Indiana Department of Health

Trauma Data Dictionary 2023

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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)
   T20-T28 with 7th character modifier of An ONLY (burns by specific body parts – initial encounter)
   T30-T32 (burn by TBSA percentages)
   T79.A1-T79.A9 with 7th character modifier of An ONLY (Traumatic Compartment Syndrome – initial encounter)

B. **Excluding the following isolated injuries:**

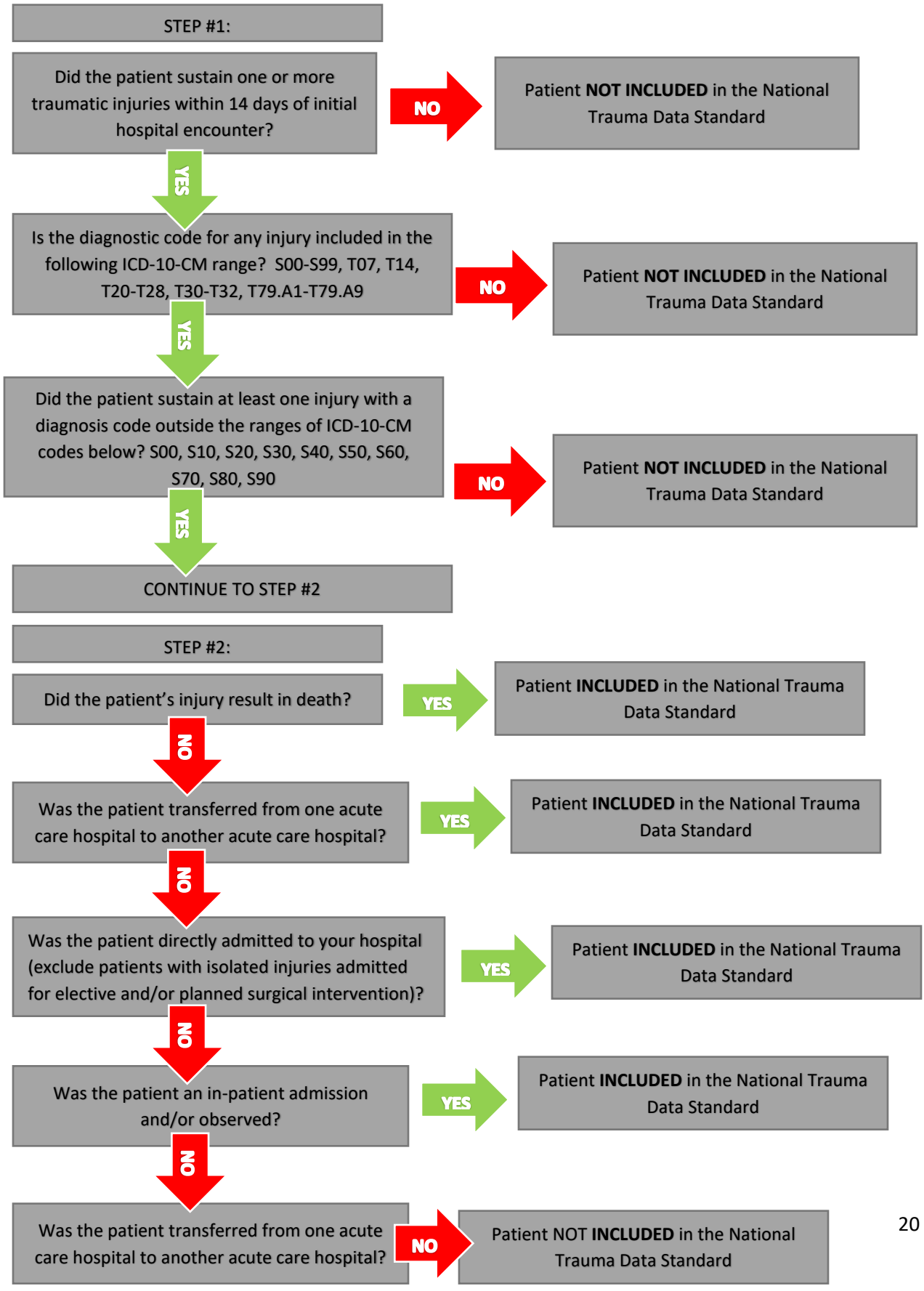
ICD-10-CM:
S00 (Superficial injuries of the head)
S10 (Superficial injuries of the neck)
S20 (Superficial injuries of the thorax)
S30 (Superficial injuries of the abdomen, pelvis, lower back and external genitals)
S40 (Superficial injuries of shoulder and upper arm)
S50 (Superficial injuries of elbow and forearm)
S60 (Superficial injuries of wrist, hand and fingers)
S70 (Superficial injuries of hip and thigh)
S80 (Superficial injuries of knee and lower leg)
S90 (Superficial injuries of ankle, foot and toes)

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

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



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 represent 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.

XSD Data Type	xs: string		**XSD Element / Domain (Simple Type)**		MedicalRecordNumber
Multiple Entry Configuration		No	**Accepts Null Value**	Yes	
Required in XSD	Yes		**Min. Constraint:**	**Max. Constraint:**	

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.

XSD Data Type	xs: string		**XSD Element / Domain (Simple Type)**		AccountNumber
Multiple Entry Configuration		No	**Accepts Null Value**	Yes	
Required in XSD	Yes		**Min. Constraint:**	**Max. Constraint:**	

Element Values

- Relevant value for data element

Additional Information

- Auto-generated by the hospital

INJURY INCIDENT DATE* TR 5.1

National & State Element
Data Format [date]

NTDB/ImageTrend Description

The date the injury occurred.

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

Element Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Estimates of date 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 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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INJURY INCIDENT TIME * TR 5.18

National & State Element
Data Format [time]

NTDB/ImageTrend Description

The time the injury occurred.

XSD Data Type	xs: time	**XSD Element / Domain (Simple Type)**	IncidentTime
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 HHMM
- HHMM should be collected as 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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PATIENT'S LAST NAME TR 1.9

Data Format [text]

ImageTrend Description

The patient's last name.

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

Element Values

- Relevant value for data element

Data Source

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

PATIENT'S FIRST NAME TR 1.8

Data Format [text]

ImageTrend Description

The patient's first name.

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

Element Values

- Relevant value for data element

Data Source

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

PATIENT'S MIDDLE INITIAL TR 1.10

Data Format [text]

ImageTrend Description

The patient's middle initial.

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

Element Values

- Relevant value for data element

Data Source

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

PATIENT'S SOCIAL SECURITY # TR 1.11

Data Format [number]

ImageTrend Description

The patient's social security number.

XSD Data Type	xs: number	**XSD Element / Domain (Simple Type)**	SocialSecurityNumber
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 ###-##-####

Data Source

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

DATE OF BIRTH * TR 1.7

National & State Element
Data Format [date]

NTDB/ImageTrend Description

The patient's date of birth.

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

Element Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- If Date of Birth equals Injury Date, then the Age and Age Units variables must be completed.
- If date of birth is "Not Known/Not Recorded" complete variables: Age and Age Units

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 (at date of incident) * TR 1.12

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 (Simple Type)**	Age
Multiple Entry Configuration	No	**Accepts Null Value**	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
- 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 Units
- The null value "Not Applicable" is reported if Date of Birth is documented

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/ImageTrend Description

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

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

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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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 (Simple Type)**	Race
Multiple Entry Configuration	Yes, max 2	**Accepts Null Value**	Yes, common null values
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).

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

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"

Data Source

- 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 (Simple Type)**	Ethnicity
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
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 (Simple 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

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: integer		**XSD Element / Domain (Simple Type)**	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.

Data Source

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

National Element

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WEIGHT* (kg) TR1.6.5

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

NTDB Description

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

ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	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
- The null value "Not Known/Not Recorded" is reported if the patient's Initial ED/Hospital Weight was not measured within 24 hours or less of ED/hospital arrival.

Data Source

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

National Element

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PATIENT'S HOME ADDRESS TR 1.18

Data Format [text]

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Data Source

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

Address Line 2 TR 1.18.1

Data Format [text]

ImageTrend Description

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

XSD Data Type	xs:string	**XSD Element / Domain (Simple Type)**	Address Line 2
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- Relevant value for data element

Data Source

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

PATIENT'S HOME COUNTRY* TR 1.19

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

NTDB/ImageTrend Description

The country where the patient resides.

XSD Data Type	xs: string	**XSD Element / Domain (Simple Type)**	HomeCountry
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common 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

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PATIENT'S HOME ZIP/Postal CODE* TR 1.20

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 (Simple Type)**	HomeZip
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null 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 digit code or 9 digit code for US and CA
- 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

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PATIENT'S HOME CITY* TR 1.21

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

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	**XSD Element / Domain (Simple 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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PATIENT'S HOME COUNTY* TR 1.22

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

NTDB/ImageTrend Description

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

XSD Data Type	xs: string	**XSD Element / Domain (Simple 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 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

Data Source

- Face Sheet
- Billing Sheet
- Admission Form

National Element

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PATIENT'S HOME STATE* TR 1.23

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 (Simple 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 complete when ZIP code is "Not Known/Not Recorded"
- 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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PATIENT'S ALTERNATE RESIDENCE* TR 1.13

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

NTDB/ImageTrend Description

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

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

Element Values

Homeless

Migrant Worker

Undocumented Citizen

Additional Information

- Only complete when ZIP code 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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PRIMARY METHOD OF PAYMENT* TR 2.5

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

ImageTrend Description

Primary source of payment for hospital care.

XSD Data Type	xs:string	**XSD Element / Domain (Simple 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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OTHER BILLING SOURCE TR2.13

Data Format [text]

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Additional Information

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

Data Source

- 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.

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

Element Values

- Relevant value for data element

Data Source

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

SECONDARY METHOD OF PAYMENT TR 2.7

Data Format [combo] single-choice

ImageTrend Description

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

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

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	

Data Source

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

SECONDARY OTHER BILLING SOURCE TR2.14

Data Format [text]

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Additional Information

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

Data Source

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

THIRD METHOD OF PAYMENT TR2.18

Data Format [combo] single-choice

ImageTrend Description

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

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

Element Values

Medicare Supp	Private / Commercial Insurance
Managed Care	Workers Compensation
No Fault Automobile	Other
Not Billed (for any reason)	10_Self Pay
Medicare	Other Government
Medicaid	

Data Source

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

THIRD OTHER BILLING SOURCE TR2.19

Data Format [text]

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Additional Information

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

Data Source

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

BILLED HOSPITAL CHARGES TR 2.9

Data Format [number]

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Data Source

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

WORK-RELATED* TR 2.10

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

NTDB/ImageTrend Description

Indication of whether the injury occurred during paid employment.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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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PATIENT'S OCCUPATIONAL INDUSTRY* TR 2.6

National & State Element

Data Format [combo] single-choice

NTDB/ImageTrend Description

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

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

Element Values

Finance, Insurance, and Real Estate	Construction
Manufacturing	Government
Retail Trade	Natural Resources and Mining
Transportation and Public Utilities	Information Services
Agriculture, Forestry, Fishing	Wholesale Trade
Professional and Business Services	Leisure and Hospitality
Education and Health Services	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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PATIENT'S OCCUPATIONAL INDUSTRY DESCRIPTION TR2.27

Data Format [text]

ImageTrend Description

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

XSD Data Type		**XSD Element / Domain (Simple Type)**	
Multiple Entry Configuration	No		
Required in XSD	No	**Accepts Null Value**	No

Element Values

- Relevant value for data element

Additional Information

- Only completed if injury is work-related

Data Source

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

PATIENT'S OCCUPATION* TR 2.11

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

NTDB/ImageTrend Description

The occupation of the patient.

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

Element Values

Business and Financial Operations Ocp	Life, Physical, and Social Science Ocp
Architecture and Engineering Ocp	
Community and Social Services Ocp	Legal Ocp
Education, Training, and Library Ocp	Arts, Design, Entertainment, Sports, and Media
Healthcare Practitioners and Technical Ocp	
Protective Service Ocp	Healthcare Support Ocp
Building and Grounds Cleaning and Maintenance	Food Prep & Serving Related
	Personal Care & Service Ocp
Sales and Related Ocp	Office & Admin Support Ocp
Farming, Fishing, and Forestry Ocp	Construction and Extraction Ocp
Installation, Maintenance, and Repair Ocp	
Transportation and Material Moving Ocp	Production Ocp
Management Ocp	Military Specific Ocp
Computer and Mathematical 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.

XSD Data Type		**XSD Element / Domain (Simple Type)**	
Multiple Entry Configuration	No	**Accepts Null Value**	No
Required in XSD	No		

Element Values

- Relevant value for data element

Additional Information

- Only completed if injury is work-related

Data Source

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

Injury Information

INCIDENT LOCATION ZIP/Postal CODE* TR 5.6

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 (Simple 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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INCIDENT COUNTRY* TR 5.11

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

Element Values

- Relevant value for data element

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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INCIDENT CITY* 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 (Simple Type)**	IncidentCity
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

- 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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INCIDENT COUNTY* TR 5.9

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 / Domain (Simple Type)**	IncidentCounty
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

- 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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INCIDENT STATE* TR 5.7

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 (Simple Type)**	IncidentState
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- Relevant value for data element (two digit 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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ICD-10 LOCATION CODE* TR200.5

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 (Simple Type)**	icd_location_id
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 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.

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

Element Values

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

Data Source

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

INJURY DESCRIPTION TR 20.12

Data Format [text]

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Data Source

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

ICD-10 PRIMARY EXTERNAL CAUSE CODE* TR 200.3

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 Data Type	xs: string	**XSD Element / Domain (Simple Type)**	PrimaryECodeIcd10
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

- 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 Data Type	xs: string	**XSD Element / Domain (Simple Type)**	AdditionalECodeIcd10
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 2)
- 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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ICD-10 INTENTIONALITY TR 200.3.2

Data Format [number]

ImageTrend Description

Intentionality.

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

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 (Simple Type)**	TraumaType
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Relevant ICD-10-CM code value for intentionality.

- Blunt
- Penetrating
- Burn
- Other

BARRIERS TO PATIENT CARE TR 14.46

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.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	BarrierPatientCare
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

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

Data Source

- 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.

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

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)

Data Source

- 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/ImageTrend Description

The mode of transport delivering the patient to your hospital.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	TransportMode
Multiple Entry Configuration	No	**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

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 (Simple 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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INTER-FACILITY TRANSFER* TR 25.54

National & State Element

Data Format [combo] single-choice

NTDB/ImageTrend Description

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

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

Element Values

Yes No

Additional Information

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

Data Source

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

National Element

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MASS CASUALTY INCIDENT TR 14.37

Data Format [combo] single-choice

ImageTrend Description

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

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

Element Values

No Yes

Data Source

- 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.

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

Element Values

No Yes

Data Source

- 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).

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

Element Values

- Relevant value for data element

Data Source

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

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.

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

Element Values

- Relevant value for data element

Data Source

- EMS Run Report
- Other ED Documentation

VEHICULAR INJURY INDICATORS TR 14.41

Data Format [combo] single-choice

ImageTrend Description

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

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

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	

Data Source

- 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.

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

Element Values

- Relevant value for data element

Data Source

- 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.

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

Element Values

Driver	Middle	Right
Left (Non-driver)	Other	

Data Source

- EMS Run Report
- Other ED Documentation

HEIGHT OF FALL IN FEET TR 14.45

Data Format [number]

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Data Source

- EMS Run Report
- Other ED Documentation

Trauma Triage Criteria (Steps 1 and 2)* TR 17.22

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 (Simple Type)**	ServiceTypeID
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null 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

- EMS Run Report

Trauma Triage Criteria (Steps 3 and 4)* TR 17.47

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

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

Element Values

- Fall adults: > 20 ft. (one story is equal to 10 ft.)
- Motorcycle crash > 20 mph
- Fall
    - For children: > 10 ft. or 2-3 times the height of the child
    - 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
- Burns
- 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

- EMS Run Report

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 (Simple Type)**	ProtectiveDevice
Multiple Entry Configuration	No	**Accepts 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) – TR29.2
8. Airbag Present – TR29.3
9. 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 "1. None."

Data Source

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

National Element

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CHILD SPECIFIC RESTRAINT* TR 29.31

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 (Simple Type)**	ChildSpecificRestraint
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

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

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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AIRBAG DEPLOYMENT* TR 29.32

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 (Simple Type)**	AirbagDeployment
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

1. Not Applicable
2. Airbag Deployed Front (TR29.21)
3. Airbag Deployed Other (TR29.22)
4. Airbag Deployed Side (TR29.19)
5. Airbag Not Deployed (TR29.20)
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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SAFETY (Equipment) DESCRIPTION TR 29.10

Data Format [text]

ImageTrend Description

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

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

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"

Data Source

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

EMS RUN NUMBER TR 7.1

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.

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

Element Values

- Relevant value for data element

Data Source

- 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

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

Element Values

- Relevant value for data element

Data Source

- 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.

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

Element Values

- Relevant value for data element

Data Source

- EMS Run Report
- Other ED Documentation

EMS DISPATCH DATE TR 9.1

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 (Simple 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

- EMS Run Report

EMS DISPATCH TIME TR 9.10

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 (Simple Type)**	EMSNotifyTime
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 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 Run Report

(EMS Unit) ARRIVAL DATE AT SCENE OR TRANSFERRING FACILITY

TR 9.2

Data Format [time]

ImageTrend Description

The time the unit transporting to your hospital arrived on the scene / transferring facility. (The date the vehicle stopped moving)

XSD Data Type	xs: time	**XSD Element / Domain (Simple Type)**	EMSArrivalTime
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 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 Run Report

(EMS Unit) ARRIVAL TIME AT SCENE OR TRANSFERRING FACILITY

TR 9.2.1

Data Format [time]

ImageTrend Description

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

XSD Data Type	xs: time	**XSD Element / Domain (Simple Type)**	EMSArrivalTime
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 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 Run Report

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

Data Format [time]

ImageTrend Description

The date the unit transporting to your hospital left the scene/transferring facility.

XSD Data Type	xs: time	**XSD Element / Domain (Simple 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

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 Run Report

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

Data Format [time]

ImageTrend Description

The time the unit transporting to your hospital left the scene/transferring facility.

XSD Data Type	xs: time	**XSD Element / Domain (Simple 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

- EMS Run Report

UNIT ARRIVED HOSPITAL DATE TR 9.4

Data Format [time]

ImageTrend Description

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

XSD Data Type	xs: string	**Element / Domain (Simple Type)**	DateUnitAtDestination
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
- Scene may be defined as "initial hospital" for inter-facility transfers

Data Source

- EMS Run Report
- 911 or Dispatch Center

UNIT ARRIVED HOSPITAL TIME TR 9.4.1

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

Data Source

- 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.

XSD Data Type	patientUUID	**Element ComplexType**	PatientUUID
XSD Data Type	xs: string	**Required in XSD**	Yes
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

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

Page 31 the 2023 National Trauma Data Standard

(Pre-Hospital) DESTINATION DETERMINATION TR 15.32

Data Format [combo] single-choice

ImageTrend Description

Major reason for transferring the patient to the facility chosen.

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

Element Values

Closet Facility	On-Line Medical Direction
Diversion	Other
Hospital of Choice	Specialty Resource Center

Data Source

- EMS Run Report
- Other ED Documentation

Triage Destination Protocol TR 9.13

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.

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

Data Source

- EMS Run Report
- 911 or Dispatch Center

Triage Criteria TR 9.14

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).

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

Element Values

- Relevant value for data element

Data Source

- EMS Run Report
- 911 or Dispatch Center

(Pre-Hospital Thoracentesis) / TUBE THORACOSTOMY TR 18.97

Data Format [combo] single-choice

ImageTrend Description

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

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

Element Values

Not Performed	Performed

Data Source

- 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.

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

Element Values

Performed Not Performed

Data Source

- 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).

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

Element Values

Complete	Missing
Incomplete	Pending

Data Source

- EMS Run Report
- Other ED Documentation

Pre-Hospital Cardiac Arrest* TR 15.53

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

ImageTrend Description

Indication of whether the person suffered a cardiac arrest at any stage prior to ED/Hospital arrival

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

- Page 33 in the 2023 National Trauma Data Standard

(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.

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

Element Values

Not Performed	Performed

Data Source

- 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.

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

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

Data Source

- EMS Run Report
- Other ED Documentation

(Pre-Hospital) FLUIDS TR 15.30

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.

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

Element Values

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

Data Source

- EMS Run Report
- Other ED Documentation

(Pre-Hospital) MEDICATIONS TR 15.31

Data Format [combo] multiple-choice

ImageTrend Description

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

XSD Data Type	xs: string		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- Relevant value for data element

Data Source

- EMS Run Report
- Other ED Documentation

(Pre-Hospital) VITALS DATE TR18.106

Data Format [date]

ImageTrend Description

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

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

Element Values

- Collected as MM/DD/YYYY

Data Source

- EMS Run Report
- Other ED Documentation

(Pre-Hospital) VITALS TIME TR18.110

Data Format [time]

ImageTrend Description

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

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

Element Values

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

Data Source

- EMS Run Report
- Other ED Documentation

INITIAL FIELD GCS - EYE* TR 18.60

Data Format [number]

ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	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

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

INITIAL FIELD GCS - VERBAL* TR 18.61.2 / TR 18.61.0 (ped)

Data Format [number]

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**	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

**Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for*

each patient from admission to discharge.

INITIAL FIELD GCS - MOTOR* TR 18.62.2 / TR 18.62.0 (ped)

Data Format [number]

ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	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

**Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for*

each patient from admission to discharge.

(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

- EMS Run Report

(Initial Field) SYSTOLIC BLOOD PRESSURE* TR 18.67

Data Format [number]

ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	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

- EMS Run Report

(Initial Field) DIASTOLIC BLOOD PRESSURE TR 18.68

Data Format [number]

ImageTrend Description

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

			Element/Domain (Simple	
XSD Data Type	xs: string		**Type)**	DBP
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

- EMS Run Report

(Initial Field) PULSE RATE* TR 18.69

Data Format [number]

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 (Simple 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 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.
- 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

- EMS Run Report

(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 (Simple Type)**	EmsRespiratoryRate
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

- 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

- EMS Run Report

(Initial Field) SP02 (Oxygen Saturation) * TR 18.82

Data Format [number]

ImageTrend Description

First recorded oxygen saturation at the scene of injury (expressed as a percentage).

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	EmsPulseOximetry
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

- 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

- EMS Run Report

INITIAL FIELD GCS - TOTAL* TR 18.64

Data Format [number]

ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	EmsTotalGcs
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common 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

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

INITIAL FIELD GCS 40- EYE* TR 18.90.2 / TR 18.90.0 (ped)

Data Format [number]

ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	EmsEyeGcs40
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
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

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

INITIAL FIELD GCS 40- VERBAL* TR 18.91.2 / TR 18.91.0 (ped)

Data Format [number]

Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	EmsVerbalGcs40
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

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

INITIAL FIELD GCS 40- MOTOR* TR 18.92.2 / TR 18.92.0 (ped)

Data Format [number]

Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	EmsMotorGcs40
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
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

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

(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.

XSD Data Type	xs: string	**Element/Domain (Simple Type)**	RTS
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint: 0**	**Max. Constraint:** 4

Element Values

- Relevant value for data element

Data Source

- EMS Run Report

(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 (Simple Type)**	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"

Data Source

- 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

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

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 Medical Record Information

REFERRING HOSPITAL NAME TR 33.1

Data Format [combo] single-choice

ImageTrend Description

Name of the referring hospital.

XSD Data Type	xs: string	**Element/Domain (Simple Type)**	ReferringHospitalID
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Minimum Constraint:** 0	**Maximum Constraint:** 50

Element Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL ARRIVAL DATE TR 33.2

Data Format [date]

ImageTrend Description

The date the patient arrived at the referring hospital.

XSD Data Type	xs: string		
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 MM/DD/YYYY

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL ARRIVAL TIME TR 33.3

Data Format [time]

ImageTrend Description

The time the patient arrived at the referring hospital.

XSD Data Type	xs: string		
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 HHMM
- HHMM should be collected in military time

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL DISCHARGE DATE TR 33.30

Data Format [date]

Description

The date the patient was discharged from the referring hospital.

XSD Data Type	xs: string		
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 MM/DD/YYYY

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL DISCHARGE TIME TR 33.31

Data Format [time]

ImageTrend Description

The time the patient was discharged from the referring hospital.

XSD Data Type	xs: string		
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 HHMM
- HHMM should be collected in military time

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL PHYSICIAN NAME TR 33.4

Data Format [text]

ImageTrend Description

The name of the patient's referring physician.

XSD Data Type	xs: string		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL VITALS DATE TR 33.54

Data Format [number]

ImageTrend Description

The referring hospital vitals date.

XSD Data Type	xs: string			
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values	
Required in XSD	Yes			

Element Values

- Relevant value for data element

REFERRING HOSPITAL VITALS TIME TR 33.56

Data Format [number]

ImageTrend Description

The referring hospital vitals time.

XSD Data Type	xs: string		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- Relevant value for data element

(Referring Hospital) GCS - EYE TR 33.12

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

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

(Referring Hospital) GCS - VERBAL TR 33.13.0 /TR 33.13.2(ped)

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

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

(Referring Hospital) GCS - MOTOR TR 33.14.0 / TR 33.14.2 (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

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

(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.

XSD Data Type	xs: integer				
Multiple Entry Configuration	Yes, max 3		**Accepts Null Value**	Yes, common null values	
Required in XSD	Yes				

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 Medical Record Information

(Referring Hospital) TEMPERATURE TR 33.7

Data Format [number]

ImageTrend Description

First recorded temperature (in degrees Celsius [centigrade]) 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:** 0	**Max. Constraint:** 45°C

Element Values

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

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) SYSTOLIC BLOOD PRESSURE TR 33.5

Data Format [number]

ImageTrend Description

First recorded systolic blood pressure 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:** 0	**Max. Constraint:** 299

Element Values

- Relevant value for data element

Additional Information

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

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) PULSE RATE TR 33.6

Data Format [number]

ImageTrend Description

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

XSD Data Type	xs: string		
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

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) RESPIRATORY RATE TR 33.8

Data Format [number]

ImageTrend Description

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

XSD Data Type	xs: string		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 120

Element Values

- Relevant value for data element

Additional Information

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

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) SP02 (Oxygen Saturation) TR 33.11

Data Format [number]

ImageTrend Description

First recorded oxygen saturation at the referring hospital (expressed as a percentage).

XSD Data Type	xs: string		
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

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) MANUAL GCS TOTAL TR 33.15

Data Format [number]

ImageTrend Description

First recorded Glasgow Coma Score (total) 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:** 3	**Max. Constraint:** 15

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 & 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

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

(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.

XSD Data Type	xs: string		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint: 0**	**Max. Constraint:** 4

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 Medical Record Information

(Referring Hospital) Supplemental Oxygen TR 33.10

Data Format [combo] single-choice

ImageTrend Description

Supplemental Oxygen.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

No Yes

Data Source

- Referring Hospital Medical Record Information

(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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Yes No

Data Source

- Referring Hospital Medical Record Information
- Other ICU Documentation

(Referring) HOSPITAL OR TR 33.19

Data Format [combo] single-choice

ImageTrend Description

Referring Operating Room. Determination of whether or not the patient went to the OR at the referring hospital.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Yes No

Data Source

- 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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Yes No

Data Source

- Referring Hospital Medical Record Information

(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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Positive Negative Not Performed

Data Source

- 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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Positive Negative Not Performed

Data Source

- 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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Positive Negative Not Performed

Data Source

- 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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Positive Negative Not Performed

Data Source

- 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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Positive Negative Not Performed

Data Source

- 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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Positive Negative

Data Source

- 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.

XSD Data Type	xs:integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

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 Medical Record Information

(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.

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- Hospital of Choice
- Specialty Resource Center

Data Source

- Referring Hospital Medical Record Information

(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

XSD Data Type	xs: string		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- Relevant value for data element

Data Source

- 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.

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

Element Values

No Yes

Data Source

- 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 (Simple Type)**	HospitalArrivalDate
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 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 (Simple Type)**	HospitalArrivalTime
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 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.

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

Element Values

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

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

HIGHEST ACTIVATION* TR17.21.1

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

Description

Patient received the highest level of trauma activation at your hospital

INCLUDE:

- Patients who received the highest level of trauma activation initiated by emergency medical services (EMS) or by emergency department (ED) personnel at your hospital.
- Patients who received the highest level of trauma activation initiated by 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.

XSD Data Type	xs:integer		**XSD Element Name:**	HighestActivation
Multiple Entry Configuration		No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		**XSD ComplexType:** Yes No	**Constraint:** Enumerated list

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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	TraumaTeamActivated
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 MM/DD/YYYY
- Only completed if Trauma Team is activated

Data Source

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

TIME TRAUMA TEAM ACTIVATED TR 17.34

Data Format [time]

ImageTrend Description

The time the trauma team was activated.

XSD Data Type:	xs: string	**XSD Element/Domain (Simple Type)**	TraumaTeamActivatedTime
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 HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

Data Source

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

ADMITTING MD/STAFF TR 18.98

Data Format [combo] single-choice

ImageTrend Description

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

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

Element Values

- Relevant value for data element

Data Source

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

TEAM MEMBER TR 17.9

Data Format [combo] single-choice

ImageTrend Description

Name of the team member called when trauma team was activated.

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

Element Values

- Relevant value for data element

Additional Information

- Only completed if Trauma Team is activated

Data Source

- 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.

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

Element Values

Cardiology

Cardiovascular Surgery

Ears, Nose, Throat (ENT)

Family Practice

Gastrointestinal (GI)

General Surgery

Hem-Onc

Hospitalist

Infection Control

Internal Medicine

Medicine

Nephrology

Ophthalmology

Orthopedics

Pediatric Surgery

Plastic Surgery

Surgery Subspecialty

Trauma

Additional Information

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

Data Source

- 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

ImageTrend Description

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

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

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
Intensive Care Unit	Orthopedic Surgery	Urology
		Vascular Surgery

Additional Information

- Only completed if Trauma Team is activated

Data Source

- 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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	DateTimeCalled
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 MM/DD/YYYY
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

TIME (Trauma Team Member) CALLED TR 17.14

Data Format [time]

ImageTrend Description

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

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	DateTimeCalledTime
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 HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

Data Source

- 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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	DateArrived
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 MM/DD/YYYY
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

TIME (Trauma Team Member) ARRIVED TR 17.11

Data Format [time]

ImageTrend Description

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

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	TimeArrived
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 HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

Data Source

- 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?

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	TimelyArrival
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Yes No

Additional Information

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

Data Source

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

TRAUMA SURGEON ARRIVAL DATE* TR17.15.1

National & State Element

Data Format [combo] single-choice

NTDB/ImageTrend Description

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

XSD Data Type	xs:date	**XSD Element Name:**	TraumaSurgeonArrivalDate
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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TRAUMA SURGEON ARRIVAL TIME* TR17.15.2

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:**	TraumaSurgeonArrivalTime
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**XSD ComplexType:** 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

Data Source

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

(Consulting) SERVICE TYPE TR 17.32

Data Format [combo] single-choice

ImageTrend Description

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

XSD Data Type	xs: integer		
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

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

Data Source

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

CONSULTING STAFF TR 17.33

Data Format [combo] single-choice

ImageTrend Description

Name of staff member that consulted on the patient.

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

Element Values

- Relevant value for data element

Additional Information

- Only completed if Consulting Services is "Yes"

Data Source

- 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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	DateofService
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 MM/DD/YYYY
- Only completed if Consulting Services is "Yes"

Data Source

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

TIME (Consulting Practitioner Requested) TR 17.8

Data Format [time]

ImageTrend Description

The time the consultant was called.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	TimeOfService
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 HHMM
- HHMM should be collected as military time
- Only completed if Consulting Services is "Yes"

Data Source

- 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 / Domain (Simple Type)**	Decision_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

- Collected as MM/DD/YYYY
- Used to auto-generate an additional calculated element: Total ED Time: (elapsed time from ED admit to ED discharge)
- 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 (Simple Type)**	Decision_Time
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 HHMM military time
- Used to auto-generate an additional calculated element: Total ED Time (elapsed time from ED admit to ED discharge)
- 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 discharged (physically left) the ED.

XSD Data Type	xs: date	**XSD Element / Domain (Simple Type)**	EdDischargeDate
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.

Data Source

- 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 discharged (physically left) the ED.

XSD Data Type	xs: time		**XSD Element / Domain (Simple Type)**	EDDischargeTime	
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

Data Source

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

ED DISCHARGE DISPOSITION* TR 17.27

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.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	EdDischargeDisposition
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common 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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DISCHARGE TRANSPORT MODE* TR 17.60

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.

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

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. **

PRIMARY TRAUMA SERVICE TYPE*

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 (Simple 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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TRANSFER DELAY* TR 17.45

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.

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

Element Values

No Yes

Additional Information

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

Data Source

- 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 as a reason for delay in transferring the patient.

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

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"

Data Source

- 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

Reason for delay in transferring the patient.

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

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"

Data Source

- 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 issues as reason for delay in transferring the patient.

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

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"

Data Source

- 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 delay as reason for delay in transferring the patient.

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

Element Values

Equipment broken

Equipment missing/unavailable

Not Known

Additional Information

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

Data Source

- 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 issues as reason for delay in transferring the patient.

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

Element Values

Error in judgement

Error in technique

Error in treatment

Additional Information

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

Data Source

- 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 as reason for delay in transferring the patient.

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

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"

Data Source

- 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 issue as reason for delay in transferring the patient.

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

Element Values

Bed availability

Difficulty obtaining accepting facility/hospital

New ED staff

Additional Information

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

Data Source

- 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 issue as reason for delay in transferring the patient.

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

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"

Data Source

- 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

Reason for delay in transferring the patient.

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

Element Values

Transportation issue

Additional Information

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

Data Source

- 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 as reason for delay in transferring the patient.

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

Element Values

- Flooding
- Rain
- Snow
- Tornado

Additional Information

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

Data Source

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

OTHER REASON FOR TRANSFER DELAY TR 17.43

State Element (Only for Non-Trauma Centers)

Data Format [text]

ImageTrend Description

Other reason for transfer delay that is not specific in the reason for transfer delay drop down menu.

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

Element Values

- Relevant value for data element

Additional Information

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

Data Source

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

Initial Assessment Information

(Initial ED/Hospital) VITALS DATE TR 18.104

Data Format [date]

ImageTrend Description

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

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	DateVitalSignsTaken
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 MM/DD/YYYY

Data Source

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

(Initial ED/Hospital) VITALS TIME TR 18.110

Data Format [time]

ImageTrend Description

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

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	TimeVitalSignsTaken
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 HHMM
- HHMM should be collected in military time

Data Source

- 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 or less of ED/hospital arrival.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	SBP
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 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 (Simple 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

Data Source

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

(Initial ED/Hospital) PULSE RATE* TR 18.2

National & State Element
Data Format [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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 or less of ED/hospital arrival.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	Temperature
Multiple Entry Configuration	No	**Accepts 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.

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

Element Values

Axillary	Rectal
Foley	Temporal Artery
Oral	Tympanic
Other	

Data Source

- 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 or less of ED/hospital arrival (expressed as a percentage).

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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 or less of ED/hospital arrival (expressed as a number per minute).

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	RespiratoryRate
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 120

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 (Simple Type)**	SupplementalOxygen
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

- No (No Supplemental Oxygen)
- Yes (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.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	RTS
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint: 0**	**Max. Constraint:** 4

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

- 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.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	PTS
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** -6	**Max. Constraint:** 12

Element Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) GCS - EYE* TR 18.14

National & State Element
Data Format [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	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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Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.

(Initial ED/Hospital) GCS - VERBAL* TR18.15.2

National & State Element

Data Format [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	GcsVerbal
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
- Inconsolable, agitated
- Inconsistently consolable, moaning
- Cries but is consolable, inappropriate interactions
- Smiles, oriented to sounds, follow objects, interacts

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

(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 Score (Motor) in the ED/hospital within 30 minutes or less of ED/hospital arrival.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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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**Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.*

(Initial ED/Hospital) MANUAL GCS TOTAL* TR 18.19

National & State Element

Data Format [number]

NTBD/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 (Simple Type)**	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 were not measured within 30 minutes or less of ED/Hospital arrival.

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Nurses 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 or less 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 (Simple 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 Sheet
- Nurses Notes/Flow Sheet
- Physician Notes/Flow Sheet

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 40 – EYE* TR18.40.2

National & State Element

Data Format [number]

NTDB/ImageTrend Description

First recorded Glasgow Coma Score 40 (Eye) in the ED/hospital within 30 minutes or less of ED/hospital arrival.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	Gcs40Eye
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
- 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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**Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.*

(Initial ED/Hospital) GCS 40 – VERBAL* TR18.41.2

National & State Element

Data Format [number]

NTDB/ImageTrend Description

First recorded Glasgow Coma Score 40 (Verbal) within 30 minutes or less of ED/hospital arrival.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	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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**Facility can report <u>EITHER</u> GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.*

(Initial ED/Hospital) GCS 40 – MOTOR* TR18.42.2

National & State Element

Data Format [number]

NTDB/ImageTrend Description

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	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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*Facility can report EITHER GCS or GCS40. Facility must stay consistent for each patient from admission to discharge.

(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 or less of ED/hospital arrival.

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

Element Values

- No (Unassisted Respiratory Rate)
- Yes (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.

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

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	

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED / Hospital) CPR PERFORMED TR 18.71

Data Format [combo] single-choice

ImageTrend Description

Indication as to if CPR management was conducted while under the care of the ED/Hospital.

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

Element Values

CPR in Progress, continued Not Performed Performed

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

UNITS OF BLOOD

TR 22.13

Data Format [number]

ImageTrend Description

Number of units of blood (PRBC, FFP, Plts) administered to the patient in the first 24 hours.

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

Element Values

- Relevant value for data element

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

BLOOD ORDERED DATE TR 22.14

Data Format [date]

ImageTrend Description

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

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

Element Values

- Collected as MM/DD/YYYY

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

CROSSMATCH DATE

TR 22.15

Data Format [date]

ImageTrend Description

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

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

Element Values

- Collected as MM/DD/YYYY

Data Source

- 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.

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

Element Values

- Collected as MM/DD/YYYY

Data Source

- 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.

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

Element Values

Positive Negative Not Performed

Additional Information

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

Data Source

- 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.

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

Element Values

Positive Negative Not Performed

Additional Information

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

Data Source

- 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.

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

Element Values

Positive Negative Not Performed

Additional Information

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

Data Source

- 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.

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

Element Values

Positive Negative Not Performed

Additional Information

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

Data Source

- 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.

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

Element Values

- Collected as MM/DD/YYYY

Data Source

- 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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	InitialEDHospitalTimeSentToCTTime
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 HHMM
- HHMM should be collected in military time

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) ABDOMINAL ULTRASOUND DATE TR 18.102

Data Format [date]

ImageTrend Description

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

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

Element Values

- Collected as MM/DD/YYYY

Data Source

- 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.

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

Element Values

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

Data Source

- 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.

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

Element Values

Positive Negative

Additional Information

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

Data Source

- 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.

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

Element Values

Positive Negative

Additional Information

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

Data Source

- 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: integer		**XSD Element / Domain (Simple Type)**	AlcoholUseIndicators
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: integer		**XSD Element / Domain (Simple Type)**	AlcoholUseIndicators	
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)
- Record BAC results within 24 hours after first hospital encounter, at either your facility or the transferring facility
- The null value "Not Applicable" is used 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.

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

Element Values

- Relevant value for data element

Data Source

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

DRUG SCREEN* TR 18.45

National & State Element

Data Format [combo] multiple-choice

NTDB Description

First recorded positive drug screen results within 24 hours after first hospital encounter (select all that apply).

ImageTrend Description

Laboratory test used to detect the presence of drugs in the patient's blood. Enter the drugs present when drug screening was performed in ED. You may enter more than one drug. Do not include drugs given to the patient during any phase of resuscitation.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	DrugUseIndicator
Multiple Entry Configuration	Yes, max 2	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

AMP (Amphetamine)
BAR (Barbiturate)
BZO (Benzodiazepines)
COC (Cocaine)
mAMP (Methamphetamine)
MDMA (Ecstasy)
MTD (Methadone)
OPI (Opioid)
OXY (Oxycodone)
PCP (Phencyclidine)
TCA (Tricyclic Antidepressant)
THC (Cannabinoid)
Other
None
Not Tested

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

ICD-10 Injury Diagnosis* TR 200.1

National & State Element

Data Format [combo] multiple-choice

NTDB/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 (Simple Type)**	Diagnosis Icd10
Multiple Entry Configuration	Yes, max 100	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

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

Additional Information

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

Data Source

- 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 / Domain (Simple Type)**	AISCODE
Multiple Entry Configuration	Yes, max 50	**Accepts Null Value**	Yes, common null values
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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AIS VERSION* 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 (Simple Type)**	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)**	IssRegion
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 2023 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
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, common null values
Required in XSD	Yes	**Min. Constraint:** 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 care for the patient during this patient care event.

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

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
- 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-ExistingConditions -AlcoholUseDisorder)

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.

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

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
- 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-ExistingConditions -AnticoagulantTherapy)

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 AGENTS	THROMBIN INHIBITORS	THROMBOLYTIC 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			

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

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
- 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-ExistingConditions – ADD/ADHD)

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

NTDB Description

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

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

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
- 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-ExistingConditions - BipolarDisorder)

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

NTDB Description

A bipolar I/II 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 null 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
- 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-ExistingConditions - BleedingDisorder)

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

NTDB Description

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

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

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 Willenbrand 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
- 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-ExistingConditions - CerebralVascularAccident)

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).

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

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
- 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-ExistingConditions - ChronicObstructivePulmonaryDisease)

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.

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

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
- 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-ExistingConditions - ChronicRenalFailure)

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

NTDB Description

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

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

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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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CIRRHOSIS (Pre-ExistingConditions - Cirrhosis)

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.

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

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-ExistingConditions - CongenitalAnomalies)

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	xs: integer	**XSD Element / Domain (Simple Type)**	ComorbidCondition
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null 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
- 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-ExistingConditions - CongestiveHeartFailure)

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.

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

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

Data Source

- 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-ExistingConditions - CurrentSmoker)

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).

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

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
- 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-ExistingConditions - CurrentlyReceivingChemotherapyCancer)

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.

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

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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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DEMENTIA (Pre-ExistingConditions - Dementia)

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).

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

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
- 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-ExistingConditions - Dementia)

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

NTDB Description

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

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

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
- 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-ExistingConditions.DisseminatedCancer)

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.

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

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
- 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-ExistingConditions.FuntionallyDependentHealthStatus)

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).

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

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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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HYPERTENSION (Pre-ExistingConditions - Hypertension)

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

NTDB Description

History of persistent elevated blood pressure requiring antihypertensive medication.

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

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
- 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-ExistingConditions - MajorDepressiveDisorder)

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 null 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-ExistingConditions - MyocardialInfarction)

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

NTDB Description

History of a MI in the six months prior to injury.

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

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
- 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-ExistingConditions - OtherMentalPersonalityDisorders)

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	ComorbidCondition
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null 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
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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PERIPHERAL ARTERIAL DISEASE (PAD)

(Pre-ExistingConditions - PeripheralArterialDisease)

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. PAD can occur in any blood vessel, but it is more common in the legs than the arms.

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

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
- 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-ExistingConditions - PostTraumaticStressDisorder)

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

NTDB Description

A post-traumatic stress 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 null 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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PREGNANCY (Pre-ExistingConditions - 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.

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

Element Values

Yes No

Additional Information

- Present prior to arrival at the clinic or hospital
- 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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PREMATURITY (Pre-ExistingConditions - Prematurity)

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

NTDB Description

Babies born before 37 weeks of pregnancy are completed.

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

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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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SCHIZOAFFECTIVE DISORDER (Pre-ExistingConditions-Schizoaffective Disorder)

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

NTDB Description

A schizoaffective 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 null 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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SCHIZOPHRENIA (Pre-ExistingConditions - Schizophrenia)

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

NTDB Description

A schizophrenia 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 null 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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STEROID USE (Pre-ExistingConditions - SteroidUse)

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.

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

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: 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
- 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-ExistingConditions - SubstanceUseDisorder)

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

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

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
- 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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	COMBDTY_ID
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min Constraint:** 0	**Max Constraint:** 2000

Element Values

- Relevant value for data element

Data Source

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

Procedures Information

ICD-10 Hospital Procedures* TR200.2

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 (Simple 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 after hospital arrival)
Angiography	Transfusion of platelets * (only capture first 24 hours after hospital arrival)
Angioembolization	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 stent)	Gastrostomy / jejunostomy (percutaneous or 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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PROCEDURE PERFORMED TR 22.30

Data Format [combo] single-choice

Description

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

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

Element Values

No Yes

Data Source

- 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.

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

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	

Data Source

- 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 (Simple 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 (Simple 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

- Collected 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.

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

Element Values

- Relevant value for data element

Data Source

- 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.

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

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

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

(Procedure) COMMENTS

TR 200.7

Data Format [text]

ImageTrend Description

Additional information about the procedure.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Element Values

- Relevant value for data element

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

RESOURCE UTILIZATION TR 26.59

Data Format [combo] single-choice

ImageTrend Description

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

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

Element Values

Adult Protective Service
Bi-Pap
Case Management
Cerebral Brain Flow Studies
Child Protective Service
CRRT
Dialysis
Epidural Catheter
Exceeds LOS
Factor VIIa (Novoseven)
High dose methylprednisolone
Hypertonic Saline
Level-1 Blood/Fluid Warmer
LiCox Monitor
Massive Blood Transfusion
Miama J Collar
MRI
None
Nutritionist
Occupational Therapy
Pentobarbital Coma
Peripheral Parenteral Nutrition (PPN)
Physical Therapy
PICC line
PRISMA (CVVHD)
Respiratory Therapy
RN accompanied transfer
Specialized Bed
Speech Therapy
TLSO Brace
Total Parenteral Nutrition (TPN)
Traction
Transfusion of FFP
Transfusion of Platelets
Transfusion of PRBC
Tube Feeding
Uncrossmatched Blood
Vaccine Post-Splenectomy
Venous Doppler
Wound Care RN
Wound Vacuum

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

Complications/Performance Improvement Information

ACUTE KIDNEY INJURY (AKI)* (HospitalEvents -AcuteKidneyInjury)

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 ≥ 4.0 mg/dl (≥ 353.6 µmol/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 ≥ 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: integer	**XSD Element / Domain (Simple 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
- 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)*

(HospitalEvents - AcuteRespiratoryDistressSyndrome)

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: integer	**XSD Element / Domain (Simple 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 ARDS must be documented in the patient's medical record.
- Consistent with the 2012 New Berlin Definition.

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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ALCOHOL WITHDRAWAL SYNDROME*

(HospitalEvents.AlcoholWithdrawalSyndrome)

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: integer	**XSD Element / Domain (Simple 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 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

- 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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CARDIAC ARREST WITH CPR* (HosptialEvents - CardiacArrestCPR)

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: integer		**XSD Element / Domain (Simple 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
- Cardiac Arrest must be documented in the patient's medical record.

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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CATHETER-ASSOCIATED URINARY TRACT INFECTION (CAUTI)*

(HospitalEvents.CathAssociatedUTI)

National & State Element

Data Format [combo] single-choice

NTDB/ImageTrend Description

UPDATED TO: 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 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 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^{0}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^{0}C) hypothermia (<36.0^{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: integer	**XSD Element / Domain (Simple 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)*

(HospitalEvents - CentralLineAssociatedBSI)

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.

<u>January 2016 CDC Criterion LCBI 1:</u>

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

<u>January 2016 CDC Criterion LCBI 2:</u>

Patient has at least one of the following signs or symptoms: fever (>38^{0}C), chills, or hypotension

AND

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

AND

the same common commensal (i.e., diphtheroids [Corynebacterium spp. not C. diphtheriae], Bacillus spp. [not B. anthracis], Propionibacterium spp., coagulase-negative staphylococci [including S. epidermidis], viridans group streptococci,

Aerococcus spp., and Micrococcus spp.) is identified from two or more blood specimens drawn on separate occasions, by a culture or non- culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST). Criterion elements must occur within the Infection Window Period, the 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 calendar days after.

OR

January 2016 CDC Criterion LCBI 3:

Patient ≤ 1 year of age has at least one of the following signs or symptoms: fever (>38^0 C), hypothermia (<36^{0}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: integer	**XSD Element / Domain (Simple 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 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
- 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*

HospitalEvents.DeepSurgicalSiteInfection

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 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		

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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 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
- 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)*(HospitalEvents-DeepVeinThrombosis)

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: integer	**XSD Element / Domain (Simple 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
- 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.
- 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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Delirium* (HospitalEvents-DeepVeinThrombosis)

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
- 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)*

(HospitalEvents-MyocardialInfarction)

National & State Element

Data Format [combo] single-choice

NTDB/ImageTrend Description

An acute myocardial infarction 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: integer	**XSD Element / Domain (Simple 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

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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ORGAN/SPACE SURGICAL SITE INFECTION*

(HospitalEvents-OrganSpaceSurgicalSiteInfection)

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: integer	**XSD Element / Domain (Simple 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 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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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OSTEOMYELITIS* (HospitalEvents-Osteomyelitis)

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: integer	**XSD Element / Domain (Simple 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 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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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PRESSURE ULCER (PE)* (HospitalEvents - PressureUlcer)

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: integer	**XSD Element / Domain (Simple 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
- 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)* (HospitalEvents-PulmonaryEmbolism)

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: integer	**XSD Element / Domain (Simple 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
- 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.

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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SEVERE SEPSIS* (HospitalEvents-SevereSepsis)

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.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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 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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

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STROKE/CVA* (HospitalEvents-StrokeCva)

National & State Element

Data Format [combo] single-choice

NTDB Description

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).

ImageTrend Description

A focal or global neurological deficit of rapid onset and NOT present on admission.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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 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
- 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*

(HospitalEvents-SuperficialIncisionSurgicalSiteInfection)

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)).
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.

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: integer	**XSD Element / Domain (Simple 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 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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

Page 124 in the 2023 National Trauma Data Standard

UNPLANNED ADMISSION TO ICU*

(HospitalEvents-UnplannedAdmissionToICU)

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 in which ICU care was required for postoperative care of a planned surgical procedure.
- Patients with a planned ICU stay post-operative.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	HospitalComplication
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common 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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

Page 126 in the 2023 National Trauma Data Standard

UNPLANNED INTUBATION* (HospitalEvents-UnplannedIntubation)

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: integer	**XSD Element / Domain (Simple Type)**	HospitalComplication
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common 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 extubation.

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

Page 127 in the 2023 National Trauma Data Standard

UNPLANNED VISIT TO THE OPERATING ROOM*

(HospitalEvents-UnplannedVisitToOR)

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

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	HospitalComplication
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common 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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flowh Sheet
- Discharge Summary

National Element

Page 128 in the 2023 National Trauma Data Standard

VENTILATOR-ASSOCIATED PNEUMONIA (VAP)*

(HospitalEvents-VentilatorAssociatedPneumonia)

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: • 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** chest imaging test result is acceptable.	At least **one** of the following: • Fever (>38°C or >100.4°F) • Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³) • For adults ≥70 years old, altered mental status with no other recognized cause AND at least one of the following: • 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_2 desaturations (e.g., PaO_2/FiO_2 ≤240), increased oxygen requirements, or increased ventilator demand)	At least **one** of the following: • Organism identified from blood • Organism identified from pleural fluid • Positive quantitative culture from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing.) • ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (e.g., Gram's stain) • Positive quantitative culture of lung tissue • Histopathologic exam shows at least **one** of the following evidences of pneumonia: o Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles and alveoli o 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: • 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** chest imaging test result is acceptable.	At least **one** of the following: • Fever (>38°C or >100.4°F) • Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³) • For adults ≥70 years old, altered mental status with no other recognized cause AND at least **one** of the following: • 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_2 desaturations (e.g., $PaO_2/FiO_2 \leq 240$), increased oxygen requirements, or increased ventilator demand)	At least **one** of the following: • Virus, *Bordetella,Legionella, Chlamydia or Mycoplasma* 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). • Fourfold rise in paired sera (IgG) for pathogen (e.g., influenza viruses, *Chlamydia*) • Fourfold rise in *Legionella pneumophila* serogroup 1 antibody titer to ≥1:128 in paired acute and convalescent sera by indirect IFA. • Detection of L. pneumophila 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: • 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** chest imaging test result is acceptable.	Patient who is immunocompromised has at least ***one*** of the following: • Fever (>38°C or >100.4°F) • 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 increased suctioning requirements • New onset or worsening cough, or dyspnea, or tachypnea5 • Rales6 or bronchial breath sounds • Worsening gas exchange (e.g., O2 desaturations [e.g., PaO2/FiO2 <240]7, increased oxygen requirements, or increased ventilator demand) • Hemoptysis • Pleuritic chest pain	At least **one** of the following: • 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 Any of the following from: **LABORATORY CRITERIA DEFINED UNDER PNU2**

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 result is acceptable.	Worsening gas exchange (e.g., O_2 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/mm³) **or** leukocytosis (≥15,000 WBC/mm³) 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 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 result is acceptable.	At least **three** of the following: • Fever (>38.0°C or >100.4°F) or hypothermia (<36.0°C or <96.8°F) • Leukopenia (≤4000 WBC/mm³) **or** leukocytosis (≥15,000 WBC/mm³) • 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, apnea, or tachypnea • Rales or bronchial breath sounds • Worsening gas exchange (e.g., O_2 desaturations [e.g., pulse oximetry <94%], increased oxygen requirements, or increased ventilator demand)

XSD Data Type	xs: integer	**XSD Element / Domain (Simple 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
- Progress Notes
- Case Management/Social Services
- Nursing Notes/Flow Sheet
- Triage/Trauma Flow Sheet
- Discharge Summary

National Element

Page 129 in the 2023 National Trauma Data Standard

(Complication) STATUS TR 23.15

Data Format [radio]

ImageTrend Description

The status of the complication.

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

Element Values

Open Close

(Complication) OCCURRENCE DATE TR 23.13

Data Format [date]

ImageTrend Description

The date that the complication was first documented.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	occurrencedate
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 MM/DD/YYYY

(Complication) OCCURRENCE TIME TR 23.20

Data Format [time]

ImageTrend Description

The time that the complication was first documented.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	occurrencetime
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 HHMM

(Complication) LOCATION OF OCCURRENCE TR 23.19

Data Format [combo] single-choice

ImageTrend Description

The location that the complication occurred.

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

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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	
Multiple Entry Configuration	Yes	**Accepts Null Value**	No
Required in XSD	Yes		

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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	pr_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

- Collected as MM/DD/YYYY

(Complication) PR TIME TR23.18

Data Format [time]

ImageTrend Description

Complications peer review time.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	pr_time
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 HHMM

(Complication) CORRECTIVE ACTION TR 23.9

Data Format [combo] single-choice

ImageTrend Description

The action taken based on the complication.

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

Element Values

Counseling

Education

Guideline / Protocol

Not Indicated

Other

Peer Review Presentation

Privilege/Credentialing

Process Improvement Team

Resource Enhancement

Trend

Unnecessary

(Complication) OTHER CORRECTIVE ACTION TR 23.10

Data Format [text]

ImageTrend Description

Any other action taken based on the complication.

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

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 cause the complication.

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

Element Values

- 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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	AdditionalNotes
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 2000

Element Values

- Relevant value for data element

PREVENTABILITY (of Complication) TR 23.12

Data Format [combo] single-choice

ImageTrend Description

Is the complication preventable?

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

Element Values

- 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.

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

Element Values

- 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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	Correspondence_Staff
Multiple Entry Configuration	No	**Accepts Null Value**	No
Required in XSD	Yes		

Element Values

- Relevant value for data element

(COMPLICATION CORRESPONDENCE) NOTE TR 23.1.15

Data Format [text]

ImageTrend Description

Complication correspondence note.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	Correspondence_Note
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 2000

Element Values

- Relevant value for data element

(Complication Correspondence) SOURCE TR 23.1.13

Data Format [combo] single-choice

ImageTrend Description

Complication correspondence source.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	Correspondence_Source
Multiple Entry Configuration	No	**Accepts Null Value**	No
Required in XSD	Yes		

Element Values

- 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.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	Correspondence_Type
Multiple Entry Configuration	No	**Accepts Null Value**	No
Required in XSD	Yes		

Element Values

- 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.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	Correspondence_Group
Multiple Entry Configuration	No	**Accepts Null Value**	No
Required in XSD	Yes		

Element Values

- Neuro
- Peds
- Ortho
- Trauma
- Other

(Performance Improvement) STATUS TR 31.9

Data Format [radio]

ImageTrend Description

The status of the QA peer review judgement.

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

Element Values

Open	Close

(PI) OCCURRENCE DATE TR 31.7

Data Format [date]

ImageTrend Description

The date that the performance improvement audit occurred.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	OccurrenceDate
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 MM/DD/YYYY

(PI) OCCURRENCE TIME TR 31.18

Data Format [time]

ImageTrend Description

The time that the performance improvement audit occurred.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	occurrencetime
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 HHMM

(PI) PR DATE

TR 31.8

Data Format [date]

ImageTrendDescription

The QA indicator peer review date.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	PR_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

- Collected as MM/DD/YYYY

(PI) PR TIME

TR 31.19

Data Format [time]

ImageTrend Description

The QA indicator peer review time.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	PR_Time
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 HHMM

FURTHER EXPLANATION / ACTION (of PI) TR 31.10

Data Format [text]

ImageTrend Description

Further explanation of the PI.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	AdditionalNotes
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 2000

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 Type)**	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.

XSD Data Type	xs: string	**XSD Element/Domain (Simple Type)**	Correspondence_Note
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 2000

Element Values

- Relevant value for data element

(PI Correspondence) SOURCE TR 31.13

Data Format [combo] single-choice

ImageTrend Description

Performance Improvement audit correspondence source.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	Correspondence_Source
		Accepts Null	
Multiple Entry Configuration	No	**Value**	No
Required in XSD	Yes		

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

(PI Correspondence) TYPE

TR 31.12

Data Format [combo] single-choice

ImageTrend Description

Performance Improvement audit correspondence type.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	Correspondence_Type
Multiple Entry Configuration	No	**Accepts Null Value**	No
Required in XSD	Yes		

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.

XSD Data Type	xs: integer	**XSD Element/Domain (Simple Type)**	Correspondence_Group
Multiple Entry Configuration	No	**Accepts Null Value**	No
Required in XSD	Yes		

Element Values

- Neuro
- Peds
- Ortho
- Trauma
- Other

Outcome Information

HOSPITAL DISCHARGE SERVICE TR 25.31

Data Format [combo] single-choice

ImageTrend Description

The department that discharged the patient from the hospital.

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

Element

Values

Acute Rehabilitation Medicine	Neurology
Anesthesia	Neurosurgery
Bariatric	Obstetric
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
Kidney Transplant	Trauma Surgeon
Liver	Urology
Neonatal	Vascular Surgery
Nephrology	

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

HOSPITAL ADMISSION DATE TR 25.33

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)**	AdmissionDateTime
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 MM/DD/YYYY
- Used to auto-generate an additional calculated element: Total Length of Hospital Stay (time from hospital admission to hospital discharge)

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

HOSPITAL ADMISSION TIME TR 25.47

Data Format [time]

ImageTrend Description

Time 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)**	AdmissionTime
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 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)

Data Source

- 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: string	**XSD Element/Domain (Simple Type)**	DischargeOrdersWrittenDateTime
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.
- 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 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: string	**XSD Element/Domain (Simple Type)**	DischargeOrdersWrittenTime
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
- The null value "Not Applicable" is used if ED Discharge Disposition = 5 (Decrease/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.

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 Data Type	xs: date		**XSD Element / Domain (Simple Type)**	HospitalDischargeDate
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

Data Source

- 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 (Simple Type)**		HospitalDischargeTime
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

Data Source

- Physician Order
- Discharge Instructions
- Nursing Notes/Flow Sheet
- Case Management/Social Services Notes
- Discharge Summary

TOTAL ICU DAYS* TR 26.9

National & State Element
Data Format [number]

NTDB/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 (Simple Type)**	Total_ICU
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 400

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 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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TOTAL VENTILATOR DAYS* TR 26.58

National & State Element
Data Format [number]

NTDB/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 (Simple Type)**	TotalVentDays
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null 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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DISABILITY AT DISCHARGE - FEEDING TR 26.54

Data Format [combo] single-choice

ImageTrend Description

A score calculated to derive a baseline of trauma patient feeding disability at discharge from an acute care facility.

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

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.)

Data Source

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

DISABILITY AT DISCHARGE - LOCOMOTION TR 26.55

Data Format [combo] single-choice

ImageTrend Description

A score calculated to derive a baseline of trauma patient locomotion (independence) disability at discharge from an acute care facility.

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

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.)

Data Source

- 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.

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

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.)

Data Source

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

HOSPITAL DISCHARGE DISPOSITION* TR 25.27

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 (Simple Type)**	HospitalDischargeDisposition
Multiple Entry Configuration	No		
Required in XSD	Yes	**Accepts Null Value**	Yes, common null values

Element Values

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

Additional Information

- 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 should be coded as 6
- Disposition to any other medical facility should be coded as 14
- 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
- Hospital Discharge Dispositions which were retired greater than 2 years before the current NTDS version are no longer listed under Element Values above, which

is why there are 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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HOSPITAL TRANSFERRED TO TR 25.35

Data Format [combo] single-choice

ImageTrend Description

Name of the receiving facility the patient was transferred to.

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

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

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Other) FACILITY (Transferred to) TR 25.39

Data Format [text]

ImageTrend Description

Any other identifying facility not found on the available list of options to which the patient was discharged.

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

Element Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Transferred to "Other" is selected

Data Source

- 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.

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

Element Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Transferred to "Other" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Other) STATE (Transferred to) TR 25.41

Data Format [text]

ImageTrend Description

The state in which the transfer facility is located.

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

Element Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Transferred to "Other" is selected

Data Source

- 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.

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

Element Values

- Ambulance
- Helicopter
- Fixed Wing
- Police
- Private Vehicle

Additional Information

- Only completed if Hospital Disposition "Acute Care Hospital" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

DISABILITY AT DISCHARGE - FIM SCORE TR 26.61

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)

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

Element Values

- Relevant value for data element
- Auto-calculated by combining Feeding, Locomotion, and Motor scores when entered

Data Source

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

LOCATION OF DEATH TR 25.30

Data Format [combo] single-choice

ImageTrend Description

The location where the patient expired.

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

Element Values

- ICU
- OR
- Floor
- Prior to Arrival
- ER

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

DATE & TIME OF DEATH TR 25.36

Data Format [Date] [Time]

ImageTrend Description

Date and time the patient expired.

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

Element Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

DEATH CIRCUMSTANCE TR 25.32

Data Format [combo] single-choice

ImageTrend Description

Indicates patient's primary cause of death.

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

Element Values

Brain Injury
Burn Shock
Cardio Failure
Drowning
Electrocution
Heart Laceration
Liver Laceration
Multiple Organ Failure/Metabolic
Other
Pre-Existing Illness
Pulmonary Failure
Pulmonary Failure/Sepsis
Thoracic Aortic Transection
Trauma Shock
Treatment Withheld
Brain Death
Sepsis
Cardiac Arrest due to Strangulation
Cardiac Arrest
Family D/C Life Support
Medical
Multisystem Trauma
Trauma Wound

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- 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.

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

Element Values

- Relevant value for data element

Additional Information

- Only completed if Death Circumstance is "Other"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary
- Autopsy Report

ORGAN DONATION TR 25.29

Data Format [combo] single-choice

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.

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

Element Values

Yes

No

Tissue Donation

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Documentation

AUTOPSY PERFORMED TR 25.37

Data Format [combo] single-choice

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.

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

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.

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

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 on calendar day after ED/hospital arrival.

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	HighestGCSTotal
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

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

Highest GCS Motor TR 39.2

Data Format [combo] single-choice

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 (Simple Type)**	HighestGCSMotor
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
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

Adult

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

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 (Simple Type)**	HighestGCSAssessment
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

- 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

Page 145 in the 2023 National Trauma Data Standard

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

Highest GCS 40 - Motor 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 (Simple Type)**	HighestGCS40Motor
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
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.)
- 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 (Simple Type)**	EDPupillaryResponse
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Both reactive

Neither reactive

One 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. ED Nurses' Notes/Trauma Flow Sheet
2. Physician's Progress Notes
3. H & P

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 (Simple Type)**	MidlineShift
Multiple Entry Configuration	No	**Accepts 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 Report
2. OP Report
3. Physician's Progress Notes
4. Nurse's Notes
5. Hospital Discharge Summary

National Element

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Cerebral Monitor TR 39.4

Data Format [combo] single-choice

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 (Simple Type)**	CerebralMonitor
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common 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 Report
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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Cerebral Monitor Date TR 39.5

Data Format [combo] single-choice

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: integer	**XSD Element / Domain (Simple Type)**	CerebralMonitorDate
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 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 Report
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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Cerebral Monitor Time TR 39.6

Data Format [combo] single-choice

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: integer	**XSD Element / Domain (Simple Type)**	CerebralMonitorTime
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 Report
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 TR40.1

Data Format [combo] single-choice

NTDB Description

Type of first dose of VTE prophylaxis administered to patient at your hospital

EXCLUDE:

- Sequential compression devices

** Reporting Criterion: Report all patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	VTPType
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.)
Direct Thrombin Inhibitor (Dabigatran, etc.)
Other
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 all patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	VTPDate
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 patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	VTPTime
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 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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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.

** Reporting Criterion: Report all patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	PackedRBC
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 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 should be 0 (zero).

Data Source Hierarchy Guide

1. Trauma Flow Sheet
2. Anesthesia Report
3. Operative Report
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 all patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	WholeBlood
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 amount of transfused whole blood (CCs [mLs]) within first 4 hours after arrival to your hospital.
- If no whole blood was given, then volume reported should be 0 (zero).

Data Source Hierarchy Guide

1. Trauma Flow Sheet
2. Anesthesia Report
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 4 hours after ED/hospital arrival

EXCLUDE:

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

** Reporting Criterion: Report all patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	Plasma
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 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 should be 0 (zero).

Data Source Hierarchy Guide

1. Trauma Flow Sheet
2. Anesthesia Report
3. Operative Report
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.

** Reporting Criterion: Report all patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	Platelets
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 amount of transfused platelets (CCs [mLs]) within first 4 hours after arrival to your hospital.
- If no platelets were given, then volume reported should be 0 (zero).

Data Source Hierarchy Guide

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

National Element

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Cryoprecipitate (4 Hours) TR 40.7

Data Format [combo] single-choice

NTDB Description

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

EXCLUDE:

- Cryoprecipitate transfusing upon patient arrival.

** Reporting Criterion: Report all patients**

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	Cryoprecipitate
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 amount of transfused cryoprecipitate (CCs [mLs]) within first 4 hours after arrival to your hospital.
- If no cryoprecipitate was given, then volume reported should be 0 (zero).

Data Source

1. Trauma Flow Sheet
2. Anesthesia Report
3. Operative Report
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 (Simple Type)**	Angiography
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
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 Report
2. Operative Report
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 (Simple Type)**	Embolization Site
Multiple Entry Configuration	Yes, max 7	**Accepts Null Value**	Yes, common null 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 greater than 2 years before the current NTDS version are no longer listed under Element Values above, which is why there are numbering gaps. Refer to the NTDS Change Log for a full list of retired Embolization Sites.

Data Source

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

National Element

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Angiography Date TR 40.13

Data Format [combo] single-choice

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: integer	**XSD Element / Domain (Simple Type)**	AngiographyDATE
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 if the data element Angiography is "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 Report
2. Operative Report
3. Progress Notes

National Element

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Angiography Time TR 40.14

Data Format [combo] single-choice

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: integer	**XSD Element / Domain (Simple Type)**	AngiographyTIME
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 Angiography is "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 Report
2. Operative Report
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 (Simple Type)**	HemorrhageSurgeryControlType
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 Report
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 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 (Simple Type)**	HemorrhageSurgeryControlDate
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 Report
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

Date 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 (Simple Type)**	HemorrhageSurgeryControlTime
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.
- 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 Report
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: integer	**XSD Element / Domain (Simple Type)**	WithdrawalLifeSupportTreatment
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Element Values

Yes

No

Additional Information

- DNR 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 Notes
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: integer	**XSD Element / Domain (Simple Type)**	WithdrawalLifeSupportTreatmentDate
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 Notes
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: integer	**XSD Element / Domain (Simple Type)**	WithdrawalLifeSupportTreatmentTime
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 Notes
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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Antibiotic Therapy TR 18.189

Data Format [combo] single-choice

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: integer	**XSD Element / Domain (Simple Type)**	AntibioticTherapy
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
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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Antibiotic Therapy Date TR 18.190

Data Format [combo] single-choice

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: integer	**XSD Element / Domain (Simple 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 the data element 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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Antibiotic Therapy Time TR 18.190.1

Data Format [combo] single-choice

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: integer	**XSD Element / Domain (Simple 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 the data element 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 (Simple 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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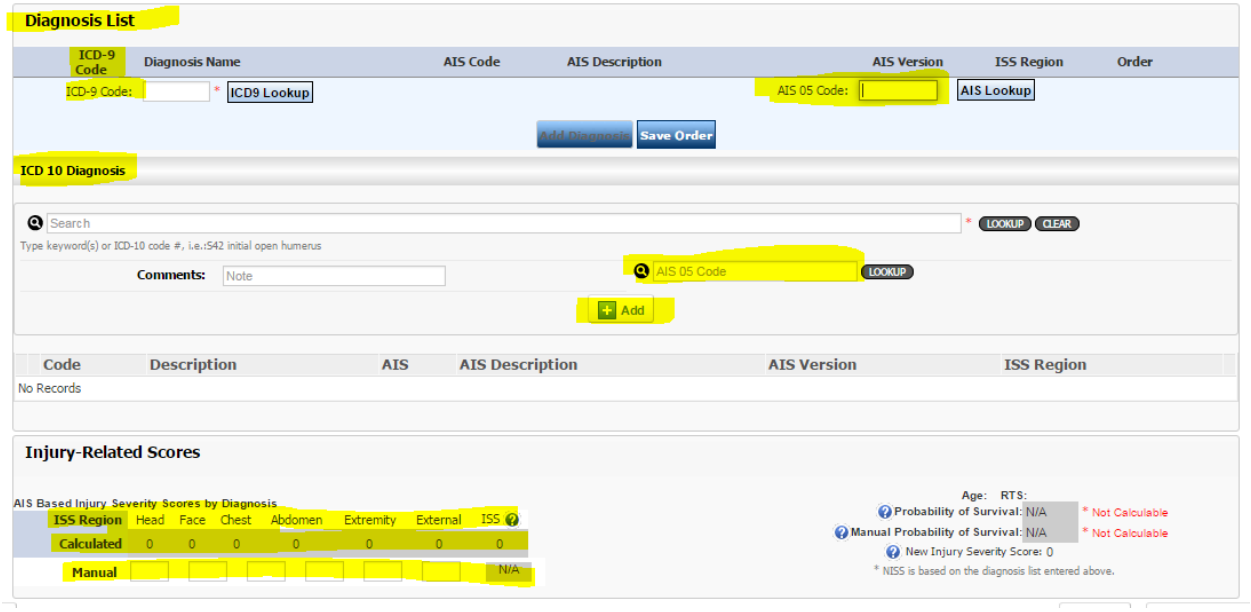
Regarding Injury Severity Score (ISS) and Abbreviated Injury Score (AIS)*

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

Rule ID Level Message

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.XX/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.XX/Y92.XXX (where X is A-Z [excluding I, O] or 0-9) (ICD-10 CM only)
9004 1 Invalid value (ICD-10 CA only)
9005 3 Place of Injury code 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

Rule ID Level Message

9101 1 E-Code is not a valid ICD-10-CM code (ICD-10 CM only)
9102 3 Additional External Cause Code ICD-10 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

Rule ID Level Message

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

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

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

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

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

Emergency Department Information

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

Rule ID Level Message

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

Rule ID Level Message

5401 1 Value is not a valid menu option
5403 2 Element cannot be blank
5404 2 Element cannot be "Not Applicable"
5405 2 Element must be "Not Known/Not Recorded" when 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

Rule ID Level Message
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

Rule ID Level Message

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/Not 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

Rule ID Level Message

8701 1 Invalid value (ICD-10 CM only)
8702 2 Element cannot be blank

8703 2 At least one diagnosis must be provided and meet inclusion criteria. (ICD-10 CM only)
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

Rule ID Level Message

18701 1 Value is not a valid menu option
18703 2 Element cannot be blank
18704 2 Element cannot be “Not Applicable”
18740 1 Single Entry Max exceeded

CARDIAC ARREST WITH CPR

Rule ID Level Message

18801 1 Value is not a valid menu option
18803 2 Element cannot be blank
18804 2 Element cannot be “Not Applicable”
18840 1 Single Entry Max exceeded

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)

Rule ID Level Message

19201 1 Value is not a valid menu option
19203 2 Element cannot be blank
19204 2 Element cannot be “Not Applicable”
19240 1 Single Entry Max exceeded

DELIRIUM

Rule ID Level Message

21601 1 Value is not a valid menu option
21603 2 Element cannot be blank
21604 2 Element cannot be “Not Applicable”
21640 1 Single Entry Max exceeded

MYOCARDIAL INFARCTION (MI)

Rule ID Level Message

19401 1 Value is not a valid menu option
19403 2 Element cannot be blank
19404 2 Element cannot be “Not Applicable”
19440 1 Single Entry Max exceeded

ORGAN/SPACE SURGICAL SITE INFECTION

Rule ID Level Message

19501 1 Value is not a valid menu option
19503 2 Element cannot be blank
19504 2 Element cannot be “Not Applicable”
19540 1 Single Entry Max exceeded

OSTEOMYELITIS

Rule ID Level Message

19601 1 Value is not a valid menu option
19603 2 Element cannot be blank
19604 2 Element cannot be “Not Applicable”

19640 1 Single Entry Max exceeded

PULMONARY EMBOLISM (PE)

Rule ID Level Message

19701 1 Value is not a valid menu option
19703 2 Element cannot be blank
19704 2 Element cannot be “Not Applicable”
19740 1 Single Entry Max exceeded

PRESSURE ULCER

Rule ID Level Message

19801 1 Value is not a valid menu option
19803 2 Element cannot be blank
19804 2 Element cannot be “Not Applicable”
19840 1 Single Entry Max exceeded

SEVERE SEPSIS

Rule ID Level Message

19901 1 Value is not a valid menu option
19903 2 Element cannot be blank
19904 2 Element cannot be “Not Applicable”
19940 1 Single Entry Max exceeded

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

Rule ID Level Message
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
7640 1 Single Entry Max exceeded

HOSPITAL DISCHARGE DATE

Rule ID Level Message
7701 1 Date is not valid
7702 1 Date out of range
7703 2 Element cannot be blank
7707 2 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 criteria
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. None
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

Hospital Name	City / Town	District	Zip	Trauma Center	CAH
ADAMS MEMORIAL HOSPITAL	DECATUR	3	467		Ye
BAPTIST HEALTH-FLOYD	NEW ALBANY	9	471		
BLUFFTON REGIONAL MEDICAL CENTER	BLUFFTON	3	467		
CAMERON MEMORIAL COMMUNITY HOSPITAL	ANGOLA	3	467		Ye
CLARK MEMORIAL HOSPITAL	JEFFERSONVILLE	9	471		
COLUMBUS REGIONAL HOSPITAL	COLUMBUS	8	472		
COMMUNITY HOSPITAL (MUNSTER)	MUNSTER	1	463		
COMMUNITY HOSPITAL EAST	INDIANAPOLIS	5	462		
COMMUNITY HOSPITAL NORTH	INDIANAPOLIS	5	462		
COMMUNITY HOSPITAL OF ANDERSON &	ANDERSON	6	460	Yes	
COMMUNITY HOSPITAL OF BREMEN, IN	BREMEN	2	465		Ye
COMMUNITY HOSPITAL SOUTH	INDIANAPOLIS	5	462		
COMMUNITY HOWARD REGIONAL HEALTH	KOKOMO	6	469		
DAVIESS COMMUNITY HOSPITAL	WASHINGTON	10	475		
DEACONESS GATEWAY	NEWBURGH	10	476		
DEACONESS HOSPITAL	EVANSVILLE	10	477	Yes	
DEARBORN COUNTY HOSPITAL	LAWRENCEBURG	9	470		
DECATUR COUNTY MEMORIAL HOSPITAL	GREENSBURG	9	472		Ye
DEKALB HEALTH	AUBURN	3	467		
DOCTOR'S HOSPITAL	BREMEN	2	465		
DUKES MEMORIAL HOSPITAL	PERU	3	469		Ye
DUPONT HOSPITAL	FORT WAYNE	3	468		
ELKHART GENERAL HOSPITAL	ELKHART	2	465		
ESKENAZI HEALTH	INDIANAPOLIS	5	462	Yes	
FAYETTE REGIONAL HEALTH SYSTEM	CONNERSVILLE	6	473		
FRANCISCAN HEALTH - CRAWFORDSVILLE	CRAWFORDSVIL	4	479		
FRANCISCAN HEALTH - CROWN POINT	CROWN POINT	1	463	Yes	
FRANCISCAN HEALTH - DYER	DYER	1	463		
FRANCISCAN HEALTH - HAMMOND	HAMMOND	1	463		
FRANCISCAN HEALTH - INDIANAPOLIS	INDIANAPOLIS	5	462		
FRANCISCAN HEALTH - LAFAYETTE EAST	LAFAYETTE	4	479	Yes	
FRANCISCAN HEALTH - MICHIGAN CITY	MICHIGAN CITY	1	463		
FRANCISCAN HEALTH - MOORESVILLE	MOORESVILLE	5	461		
FRANCISCAN HEALTH - MUNSTER	MUNSTER	1	463		
FRANCISCAN HEALTH - RENSSELAER	RENSSELAER	1	479		
GIBSON GENERAL HOSPITAL	PRINCETON	10	476		Ye
GOOD SAMARITAN HOSPITAL	VINCENNES	10	475	Yes	
GOSHEN HOSPITAL	GOSHEN	2	465		
GREENE COUNTY GENERAL HOSPITAL	LINTON	7	474		Ye
HANCOCK REGIONAL HOSPITAL	GREENFIELD	5	461		
HARRISON COUNTY HOSPITAL	CORYDON	9	471		Ye
HENDRICKS REGIONAL HEALTH	DANVILLE	5	461		
HENRY COUNTY MEMORIAL HOSPITAL	NEW CASTLE	6	473		
IU HEALTH - ARNETT HOSPITAL	LAFAYETTE	4	479	Yes	
IU HEALTH - BALL MEMORIAL HOSPITAL	MUNCIE	6	473	Yes	

IU HEALTH - BEDFORD HOSPITAL	BEDFORD	8	474		Ye
IU HEALTH - BLACKFORD HOSPITAL	HARTFORD CITY	6	473		Ye
IU HEALTH - BLOOMINGTON HOSPITAL	BLOOMINGTON	8	474	Yes	
IU HEALTH - METHODIST HOSPITAL	INDIANAPOLIS	5	462	Yes	
IU HEALTH - MORGAN HOSPITAL INC	MARTINSVILLE	5	461		
IU HEALTH - NORTH HOSPITAL	CARMEL	5	460		
IU HEALTH - PAOLI HOSPITAL	PAOLI	8	474		Ye
IU HEALTH - RILEY HOSPITAL FOR CHILDREN	INDIANAPOLIS	5	462	Yes	
IU HEALTH - SAXONY HOSPITAL	FISHERS	5	460		
IU HEALTH - STARKE HOSPITAL	KNOX	2	465		
IU HEALTH - TIPTON HOSPITAL INC	TIPTON	6	460		Ye
IU HEALTH - WEST HOSPITAL	AVON	5	461		
IU HEALTH - WHITE MEMORIAL HOSPITAL	MONTICELLO	4	479		Ye
JAY COUNTY HOSPITAL	PORTLAND	6	473		Ye
JOHNSON MEMORIAL HOSPITAL	FRANKLIN	5	461		
KING'S DAUGHTERS' HOSPITAL AND HEALTH	MADISON	9	472		
KOSCIUSKO COMMUNITY HOSPITAL	WARSAW	2	465		
LA PORTE HOSPITAL	LA PORTE	1	463		
LUTHERAN HOSPITAL OF INDIANA	FORT WAYNE	3	468	Yes	
MAJOR HOSPITAL	SHELBYVILLE	5	461		
MARGARET MARY COMMUNITY HOSPITAL INC	BATESVILLE	9	470		Ye
MARION GENERAL HOSPITAL	MARION	6	469		
MEMORIAL HOSPITAL & HEALTH CARE CENTER	JASPER	1	475	Yes	
MEMORIAL HOSPITAL LOGANSPORT	LOGANSPORT	4	469		
MEMORIAL HOSPITAL OF SOUTH BEND	SOUTH BEND	2	466	Yes	
METHODIST HOSPITALS INC NORTHLAKE	GARY	1	464		
METHODIST HOSPITALS INC SOUTHLAKE CAMPUS	MERRILLVILLE	1	464		
MONROE HOSPITAL	BLOOMINGTON	8	474		
PARKVIEW HUNTINGTON HOSPITAL	HUNTINGTON	3	467		
PARKVIEW LAGRANGE HOSPITAL	LAGRANGE	3	467		Ye
PARKVIEW NOBLE HOSPITAL	KENDALLVILLE	3	467		
PARKVIEW RANDALLIA HOSPITAL	FORT WAYNE	3	468		
PARKVIEW REGIONAL MEDICAL CENTER	FORT WAYNE	3	468	Yes	
PARKVIEW WABASH HOSPITAL	WABASH	3	469		
PARKVIEW WHITLEY HOSPITAL	COLUMBIA CITY	3	467		
PERRY COUNTY MEMORIAL HOSPITAL	TELL CITY	1	475		Ye
PEYTON MANNING CHILDREN'S HOSPITAL AT ST	INDIANAPOLIS	5	462		
PORTAGE HOSPITAL	PORTAGE	1	463		
PORTER REGIONAL HOSPITAL	VALPARAISO	1	463		
PULASKI MEMORIAL HOSPITAL	WINAMAC	2	469		Ye
PUTNAM COUNTY HOSPITAL	GREENCASTLE	7	461		Ye
REID HEALTH	RICHMOND	6	473	Yes	
RICHARD L ROUDEBUSH VA MEDICAL CENTER	INDIANAPOLIS	5	462		
RIVERVIEW HEALTH	NOBLESVILLE	5	460		
RUSH MEMORIAL HOSPITAL	RUSHVILLE	6	467		Ye
SCHNECK MEDICAL CENTER	SEYMOUR	8	472		
SCOTT COUNTY MEMORIAL HOSPITAL	SCOTTSBURG	9	471		Ye
ST CATHERINE HOSPITAL INC	EAST CHICAGO	1	463		
ST JOSEPH HOSPITAL	FORT WAYNE	3	468		

ST JOSEPH REGIONAL MEDICAL CENTER	MISHAWAKA	2	465		
ST JOSEPH REGIONAL MEDICAL CENTER	PLYMOUTH	2	465		
ST MARY MEDICAL CENTER HOBART	HOBART	1	463		
ST VINCENT ANDERSON REGIONAL HOSPITAL	ANDERSON	6	460	Yes	
ST VINCENT CARMEL HOSPITAL	CARMEL	5	460		
ST VINCENT CLAY HOSPITAL	BRAZIL	7	478		Ye
ST VINCENT DUNN HOSPITAL INC	BEDFORD	8	474		Ye
ST VINCENT EVANSVILLE	EVANSVILLE	1	477	Yes	
ST VINCENT FISHERS HOSPITAL	FISHERS	5	460		
ST VINCENT FRANKFORT HOSPITAL	FRANKFORT	4	460		Ye
ST VINCENT HOSPITAL - INDIANAPOLIS	INDIANAPOLIS	5	462	Yes	
ST VINCENT JENNINGS HOSPITAL	NORTH VERNON	9	472		Ye
ST VINCENT KOKOMO	KOKOMO	6	469		
ST VINCENT MERCY HOSPITAL INC	ELWOOD	6	460		Ye
ST VINCENT RANDOLPH HOSPITAL	WINCHESTER	6	473		Ye
ST VINCENT SALEM HOSPITAL	SALEM	8	471		Ye
ST VINCENT WARRICK HOSPITAL	BOONVILLE	1	476		Ye
ST VINCENT WILLIAMSPORT HOSPITAL	WILLIAMSPORT	4	479		Ye
SULLIVAN COUNTY COMMUNITY HOSPIT	SULLIVAN	7	478		Ye
TERRE HAUTE REGIONAL HOSPITAL	TERRE HAUTE	7	478	Yes	
UNION HOSPITAL CLINTON	CLINTON	7	478		
UNION HOSPITAL TERRE HAUTE	TERRE HAUTE	7	478	Yes	Ye
VALPARAISO MEDICAL CENTER	VALPARAISO	1	463		
WITHAM HEALTH SERVICES	LEBANON	5	460		
WITHAM HEALTH SERVICES AT ANSON	ZIONSVILLE	5	460		
WOODLAWN HOSPITAL	ROCHESTER	2	469		Ye

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 AGENTS	THROMBIN INHIBITORS	THROMBOLYTIC 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 a sufficient quantity of 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. Exclude 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, was 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): (Consistent with Centers for Disease Control, 2014 Fact Sheet.

Always use the most recent definition provided by the CDC.) 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.

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 7 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 are: 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 ≥ 4.0 mg/dl (≥ 353.6 µmol/l)

OR
Initiation of renal replacement therapy OR, in patients < 18 years, decrease in eGFR to <35 ml/min per 1.73 m^2

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 oliguria and creatinine are present.

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): (Consistent with the 2012 New Berlin Definition.
Always use the most recent New Berlin definition provided.)

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: 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.

Alcohol Withdrawal Syndrome: (Consistent with the 2016 World Health Organization (WHO) definition of Alcohol Withdrawal Syndrome. Always use the most recent definition provided by the WHO.)
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). 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.
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^{0}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^{0}C)
   - hypothermia (<36.0^{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 ≥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^{0}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 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 calendar days after.

OR

January 2016 CDC Criterion LCBI 3:

Patient ≤ 1 year of age has at least one of the following signs or symptoms: fever (>38^0 C), hypothermia (<36^{0}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., 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 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 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-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		

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 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
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		

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 1 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 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)

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 extubation. 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 • 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** chest imaging test reslut is acceptable.	• Fever (>38°C or >100.4°F) • Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³) • For adults ≥70 years old, altered mental status with no other recognized cause AND at least two of the following: • 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_2 desaturations (e.g., $PaO_2/FiO_2 \leq 240$), increased oxygen requirements, or increased ventilator demand)	• Organism identified from blood • Organism identified from pleural fluid • Positive quantitative culture from minimally-contaminated LRT specimen (e.g., BAL or protected specimen brushing.) • ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (e.g., Gram's stain) • Positive quantitative culture of lung tissue • Histopathologic exam shows at least **one** of the following evidences of pneumonia: ○ Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles and alveoli ○ 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: • New or progressive **and** persistent infiltrate • Consolidation • Cavitation • Pneumatoceles, in infants ≤1 year old	At least **one** of the following: • Fever (>38°C or >100.4°F) • Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³) • For adults ≥70 years old, altered mental status with no other recognized cause AND at least **one** of the following:	At least **one** of the following: • Virus, *Bordetella, Legionella, Chlamydia or Mycoplasma* 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). • Fourfold rise in paired sera (IgG) for pathogen (e.g., influenza viruses, *Chlamydia*) • Fourfold rise in *Legionella pneumophila* serogroup 1 antibody titer to ≥1:128 in paired acute and convalescent sera by indirect IFA.
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_2 desaturations (e.g., $PaO_2/FiO_2 \leq 240$), 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 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),	Patient who is immunocompromised has at least ***one*** of the following: • Fever (>38°C or >100.4°F) • 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 increased suctioning requirements • New onset or worsening cough, or dyspnea, or tachypnea5 • Rales6 or bronchial breath sounds • Worsening gas exchange (e.g., O2 desaturations [e.g., PaO2/FiO2 <240]7, increased oxygen requirements, or increased ventilator demand)	At least **one** of the following: • 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 Any of the following from: **LABORATORY CRITERIA DEFINED UNDER PNU2**

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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 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 result is acceptable.	Worsening gas exchange (e.g., O_2 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/mm³) or leukocytosis (≥15,000 WBC/mm³) 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 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 result is acceptable.	At least **three** of the following: • Fever (>38.0°C or >100.4°F) or hypothermia (<36.0°C or <96.8°F) • Leukopenia (≤4000 WBC/mm³) or leukocytosis (≥15,000 WBC/mm³) • 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, apnea, or tachypnea • Rales or bronchial breath sounds • Worsening gas exchange (e.g., O_2 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:

a. **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:
   a. Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities.
   b. Pooling of risk by underwriting insurance and annuities.
   c. Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs.

b. **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.

c. **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.

d. **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:
   a. Store retailers operate fixed point-of-sale locations, located and designed to attract a high volume of walk-in customers.
   b. Non-store retailers, like store retailers, are organized to serve the general public, but their retailing methods differ.

e. **Transportation and Public Utilities** - 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.

f. **Agriculture, Forestry, Fishing** - 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.

g. **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.

h. **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.

i. **Construction** - 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.

j. **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.

k. **Natural Resources and Mining** - 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.

l. **Information Services** - 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.

m. **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.

n. **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.

o. **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:

a. **Business and Financial Operations Occupations**
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, All Other

b. Architecture and Engineering Occupations
Landscape Architects
Surveyors, Cartographers, and Photogrammetrists Agricultural Engineers
Chemical Engineers Civil Engineers
Electrical Engineers

c. **Community and Social Services Occupations**
Marriage and Family Therapists
Substance Abuse and Behavioral Disorder Counselors Healthcare Social workers
Probation Officers and Correctional Treatment Specialists Clergy

d. **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

e. **Healthcare Practitioners and Technical Occupations**

Dentists, All Other
Specialists Dietitians
and Nutritionists
Physicians and
Surgeons Nurse
Practitioners
Cardiovascular Technologists and Technicians
Emergency Medical Technicians and Paramedics

f. **Protective Service Occupations**

Firefighters
Police
Officers
Animal Control Workers
Security Guards
Lifeguards, Ski Patrol, and Other Recreational Protective Service

g. **Building and Grounds Cleaning and Maintenance**

Building Cleaning Workers
Landscaping and Grounds keeping Workers Pest Control
Workers Pesticide Handlers, Sprayers, and Applicators,
Vegetation
Tree Trimmers and Pruners

h. **Sales and Related Occupations**

Advertising Sales
Agents Retail
Salespersons Counter
and Rental Clerks
Door-to-Door Sales Workers, News and Street Vendors, and Related
Workers Real Estate Brokers

i. **Farming, Fishing, and Forestry Occupations**

Animal Breeders
Fishers and Related Fishing Workers
Agricultural Equipment Operators Hunters and
Trappers Forest and Conservation Workers
Logging Workers

j. **Installation, Maintenance, and Repair Occupations**

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
Industrial Machinery Installation, Repair, and Maintenance Workers

k. **Transportation and Material Moving Occupations**

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

l. **Management Occupations**

Public Relations and Fundraising
Managers Marketing and Sales
Managers Administrative Services
Managers
Transportation, Storage, and Distribution
Managers Transportation, Storage, and
Distribution Managers Food Service
Managers

m. **Computer and Mathematical Occupations**

Web Developers
Software Developers and Programmers
Database
Administrators
Statisticians
Computer Occupations, All Other

n. **Life, Physical, and Social Science Occupations**

Psychologists Economists
Foresters Zoologists and
Wildlife Biologists Political
Scientists
Agricultural and Food Science Technicians

o. **Legal Occupations**

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

p. **Arts, Design, Entertainment, Sports, and Media**

Artists and Related Workers, All Other
Athletes, Coaches, Umpires, and Related Workers
Dancers and Choreographers Reporters and Correspondents

Interpreters and Translators

Photographers

Healthcare Support Occupations

Nursing, Psychiatric, and Home Health Aides

Physical Therapist Assistants and Aides
Veterinary Assistants and Laboratory Animal
Caretakers Healthcare Support Workers, All Other
Medical Assistants

q. **Food Preparation and Serving Related**

Bartenders

Cooks, Institution and

Cafeteria Cooks, Fast Food
Counter Attendants, Cafeteria, Food Concession, and
Coffee Shop Waiters and waitresses
Dishwashers

r. **Personal Care and Service Occupations**

Animal Trainers
Amusement and Recreation Attendants

Barbers, Hairdressers, Hairstylists and

Cosmetologists Baggage Porters, Bellhops,

and Concierges
Tour Guides and Escorts
Recreation and Fitness
Workers

s. **Office and Administrative Support Occupations**

Bill and Account
Collectors Gaming
Cage Workers
Payroll and Timekeeping Clerks
Tellers
Court, Municipal, and License
Clerks Hotel, Motel, and Resort
Desk Clerks

t. **Construction and Extraction Occupations**

Brickmasons, Blockmasons, and Stonemasons

Carpet, Floor, and Tile Installers and Finishers

Construction Laborers

Electricians
Pipelayers, Plumbers, Pipefitters, and
Steamfitters Roofers

u. **Production Occupations**

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

v. **Military Specific Occupations**

Air Crew Officers
Armored Assault Vehicle
Officers Artillery and Missile
Officers
Infantry Officers

Military Officer Special and Tactical Operations Leaders, All Other and providing dry cleaning and laundry services, personal care services, and death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Foreign Visitor is defined as 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: 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.

Hospice: An organization which is primarily designed to provide pain relief, symptom management and supportive services for the terminally ill and their families.

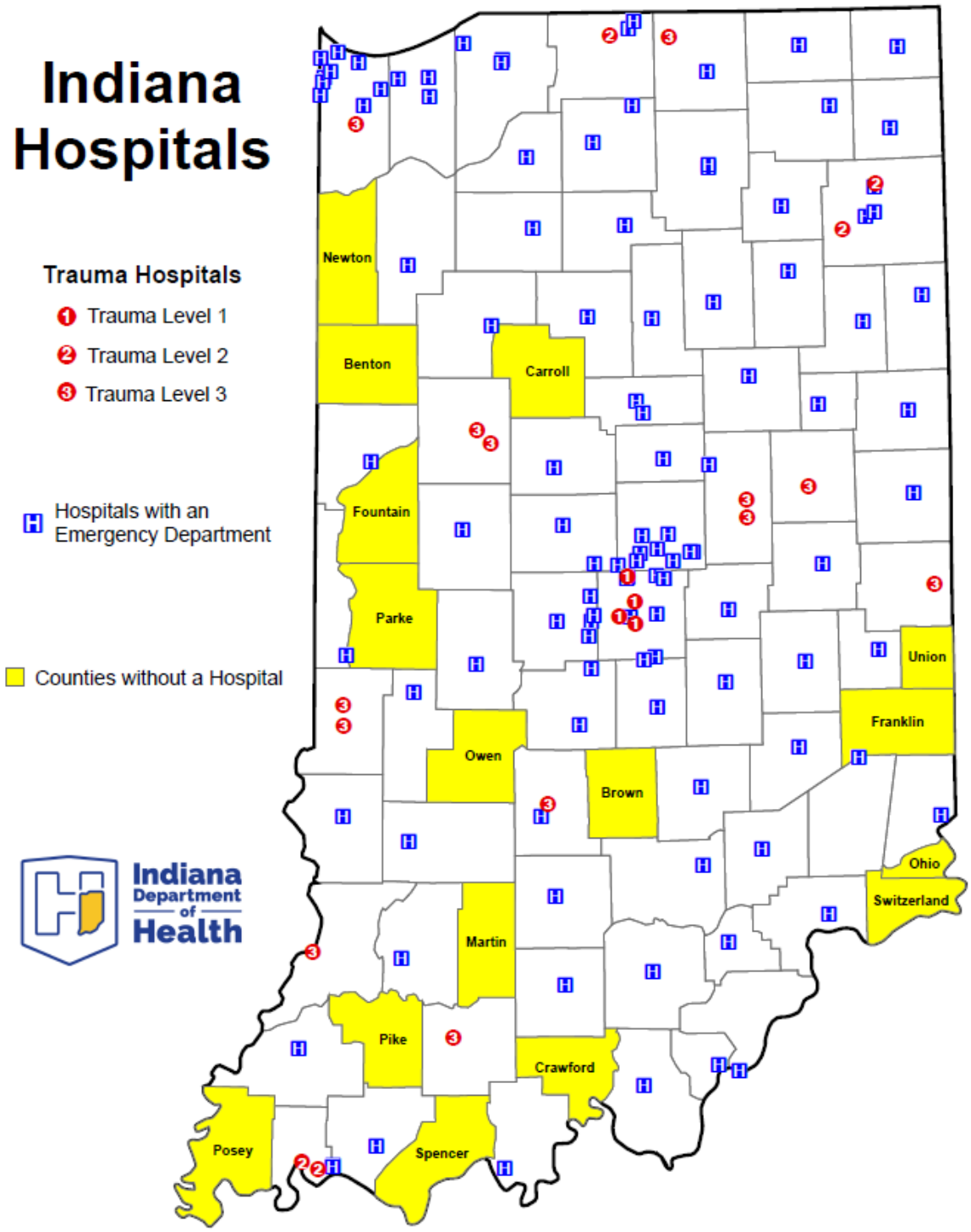
Migrant Worker is defined as a person who temporarily leaves his/her principal place of residence within a country in order to accept seasonal employment in the same or different country.

Operative and/or essential procedures is defined as 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 is defined as a national of another country who has entered or stayed in another country without permission.

Appendix 4: Map with and without Emergency Departments or no hospital at all



Appendix 5: Acronyms

- AIS: Abbreviated Injury Scale
- CDC: Centers for Disease Control
- CPR: cardiopulmonary resuscitation
- CT: computerized tomography
- ED: emergency department
- EMS: emergency medical service
- GCS: Glasgow Coma Scale
- ICD-10: International Classification of Diseases, Tenth Revision
- ICD-10-CA: International Classification of Diseases, Tenth Revision, Canada
- ICD-10-CM: International Classification of Diseases, Tenth Revision, Clinical Modification
- ICD-10-PCS: International Classification of Diseases, Tenth Revision, Procedure Coding System
- ICU: intensive care unit
- LOS: length of stay
- NA: not applicable
- NEMSIS: National Emergency Medical Services Information System
- NK/NR: not known/not recorded
- NTDB: National Trauma Data Bank
- NTDS: National Trauma Data Standard
- OR: operating room
- PACU: post-anesthesia care unit
- TQIP: Trauma Quality Improvement Program
- TQP: Trauma Quality Programs