criterion SUTI 1a:

Patient must meet 1, 2, and 3 below:

- 1. Patient had an indwelling urinary catheter in place for the entire day on the date of event and such catheter had been in place for >2 calendar days, on that date (day of device
 - Placement = Day 1) 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)
 - Suprapubic tenderness with no other recognized cause
 - Costovertebral angle pain or tenderness with no other recognized cause
- 3. Patient has a urine culture with no more than two species of organisms, at least one of which is a bacteria $> 10^5$ CFU/ml.

January 2016 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 with no other recognized cause
 - bradycardia with no other recognized cause
 - lethargy with no other recognized cause
 - vomiting with no other recognized cause
 - suprapubic tenderness with no other recognized cause

Patient has a urine culture with no more than two species of organisms, at least one of which is bacteria of $\geq 10^5$ CFU/ml.

A diagnosis of UTI must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Central Line-Associated Bloodstream Infection (CLABSI): (Consistent with the January 2016 CDC defined CLABSI. Always use the most recent definition provided by the CDC.) 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°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 nonculture 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 seven-day time period which includes the collection date of the positive blood, the 3 calendar days before and the three 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° C), hypothermia (<36°C), apnea, or bradycardia

AND

Organism(s) identified from blood is not related to an infection at another site ${f AND}$

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 nonculture 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 seven-day time period which includes the collection date of the positive blood, the three calendar days before and the three calendar days after.

A diagnosis of LCBSI must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Deep Surgical Site Infection: (Consistent with the January 2016 CDC defined SSI. Always use the most recent definition provided by the CDC.) 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

patient has at least **one** of the following signs or symptoms: fever (>38°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

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-dav	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		or site incisions	
CBGC	Coronary artery bypass graft with ches	t 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			

A diagnosis of SSI must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Deep Vein Thrombosis (DVT): The formation, development, or existence of a blood clot or thrombus within the vascular system, which may be coupled with inflammation. The patient must be treated with anticoagulation therapy and/or placement of a vena cava filter or clipping of the vena cava. A diagnosis of DVT must be documented in the patient's medical record. This diagnosis may be confirmed by a venogram, ultrasound, or CT, and must have occurred during the patient's initial stay at your hospital.

Extremity Compartment Syndrome: A condition does not present at admission in which there is documentation of tense muscular compartments of an extremity through clinical assessment or direct measurement of intracompartmental pressure requiring fasciotomy. Compartment syndromes usually involve the leg but can also occur in the forearm, arm, thigh, and shoulder. A diagnosis of extremity compartment syndrome must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital. Only record as a complication if it is originally missed, leading to late recognition, a need for late intervention, and has threatened limb viability.

Myocardial Infarction (MI): An acute myocardial infarction must be noted with documentation of any of the following:

Documentation of ECG changes indicative of acute MI (one or more of the following three):

- 1. ST elevation > 1 mm in two or more contiguous leads
- 2. New left bundle branch block
- 3. New q-wave in two or more contiguous leads

OR

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

OR

Physician diagnosis of myocardial infarction

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

Organ/Space Surgical Site Infection: (Consistent with the January 2016 CDC defined SSI. Always use the most recent definition provided by the CDC.) 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:

a. 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) b. organisms are identified from an aseptically-obtained 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).

c. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test

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

			A. Carrier and Car	
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 don	or site incisions	
CBGC	Coronary artery bypass graft with ches	st incision only		
CRAN	Craniotomy			
FUSN	Spinal fusion			
FX	Open reduction of fracture			
HER	Herniorrhaphy			
HPRO	Hip prosthesis	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	LUNG	Other infections of the respiratory tract
BRST	Breast abscess mastitis	MED	Mediastinitis
CARD	Myocarditis or pericarditis	MEN	Meningitis or ventriculitis
DISC	Disc space	ORAL	Oral cavity (mouth, tongue, or gums)
EAR	Ear, mastoid	OREP	Other infections of the male or female reproductive tract
EMET	Endometritis	PJI	Periprosthetic Joint Infection
ENDO	Endocarditis	SA	Spinal abscess without meningitis
EYE	Eye, other than conjunctivitis	SINU	Sinusitis
GIT	GI tract	UR	Upper respiratory tract
HEP	Hepatitis	USI	Urinary System Infection
IAB	Intraabdominal, not specified	VASC	Arterial or venous infection
IC	Intracranial, brain abscess or dura	VCUF	Vaginal cuff
JNT	Joint or bursa		

A diagnosis of SSI must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Osteomyelitis: (Consistent with the January 2016 CDC definition of Bone and Joint infection. Always use the most recent definition provided by the CDC.) Osteomyelitis must meet at least **one** of the following criteria:

- 1. Patient has organisms identified from bone by culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis and treatment (e.g., 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°C), swelling*, pain or tenderness*, heat*, or 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 (e.g., not active surveillance culture/testing (ASC/AST) in a patient with imaging test evidence suggestive of infection (e.g., x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc.]), which if equivocal is supported by clinical correlation (i.e., physician documentation of antimicrobial treatment for osteomyelitis).

b. imaging test evidence suggestive of infection (e.g., x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc.]), which if equivocal is supported by clinical correlation (i.e., physician documentation of antimicrobial treatment for osteomyelitis).

* With no other recognized cause

A diagnosis of osteomyelitis must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Pulmonary Embolism: 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. Consider the condition present if the patient has a V-Q 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. Must have occurred during the patient's initial stay at your hospital.

Pressure Ulcer: (Consistent with the National Pressure Ulcer Advisory Panel (NPUAP) 2014. Always use the most recent definition provided by the NPUAP.) 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. Documentation of pressure ulcer must be in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Severe Sepsis: (Consistent with the American College of Chest Physicians and the Society of Critical Care Medicine October 2010. Always use the most recent definition provided by the American College of Chest Physicians and the Society of Critical Care Medicine.)

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

Septic shock: sepsis with persisting arterial hypotension or hypoperfusion despite adequate fluid resuscitation. A diagnosis of sepsis must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Stroke/CVA: A focal or global neurological deficit of rapid onset and NOT present on admission. 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 ≥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.)

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. A diagnosis of Stroke/CVA must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Superficial Incisional Surgical Site Infection: (Consistent with the January 2016 CDC defined SSI. Always use the most recent definition provided by the CDC.) 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 subcutaneous 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 designer.

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)

A diagnosis of SSI must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Unplanned Admission to ICU: 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. Must have occurred during the patient's initial stay at your hospital. EXCLUDE patients in which ICU care was required for postoperative care of a planned surgical procedure.

Unplanned Intubation: Patient requires placement of an endotracheal tube and mechanical or assisted ventilation because of the onset of respiratory or cardiac failure manifested by severe respiratory distress, hypoxia, hypercarbia, or respiratory acidosis. In patients who were intubated in the element or Emergency Department, or those intubated for surgery, unplanned intubation occurs if they require reintubation > 24 hours after extubating. Must have occurred during the patient's initial stay at your hospital.

Unplanned Return to the Operating Room: Unplanned return to the operating room after initial operation management for a similar or related previous procedure. Must have occurred during the patient's initial stay at your hospital.

Ventilator-Associated Pneumonia (VAP): (Consistent with the January 2016 CDC defined VAP. Always use the most recent definition provided by the CDC.) 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. If the patient is admitted or transferred into a facility on a ventilator, the day of admission is considered Day 1.

VAP Algorithm (PNU2 Bacterial or Filamentous Fungal Pathogens):

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 one of the following:	At least one of the following:	At least one of the following:		

New or progressive and persistent infiltrate	• Fever (>38°C or >100.4°F)	Organism identified from blood Organism identified from pleural fluid Positive quantitative culture from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing.)
Consolidation	Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³)	 ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (e.g., Gram's stain)
Cavitation	 For adults ≥70 years old, altered mental status with no other recognized cause 	Positive quantitative culture of lung tissue
		Histopathologic exam shows at least one of the following evidences of pneumonia:
Pneumatoceles, in infants ≤1 year old	AND at least two of the following:	 Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles and alveoli
NOTE: In patients without underlying pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test reslut is acceptable.	New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements New onset or worsening cough, or dyspnea, or tachypnea Rales or bronchial breath sounds Worsening gas exchange (e.g., 0, desaturations (e.g., PaO₂/FiO₂≤240), increased oxygen requirements, or increased ventilator demand)	Evidence of lung parenchyma invasion by fungal hyphae or pseudohyphae

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

IMAGING TEST EVIDENCE	SIGNS/SYMPTOMS	LABORATORY
Two or more serial chest imaging test results with at least one of the following:	At least one of the following:	At least one of the following:
New or progressive and persistent infiltrate	• Fever (>38°C or >100.4°F)	Virus, Bordetella, Legionella, Chlamydia or Mycopiasma 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 (e.g., not Active Surveillance Culture/Testing (ASC/AST).
Consolidation	 Leukopenia (≤4000 WBC/mm²) or leukocytosis (≥12,000 WBC/mm²) 	Fourfold rise in paired sera (IgG) for pathogen (e.g., influenza viruses, Chlamydia)
Cavitation	For adults ≥70 years old, altered mental status with no other recognized cause	 Fourfold rise in Legionella pneumophila serogroup 1 antibody titer to ≥1:128 in paired acute and convalescent sera by indirect IFA.
 Pneumatoceles, in infants ≤1 year old 	AND at least one of the following:	

NOTE: In patients without underlying pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.	New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements New onset or worsening cough, or dyspnea, or tachypnea Rales or bronchial breath sounds Worsening gas exchange (e.g., 0, desaturations (e.g., PaO₂/FiO₂≤240), increased oxygen requirements, or increased ventilator demand)	Detection of L. pneumophila serogroup 1 antigens in urine by RIA or EIA
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VAP Algorithm (PNU3 Immunocompromised Patients):

IMAGING TEST EVIDENCE	SIGNS/SYMPTOMS	LABORATORY
Two or more serial chest	Patient who is immunocompromised has	At least one of the following:
imaging test results with at least one of the following:	at least <i>one</i> of the following:	
New or progressive and persistent infiltrate	• Fever (>38°C or >100.4°F)	Identification of matching Candida spp. from blood and sputum, endotracheal aspirate, BAL or protected specimen brushing.11,12,13 Evidence of fungi from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing) from one of the following: Direct microscopic exam Positive culture of fungi Non-culture diagnostic laboratory test
 Consolidation 	For adults ≥70 years old, altered mental status with no other recognized cause New onset of purulent sputum3, or change in character ofsputum4, or increased respiratory secretions, or	Any of the following from: LABORATORY CRITERIA DEFINED UNDER PNU2
Cavitation	increased suctioning requirements New onset or worsening cough, or dyspnea, or tachypnea5 Rales6 or bronchial breath sounds	
 Pneumatoceles, in infants ≤1 year old 		
NOTE: In patients without underlying pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease),	Worsening gas exchange (e.g., O2 desaturations [e.g., PaO2/FiO2 <240]7, increased oxygen requirements, or increased ventilator demand)	

one definitive chest imaging test result is acceptable.

- Hemoptysis
- Pleuritic chest pain

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

IMAGING TEST EVIDENCE SIGNS/SYMPTOMS/LABORATORY Two or more serial chest imaging test Worsening gas exchange (e.g., O2 desaturation [e.g. pulse oximetry <94%], results with at least one of the following: increased oxygen requirements, or increased ventilator demand) New or progressive and persistent infiltrate AND at least three of the following: Consolidation Temperature instability Cavitation Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥15,000 WBC/mm³) and left shift (≥10% band forms) Pneumatoceles, in infants ≤1 New onset of purulent sputum, or change in character of sputum, year old or increased respiratory secretions, or increased suctioning requirements NOTE: In patients without underlying Apnea, tachypnea, nasal flaring with retraction of chest wall, or pulmonary or cardiac disease (e.g., nasal flaring with grunting respiratory distress syndrome, Wheezing, rales, or rhonchi bronchopulmonary dysplasia, pulmonary Cough edema, or chronic obstructive pulmonary Bradycardia (<100 beats/min) or tachycardia (>170 beats/min) disease), one definitive imaging test result is acceptable.

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

VAP Algorithm ALTERNATE CRITERIA (PNUT), for children >1 year old or \$12 years old:		
IMAGING TEST EVIDENCE	SIGNS/SYMPTOMS/LABORATORY	
Two or more serial chest imaging test results with at least one of the following:	At least three of the following:	
 New or progressive and persistent infiltrate 	 Fever (>38.0°C or >100.4°F) or hypothermia (<36.0°C or <96.8°F) 	
Consolidation	 Leukopenia (≤4000 WBC/mm²) or leukocytosis (≥15,000 WBC/mm²) 	
Cavitation	 New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements 	
 Pneumatoceles, in infants ≤1 year old 	New onset or worsening cough, or dyspnea, apnea, or tachypnea	
NOTE: In patients without underlying	Rales or bronchial breath sounds	
pulmonary or cardiac disease (e.g., respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive imaging test result is acceptable.	 Worsening gas exchange (e.g., O₂ desaturations [e.g., pulse oximetry <94%], increased oxygen requirements, or increased ventilator demand) 	

A diagnosis of Pneumonia must be documented in the patient's medical record and must have occurred during the patient's initial stay at your hospital.

Other Terms

Patient's Occupational Industry: The occupational history associated with the patient's work environment.

Element Value Definitions:

Finance and Insurance - The finance and insurance sector comprises establishments

primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. Three principal types of activities are identified:

- Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities.
- Pooling of risk by underwriting insurance and annuities.
- Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs.

Real Estate - Industries in the real estate subsector group establishments that are primarily engaged in renting or leasing real estate to others; managing real estate for others; selling, buying, or renting real estate for others; and providing other real estate related services, such as appraisal services.

Manufacturing - The manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. Establishments in the manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that make new products by hand, such as bakeries, candy stores, and custom tailors, may also be included in this sector.

Retail Trade - The retail trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are, therefore, organized to sell merchandise in small quantities to the general public. This sector comprises two main types of retailers:

- Store retailers operate fixed point-of-sale locations, located, and designed to attract a high volume of walk-in customers.
- Non-store retailers, like store retailers, are organized to serve the general public, but their retailing methods differ.

<u>Transportation and Public Utilities</u> - The transportation and warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. The utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal.

<u>Agriculture, Forestry, Fishing</u> - The agriculture, forestry, fishing, and hunting sector comprises establishments primarily engaged in growing crops, raising animals,

harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats. The establishments in this sector are often described as farms, ranches, dairies, greenhouses, nurseries, orchards, or hatcheries.

Professional and Business Services. - The professional, scientific, and technical services sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. These activities require a high degree of expertise and training. The establishments in this sector specialize according to expertise and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

Education and Health Services - The educational services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and/or accommodation services to their students. The health care and social assistance sector comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities.

<u>Construction</u> - The construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector. Construction work done may include new work, additions, alterations, or maintenance and repairs.

Government – Civil service employees, often called civil servants or public employees, work in a variety of elements such as teaching, sanitation, health care, management, and administration for the federal, state, or local government. Legislatures establish basic prerequisites for employment such as compliance with minimal age and educational requirements and residency laws.

<u>Natural Resources and Mining</u> - The mining sector comprises establishments that

extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

<u>Information Services</u> - The information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data.

Wholesale Trade - The wholesale trade sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing.

Leisure and Hospitality - The arts, entertainment, and recreation sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector comprises (1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and (3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests. The accommodation and food services sector comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.

Other Services - The other services sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting, or administering religious activities, grantmaking, advocacy,

Patient's Occupation: The occupation of the patient.

Element Value Definitions:

<u>Business and Financial Operations Occupations</u> - Buyers and purchasing agents, accountants and auditors, claims adjusters, appraisers, examiners, and investigators;

human resources workers, market research analysts and marketing specialists, business operations specialists

<u>Architecture and Engineering Occupations</u> - Landscape architects, surveyors, cartographers, and photogrammetrists; agricultural engineers, chemical engineers, civil engineers, electrical engineers

<u>Community and Social Services Occupations</u> - Marriage and family therapists, substance abuse and behavioral disorder counselors, healthcare social workers, probation officers, and correctional treatment specialists, clergy

Education, Training, and Library Occupations - Engineering and architecture teachers, postsecondary math and computer teachers, postsecondary nursing instructors and teachers, postsecondary law, criminal justice, and social work teachers; postsecondary preschool and kindergarten teachers, librarians

<u>Healthcare Practitioners and Technical Occupations</u> - Dentists, all other specialists, dietitians and nutritionists, physicians and surgeons, nurse practitioners, cardiovascular technologists and technicians, emergency medical technicians and paramedics

<u>Protective Service Occupations</u> – Firefighters, police officers, animal control workers, security guards, lifeguards, ski patrol, and other recreational protective service

<u>Building and Grounds Cleaning and Maintenance</u> - Building cleaning workers, landscaping and groundskeeping workers, pest control workers, pesticide handlers, sprayers and applicators, vegetation, tree trimmers and pruners.

<u>Sales and Related Occupations</u> - Advertising sales agents, retail salespersons, counter and rental clerks, door-to-door sales workers, news and street vendors and related workers, real estate brokers

<u>Farming, Fishing, and Forestry Occupations</u> - Animal breeders, fishers and related fishing workers, agricultural equipment operators, hunters and trappers, forest and conservation workers, logging workers

<u>Installation, Maintenance, and Repair Occupations</u> - Electric motor, power tool, and related repairers; aircraft mechanics and service technicians, automotive glass installers and repairers; heating, air conditioning, and refrigeration mechanics and installers; maintenance workers, machinery and industrial machinery installation, repair, and maintenance

<u>Transportation and Material Moving Occupations</u> - Rail transportation workers, all other subway and streetcar operators; packers and packagers, hand refuse and recyclable material collectors, material moving workers, all other driver/sales workers

<u>Management Occupations</u> - Public relations and fundraising managers, marketing and sales managers, administrative services managers; transportation, storage, and distribution managers, food service managers

<u>Computer and Mathematical Occupations</u> - Computer occupations, all other web developers, software developers and programmers, database administrators, statisticians

<u>Life, Physical, and Social Science Occupations</u> – Psychologists, economists, foresters, zoologists and wildlife biologists, political scientists, agricultural and food science technicians

<u>Legal Occupations</u> - Lawyers and judicial law clerks, paralegals and legal assistants, court reporters, administrative law judges, adjudicators, and hearing officers; arbitrators, mediators, and conciliators; title examiners, abstractors, and searchers

<u>Arts, Design, Entertainment, Sports, and Media</u> - Artists and related workers, all other athletes, coaches, umpires, and related workers; dancers and choreographers, reporters and correspondents, interpreters and translators, photographers

<u>Healthcare Support Occupations</u> - Nursing, psychiatric, and home health aides; physical therapist assistants and aides, veterinary assistants and laboratory animal caretakers, healthcare support workers, and all other medical assistants

<u>Food Preparation and Serving-Related</u> – Bartenders, cooks, institution and cafeteria cooks, fast food dishwashers, counter attendants; cafeteria, food concession, and coffee shop waiters and waitresses

<u>Personal Care and Service Occupations</u> - Animal trainers, amusement and recreation attendants, barbers, hairdressers, hairstylists and cosmetologists; baggage porters, bellhops; concierges tour guides and escorts; recreation and fitness workers

<u>Office and Administrative Support Occupations</u> - Bill and account collectors, gaming cage workers, payroll and timekeeping clerks, tellers; court, municipal, and license clerks; hotel, motel, and resort desk clerks

Construction and Extraction Occupations - Brick masons, block masons, and

stonemasons; carpet, floor, and tile installers and finishers; construction laborers, electricians, pipelayers, plumbers, pipefitters, and steamfitters; roofers

<u>Production Occupations</u> - Electrical, electronics, and electromechanical assemblers; engine and other machine assemblers, structural metal fabricators, and fitters; butchers and meat cutters, machine tool cutting setters, operators, and tenders; metal and plastic welding, soldering, and brazing workers

<u>Military-Specific Occupations</u> - Air crew officers, armored assault vehicle officers, artillery and missile officers, infantry officers, military officer, special and tactical operations leaders

<u>All Other Occupations</u> - Dry cleaning and laundry services, personal care services, and death care services; pet care services, photofinishing services, temporary parking services, dating services, etc.

Foreign Visitor - Any person visiting a country other than his/her usual place of residence for any reason

Intermediate Care Facility - A facility providing a level of medical care that is less than the degree of care and treatment that a hospital or skilled nursing facility is designed to provide but greater than the level of room and board

Home Health Service - A certified service approved to provide care received at home as part-time skilled nursing care, speech therapy, physical or occupational therapy or part-time services of home health aides

Homeless - A person who lacks housing. The definition also includes a person living in transitional housing or a supervised public or private facility providing temporary living quarters.

Hospice - An organization which is primarily designed to provide pain relief, symptom management and supportive services for the terminally ill and their families

Migrant Worker - A person who temporarily leaves his/her principal place of residence within a country to accept seasonal employment in the same or different country.

Operative and/or Essential Procedures - Procedures performed in the Operating Room, Emergency Department, or Intensive Care Unit that were essential to the

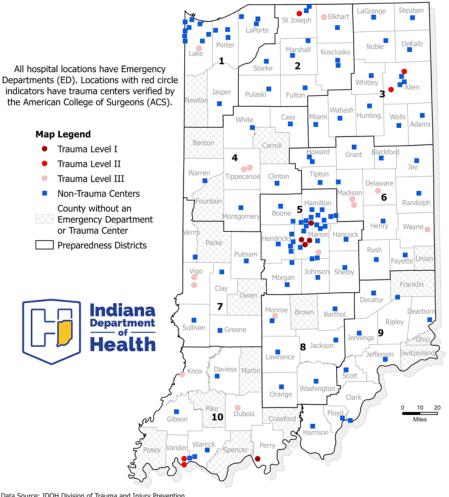
diagnoses, stabilization, or treatment of the patient's specific injuries. Repeated diagnostic procedures (e.g., repeated CT scan) should not be recorded (record only the first procedure).

Skilled Nursing Care - Daily nursing and rehabilitative care that is performed only by or under the supervision of skilled professional or technical personnel. Skilled care includes administering medication, medical diagnosis and minor surgery.

Undocumented Citizen - A national of another country who has entered or stayed in another country without permission

Appendix 4

Indiana Statewide Trauma Center and Emergency Department Map



Data Source: IDOH Division of Trauma and Injury Prevention Map Author: IDOH Office of Data Analytics Date: 10/06/2023

Appendix 5: Acronyms

- AIS: Abbreviated Injury Scale
- CDC: Centers for Disease Control and Prevention
- 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