M·TQIP

2020 Data Dictionary

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PATIENT INCLUSION CRITERIA

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

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

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

- **S00-S99 with 7th character modifiers of A, B, or C ONLY.** (Injuries to specific body parts –
- initial encounter)
- **T07** (unspecified multiple injuries)
- **T14** (injury of unspecified body region)
- **T20-T28 with 7th character modifier of A ONLY** (burns by specific body parts – initial encounter)
- **T30-T32** (burn by TBSA percentages)
- **T79.A1-T79.A9 with 7th character modifier of A ONLY** (Traumatic Compartment Syndrome –
- initial encounter)

Excluding the following isolated injuries:

ICD-10-CM:

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

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

AND MUST INCLUDE ONE OF THE FOLLOWING IN ADDITION TO (ICD-10-CM S00-S99, T07, T14, T20-T28, T30-T32 and T79.A1-T79.A9):

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

OR

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

OR

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

OR

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

*Acute Care Hospital is defined as a hospital that provides inpatient medical care and other related services for surgery, acute medical conditions or injuries (usually for a short-term illness or condition). CMS Data Navigator Glossary of Terms

Patients entered into the trauma registry will then be selected for analysis using TQIP and/or MTQIP inclusion and exclusion criteria.

Def. Source: NTDS, page iv-v

CASE NUMBER

Registry number from commercial registry software. This number is automatically assigned by the registry program. We will use only the initial admission (xxxxxx.000) record.

Def. Source:
Data Base Column Name: TRAUMA_NUM
Type of Element: Numeric
Length: 10
Report: #1-6

TRAUMA CENTER

A two-letter code that identifies each trauma center. Assigned by the data coordinating center.

BO	Ascension Borgess Hospital
PN	Ascension Providence Hospital Novi
VH	Ascension Providence Hospital Southfield
JO	Ascension St. John Hospital
SM	Ascension St. Mary's Hospital
OW	Beaumont Hospital - Dearborn
BF	Beaumont Hospital - Farmington Hills
WB	Beaumont Hospital - Royal Oak
OS	Beaumont Hospital – Trenton
TB	Beaumont Hospital – Troy
BM	Bronson Methodist Hospital
CO	Covenant HealthCare
DR	Detroit Receiving Hospital
GH	Genesys Health System
AL	Henry Ford Allegiance
HF	Henry Ford Hospital
HM	Henry Ford Macomb Hospital
HU	Hurley Medical Center
MC	McLaren Macomb
ML	McLaren Lapeer Regional Medical Center
PO	McLaren Oakland
MK	Mercy Health Muskegon
MM	Mercy Health Saint Mary's
MH	Metro Health
MI	MidMichigan Medical Center - Midland
MU	Munson Medical Center
SG	Sinai-Grace Hospital
SP	Sparrow Hospital
SH	Spectrum Health
SJ	St. Joseph Mercy Hospital Ann Arbor
SO	St. Joseph Mercy Oakland
LM	St. Mary Mercy Livonia Hospital
MG	UP Health System Marquette
UM	Michigan Medicine
MN	University of Minnesota

Def. Source: MTQIP
Report: 1,2,3,4,5,6,7,8

DEMOGRAPHIC INFORMATION

PATIENT'S FIRST NAME

The first name of the patient.

Def. Source: MTQIP
Data Base Column Name: PAT_NAME_F
Type of Element:
Length:
Report: #1

PATIENT'S LAST NAME
The last name of the patient.

Def. Source: MTQIP
Data Base Column Name: PAT_NAME_L
Type of Element:
Length:
Report: #1

PATIENT'S MIDDLE INITIAL
The first initial of the middle name of the patient.

Def. Source: MTQIP
Data Base Column Name: PAT_NAME_MI
Type of Element:
Length:
Report: #1

PATIENT'S HOME STREET 1
The house number and street of the patient.

Def. Source: MTQIP
Data Base Column Name: PAT_ADR_S01
Type of Element:
Length:
Report: #1

PATIENT'S HOME STREET 2
The house number and street of the patient if additional information is necessary to find the patient's home destination.

Def. Source: MTQIP
Data Base Column Name: PAT_ADR_S02
Type of Element:
Length:
Report: #1

PATIENT'S EMAIL ADDRESS
The email address of the patient.

- If the patient does not have an email address, a proxy email used by the patient or surrogate may be entered.

Def. Source: MTQIP
Data Base Column Name: EMAIL_ADDRES
Type of Element:
Length:
Report: #1

PATIENT'S MEDICAL RECORD NUMBER
The medical record number of the patient at your hospital.

- This number should be the unique identifier to the patient at your hospital.

- This identifier should be able to identify the patient across all their care visits at your center and should not be unique for a single encounter.

Def. Source: MTQIP
Data Base Column Name: PAT_REC_NUM
Type of Element:
Length:

Report: #1

PATIENT'S HOME ZIP/POSTAL CODE

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

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

Def. Source: NTDB
Data Base Column Name: PAT_ADR_ZIP
Type of Element: Numeric
Length:
Report: #1

PATIENT'S HOME COUNTRY

The country where the patient resides.

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

Def. Source: NTDB
Data Base Column Name: PAT_ADR_CY_S
Type of Element:
Length:
Report: #1

PATIENT'S HOME STATE

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

- Relevant value for data element (two-digit numeric FIPS code)
- Only reported when ZIP/Postal code is "Not Known/Not Recorded" and country is US.
- Used to calculate FIPS code.
- The null value "Not Applicable" is reported if Patient's Home ZIP/Postal Code is documented.
- The null value “Not Applicable” is reported for non-US hospitals.

Def. Source: NTDB
Data Base Column Name: PAT_ADR_ST
Type of Element:
Length:
Report: #1

PATIENT'S HOME COUNTY

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

- Relevant value for data element (three-digit numeric FIPS code)
- Only reported when ZIP/Postal code is "Not Known/Not Recorded" and country is US.
- Used to calculate FIPS code.
- The null value "Not Applicable" is reported if Patient's Home ZIP/Postal Code is documented.
- The null value “Not Applicable” is reported for non-US hospitals.

Def. Source: NTDB
Data Base Column Name: PAT_ADR_FCO
Type of Element:
Length:
Report: #1

PATIENT'S HOME CITY

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

- Relevant value for data element (five-digit numeric FIPS code).
- Only reported when ZIP/Postal 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 documented.
- The null value “Not Applicable” is reported for non-US hospitals.

Def. Source: NTDB
Data Base Column Name: PAT_ADR_FCI
Type of Element:
Length:
Report: #1

ALTERNATE HOME RESIDENCE

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

- Only reported when ZIP/Postal 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 reported if Patient's Home ZIP/Postal Code is reported.
- Report all that apply.

Def. Source: NTDB
Data Base Column Name: PAT_ADR_ALT1, PAT_ADR_ALT2, PAT_ADR_ALT3
Type of Element:
Length:
Report: #1

DATE OF BIRTH

The patient's date of birth.

- Relevant value for data element
- Collected as YYYY-MM-DD.
- If Date of Birth is “Not Known/Not Recorded”, report variables: Age and Age Units.
- If Date of Birth is equal to Injury Date, then the Age and Age Units variables must be reported.

Def. Source: NTDB
Data Base Column Name: DOB_DATE

Type of Element:
Length:
Report: #1

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

- Used to calculate patient age in hours, days, months, or years.
- If Date of Birth is "Not Known/Not Recorded", report variables: Age and Age Units.
- If Date of Birth equals ED/Hospital Arrival Date, then the Age and Age Units variables must be reported.
- Must also report variable: Age Units.
- The null value "Not Applicable" is reported if Date of Birth is documented.
- If an age is unable to be found after referencing all available documentation including the medical examiner report, then enter an age of 50.

Def. Source: NTDS
Data Base Column Name: CALCULATED_AGE
Type of Element: Numeric
Length: 5
Report: #1

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

- If Date of Birth is "Not Known/Not Recorded", report variables: Age and Age Units.
- If Date of Birth equals ED/Hospital Arrival Date, then the Age and Age Units variables must be reported.
- Must also report variable: Age.
- The null value "Not Applicable" is reported if Date of Birth is reported.

(1) Hours
(2) Days
(3) Months
(4) Years
(5) Minutes
(6) Weeks

Def. Source: NTDB
Data Base Column Name: AGE_UNIT
Type of Element:
Length:
Report: #1

RACE
The patient's race.

- Patient race should be based upon self-report or identified by a family member.
- Select all that apply.

(1) Asian, (A)
(2) Native Hawaiian or Other Pacific Islander (P)
(3) Other Race (O)
(4) American Indian (I)
(5) Black or African American (B)
(6) White (W)

Def. Source: NTDS, US Census Bureau 2010
Data Base Column Name: RACE, RACE2, RACE3, RACE4, RACE5, RACE6
Type of Element: Character

Length: 2
Report: #1

ETHNICITY
The patient's ethnicity.

- 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.

(1) Hispanic or Latino
(2) Not Hispanic or Latino

Def. Source: NTDS, US Census Bureau 2010
Data Base Column Name: ETHNICITY
Type of Element: Numeric
Length: 1
Report: #1

SEX
The patient's sex.

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

(1) Male (M)
(2) Female (F)

Def. Source: NTDS
Data Base Column Name: SEX
Type of Element: Character
Length: 1
Report: #1

INJURY INFORMATION

INJURY INCIDENT DATE
The date the injury occurred.

- Collected as YYYY-MM-DD.
- 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 reported.

Def. Source: NTDS
Data Base Column Name: INJ_DT
Type of Element: Date (MM/DD/YYYY Format)
Length: 8
Report: #1

INJURY INCIDENT TIME
The time the injury occurred.

- Collected as HH:MM 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 reported.

Def. Source: NTDS
Data Base Column Name: INJ_TM
Type of Element: Character (Time Format)

Length: 5
Report: #1

WORK-RELATED

Indication of whether the injury occurred during paid employment.

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

(1) Yes
(2) No

Def. Source: NTDB
Data Base Column Name: INJ_WORK_YN
Type of:
Length:
Report: #1

PATIENT'S OCCUPATIONAL INDUSTRY

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

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

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

Def. Source: NTDB
Data Base Column Name: PAT_JOB_TYPE
Type of Element:
Length:
Report: #1

PATIENT'S OCCUPATION

The occupation of the patient.

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

(1) Business and Financial Operations Occupations
(2) Architecture and Engineering Occupations
(3) Community and Social Services Occupations
(4) Education, Training, and Library Occupations

(5) Healthcare Practitioners and Technical Occupations
(6) Protective Service Occupations
(7) Building and Grounds Cleaning and Maintenance
(8) Sales and Related Occupations
(9) Farming, Fishing, and Forestry Occupations
(10) Installation, Maintenance, and Repair Occupations
(11) Transportation and Material Moving Occupations
(12) Management Occupations
(13) Computer and Mathematical Occupations
(14) Life, Physical, and Social Science Occupations
(15) Legal Occupations
(16) Arts, Design, Entertainment, Sports, and Media
(17) Healthcare Support Occupations
(18) Food Preparation and Serving Related
(19) Personal Care and Service Occupations
(20) Office and Administrative Support Occupations
(21) Construction and Extraction Occupations
(22) Production Occupations
(23) Military Specific Occupations

Def. Source: NTDB
Data Base Column Name: PAT_JOB
Type of Element:
Length:
Report: #1

ICD-10 PRIMARY EXTERNAL CAUSE CODE
External cause code used to describe the mechanism (or external factor) that caused the injury event.

- Relevant ICD-10-CM code value for injury event.
- The primary external cause code should describe the main reason a patient is admitted to the hospital.
- ICD-10-CM codes are accepted for this data element. Activity codes are not collected under the NTDS and should not be reported for this data element.
- 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 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.

Def. Source: NTDS
Data Base Column Name: INJ_ECODE_ICD10_01
Type of Element: Character (Alphanumeric)
Length: 5
Report: #1

ICD-10 PLACE OF OCCURRENCE EXTERNAL CAUSE CODE
Place of occurrence external cause code used to describe the place/site/location of the injury event (Y92.x).

- Relevant ICD-10-CM code value for injury event
- Only ICD-10-CM codes will be accepted for ICD-10 Place of Occurrence External Cause Code.

Def. Source: NTDB
Data Base Column Name: INJ_PLC_ICD10
Type of Element:
Length:
Report: #1

ICD-10 ADDITIONAL EXTERNAL CAUSE CODE

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.

- Relevant ICD 10-CM code value for injury event
- Only ICD-10-CM codes will be accepted for ICD-10 Additional External Cause Code.
- Activity codes are not reported under the NTDS and should not be reported for this data element.
- The null value "Not Applicable" is reported if no additional external cause codes are used.
- 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 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.

Def. Source: NTDS
Data Base Column Name: INJ_ECODE_ICD10_02
Type of Element: Character (Alphanumeric)
Length: 5
Report: #1

INCIDENT LOCATION ZIP/POSTAL CODE

The ZIP/Postal code of the incident location.

- Relevant value for data element
- Can be stored as a 5 or 9-digit code (XXXXX-XXXX) for US and CA, or can be stored in the postal code format of the applicable country.
- If "Not Known/Not Recorded," report variables: Incident Country, Incident State (US Only), Incident County (US Only) and Incident City (US Only).
- May require adherence to HIPAA regulations.
- If ZIP/Postal code is reported, then must report Incident Country.

Def. Source: NTDB
Data Base Column Name: INJ_ADR_ZIP
Type of Element:
Length:
Report: #1

INCIDENT COUNTRY

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

- Relevant value for data element (two-digit alpha country code)
- Values are two-character FIPS codes representing the country (e.g., US).
- If Incident Country is not US, then the null value "Not Applicable" is reported for: Incident State, Incident County, and Incident Home City

Def. Source: NTDB
Data Base Column Name: INJ_ADR_CY_S
Type of Element:
Length:
Report: #1

INCIDENT STATE

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

- Relevant value for data element (two-digit numeric FIPS code).
- Only reported when Incident Location ZIP/Postal Code is "Not Known/Not Recorded", and country is US.
- Used to calculate FIPS code.
- The null value "Not Applicable" is reported if Incident Location ZIP/Postal Code is reported.
- If Incident Country is not US, report the null value "Not Applicable."

Def. Source: NTDB
Data Base Column Name: INJ_ADR_ST
Type of Element:
Length:
Report: #1

INCIDENT COUNTY

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

- Relevant value for data element (three-digit numeric FIPS code).
- Only reported when Incident Location ZIP/Postal Code is "Not Known/Not Recorded", and country is US.
- Used to calculate FIPS code.
- The null value "Not Applicable" is reported if Incident Location ZIP/Postal Code is reported.
- If Incident Country is not US, report the null value "Not Applicable."

Def. Source: NTDB
Data Base Column Name: INJ_ADR_FCO
Type of Element:
Length:
Report: #1

INCIDENT CITY

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

- Relevant value for data element (five-digit numeric FIPS code).
- Only reported 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 reported if Incident Location ZIP/Postal Code is reported.
- If Incident Country is not US, report the null value "Not Applicable."

Def. Source: NTDB
Data Base Column Name: INJ_ADR_FCI
Type of Element:
Length:
Report: #1

PROTECTIVE DEVICES

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

- Report all that apply.

- If "Child Restraint" is present, must report data element Child Specific Restraint.
- If "Airbag" is present, must report data element Airbag Deployment.
- Evidence of the use of safety equipment may be reported or observed.
- Lap Belt should be reported to include those patients that are restrained, but not further specified.
- If chart indicates "3-point-restraint," report Element Values “2. Lap Belt” and “10. Shoulder Belt.”
- If documented that a “Child Restraint (booster seat or child care seat)” was used or worn, but not properly fastened, either on the child or in the car, report Element Value “1. None.”

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

Def. Source: NTDS
Data Base Column Name: SAFETY01, SAFETY02, SAFETY03
Type of Element:
Length:
Report: #7

AIRBAG DEPLOYMENT

Indication of airbag deployment during a motor vehicle crash.

- Report all that apply.
- Evidence of the use of airbag deployment may be reported or observed.
- Only report when Protective Devices include "8. Airbag Present."
- Airbag Deployed Front should be reported for patients with documented airbag deployments but are not further specified.
- The null value "Not Applicable" is used if no "Airbag Present" is reported under Protective Devices.

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

Def. Source: NTDB
Data Base Column Name: AIRBAG01, AIRBAG02, AIRBAG03, AIRBAG04
Type of Element:
Length:
Report: #1

MECHANISM

Enter the mechanism that caused the injury event. Blunt injuries are the result of an external force exerted onto the body. Penetrating injuries result from the puncturing of the skin creating a wound.

(1) Blunt
(2) Penetrating

Def. Source:
Data Base Column Name: INJ_TYPE
Type of Element: Character

Length: 15
Report: #1

PRE-HOSPITAL INFORMATION

EMS DISPATCH DATE

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

- Relevant value for data element
- Collected as YYYY-MM-DD.
- 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 reported for patients who were not transported by EMS.

Def. Source: NTDB
Data Base Column Name: PHP_D_DATES_L (SCENE), ITP_D_DATES_L (INTERFACILITY TXFR)
Type of Element:
Length:
Report: #1

EMS DISPATCH TIME

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

- Relevant value for data element
- 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 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 reported for patients who were not transported by EMS.

Def. Source: NTDB
Data Base Column Name: PHP_D_TIMES_L (SCENE), ITP_D_TIMES_L (INTERFACILITY TXFR)
Type of Element:
Length:

Report: #1

EMS UNIT ARRIVAL DATE AT SCENE OR TRANSFERRING FACILITY

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

- Relevant value for data element
- Collected as YYYY-MM-DD.
- For inter-facility transfer patients, this is the date on which the unit transporting the patient to your facility from the transferring facility arrived at the transferring facility (arrival is defined at date/time when the vehicle stopped moving).
- 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 arrived at the scene (arrival is defined at date/time when the vehicle stopped moving).
- The null value "Not Applicable" is reported for patients who were not transported by EMS.

Def. Source: NTDB
Data Base Column Name: PHP_A_DATES_L (SCENE), ITP_A_DATES_L (INTERFACILITY TRANFER)
Type of Element:

Length:
Report: #1

EMS UNIT ARRIVAL TIME AT SCENE OR TRANSFERRING FACILITY

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

- Relevant value for data element.
- 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 at 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 at date/time when the vehicle stopped moving).
- The null value "Not Applicable" is reported for patients who were not transported by EMS.

Def. Source: NTDB
Data Base Column Name: PHP_A_TIMES_L (SCENE), ITP_A_TIMES_L (INTERFACILITY TRANSFER)
Type of Element:
Length:
Report: #1

EMS UNIT DEPARTURE DATE FROM SCENE OR TRANSFERRING FACILITY

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

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

Def. Source: NTDB
Data Base Column Name: PHP_L_DATES_L (SCENE), ITP_L_DATES_L (INTERFACILITY TRANSFER)
Type of Element:
Length:
Report: #1

EMS UNIT DEPARTURE TIME FROM SCENE OR TRANSFERRING FACILITY

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

- Relevant value for data element.
- 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 at 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 at date/time when the vehicle started moving).
- The null value "Not Applicable" is reported for patients who were not transported by EMS.

Def. Source: NTDB
Data Base Column Name: PHP_L_TIMES_L (SCENE), ITP_L_TIMES_L (INTERFACILITY TRANSFER)
Type of Element:

Length:
Report: #1

TRANSPORT MODE

The mode of transport delivering the patient to your hospital.

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

Def. Source: NTDS
Data Base Column Name: PAT_A_MODE, ITP_MODE (DI ONLY)
Type of Element:
Length:
Null: Registry Default
Report: #1

INITIAL FIELD SYSTOLIC BLOOD PRESSURE

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

- Relevant value for data element.
- 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.
- 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 reported 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 systolic blood pressure was NOT measured at the scene of injury.

Def. Source: NTDB
Data Base Column Name: PHAS_SBPS_L
Type of Element:
Length:
Report: #1

INITIAL FIELD PULSE RATE

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

- Relevant value for data element
- 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.
- 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 reported 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.

Def. Source: NTDB
Data Base Column Name: PHAS_PULSES_L
Type of Element:
Length:

Report: #1

INITIAL FIELD RESPIRATORY RATE

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

- Relevant value for data element
- 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.
- The null value "Not Applicable" is reported 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.

Def. Source: NTDB
Data Base Column Name: PHAS_URRS_L (PRE-HOSPITAL UNASSISTED), PHAS_ARRS_L (PRE-HOSPITAL ASSISTED)
Type of Element:
Length:
Report: #1

INITIAL FIELD OXYGEN SATURATION

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

- Relevant value for data element
- 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.
- Value should be based upon assessment before administration of supplemental oxygen.
- The null value "Not Applicable" is reported 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.

Def. Source: NTDB
Data Base Column Name: PHAS_SA02S_L
Type of Element:
Length:
Report: #1

INITIAL FIELD GCS - EYE

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

- 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 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.
- The null value "Not Applicable" is reported 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.
- The null value “Not Known/Not Recorded” is reported if Initial Field GCS 40 – Eye is reported.

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

Def. Source: NTDB
Data Base Column Name: PHAS_GCS_EOS_L

Type of Element:
Length:
Report: #1

INITIAL FIELD GCS - VERBAL

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

- 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 patient is intubated, then the GCS Verbal score is equal to 1.
- 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 Applicable" is reported 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 - Verbal was NOT measured at the scene of injury.
- The null value “Not Known/Not Recorded” is reported if Initial Field GCS 40 - Verbal is reported.

(1) No verbal response
(2) Incomprehensible sounds
(3) Inappropriate words
(4) Confused
(5) Oriented

Def. Source: NTDB
Data Base Column Name: PHAS_GCS_VRS_L
Type of Element:
Length:
Report: #1

INITIAL FIELD GCS - MOTOR

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

- 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 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 reported 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 - Motor was NOT measured at the scene of injury.
- The null value “Not Known/Not Recorded” is reported if Initial Field GCS 40 - Motor is reported.

(1) No motor response
(2) Extension to pain
(3) Flexion to pain
(4) Withdrawal from pain
(5) Localizing pain
(6) Obeys commands

Def. Source: NTDB
Data Base Column Name: PHAS_GCS_MRS_L
Type of Element:
Length:
Report: #1

INITIAL FIELD GCS - TOTAL

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

- Relevant value for data element.
- 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 recorded, but there is 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.
- The null value "Not Applicable" is reported 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 reported if Initial Field GCS 40 is reported.

Def. Source: NTDB
Data Base Column Name: PHAS_GCSSC_L
Type of Element:
Length:
Report: #1

INITIAL FIELD GCS 40 - EYE

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

- 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 Element Value “0. Not Testable” if unable to assess (e.g. swelling to eye(s)).
- The null value “Not Known/Not Recorded” is reported if 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.

(1) None
(2) To Pressure
(3) To Sound
(4) Spontaneous
(0) Not Testable

Def. Source: NTDS
Data Base Column Name: EMSGCS40EYE
Type of Element: Numeric
Length: 1
Report: #1

INITIAL FIELD GCS 40 - VERBAL

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

- 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 Element Value “0. 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.

(1) None
(2) Sounds
(3) Words
(4) Confused
(5) Oriented
(0) Not Testable

Def. Source: NTDS
Data Base Column Name: EMSGCS40VERBAL
Type of Element: Numeric
Length: 1
Report: #1

INITIAL FIELD GCS 40 - MOTOR

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

- 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 Element Value “0. 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.

(1) None
(2) Extension
(3) Abnormal Flexion
(4) Normal Flexion
(5) Localizing
(6) Obeys Commands
(0) Not Testable

Def. Source: NTDS
Data Base Column Name: EMSGCS40MOTOR
Type of Element: Numeric
Length: 1
Report: #1

PRE-HOSPITAL CARDIAC ARREST

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

- A patient who experienced a sudden cessation of cardiac activity. The patient was unresponsive with no normal breathing and no signs of circulation.

- The event must have occurred outside of the index hospital. Pre-hospital cardiac arrest could occur at a transferring institution.
- Any component of basic and/or advanced cardiac life support must have been initiated.

(1) Yes
(2) No

Def. Source: NTDS
Data Base Column Name: MTQIP_PRECPR
Type of Element: Character
Length: 1

EMERGENCY DEPARTMENT INFORMATION

ED TRAUMA RESPONSE
Enter the final level of response being provided to the patient in the Emergency Department (ED) by trauma.

- Trauma is called by the ED to see a patient in the ED and a provider from the service sees the patient, report as consult.
- Patient arrives as a full activation, but is downgraded to a partial activation, submit as a partial activation.
- Patient arrives as partial activation, but is upgraded to a full activation, submit as a full activation.

(1) Full activation
(2) Partial activation
(3) Trauma consult
(4) None

Def. Source:
Data Base Column Name: ED_TTA_TYPE, ED_TTA_TYPE_AS_TEXT
Type of Element:
Length: 8
Report: #1

ED/HOSPITAL ARRIVAL DATE
The date the patient arrived to the ED/hospital.

- 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 YYYY-MM-DD.
- Used to auto-generate two additional calculated elements: 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).

Def. Source: NTDS
Data Base Column Name: ED_ARRDT
Type of Element: Date
Length: 8
Report: #1

ED/HOSPITAL ARRIVAL TIME
The time that the patient arrived to the ED/hospital.

- 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.

Def. Source: NTDS
Data Base Column Name: ED_ARRTM

Type of Element: Character (Time Format)
Length: 5
Report: #1

INITIAL ED/HOSPITAL SYSTOLIC BLOOD PRESSURE
First recorded systolic blood pressure in the ED/hospital within 30 minutes or less of ED/hospital arrival.

- Please note that first recorded/hospital vitals do not need to be from the same assessment.
- Measurement reported must be without the assistance of CPR or any type of mechanical chest compression device. For those patients who are receiving CPR or any type of mechanical chest compressions, report the value obtained while compressions are paused.
- If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no BP is ever able to be obtained then report BP as 0.

Def. Source: NTDS
Data Base Column Name: ED_BP
Type of Element: Numeric
Length: 3
Report: #1

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

- Please note that first recorded/hospital vitals do not need to be from the same assessment.
- Measurement reported must be without the assistance of CPR or any type of mechanical chest compression device. For those patients who are receiving CPR or any type of mechanical chest compressions, report the value obtained while compressions are paused.
- If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no pulse is ever able to be obtained then report pulse as 0.

Def. Source: NTDS
Data Base Column Name: ED_PULSE
Type of Element: Numeric
Length: 3
Report: #1

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

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

Def. Source: NTDS
Data Base Column Name: ED_TEMP
Type of Element: Numeric
Length: 5
Report: #1

INITIAL ED/HOSPITAL RESPIRATORY RATE
First recorded respiratory rate in the ED/hospital within 30 minutes or less of ED/hospital arrival (expressed as a number per minute).

- Relevant value for data element.
- If reported, report additional data element: "Initial ED/Hospital Respiratory Assistance."
- Please note that first recorded hospital vitals do not need to be from the same assessment.

Def. Source: NTDB
Data Base Column Name: EDAS_URR (ED ASSESS UNASSISTED), EDAS_ARR (ED ASSESS ASSISTED)
Type of Element:
Length:
Report: #1

INITIAL ED/HOSPITAL RESPIRATORY ASSISTANCE

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

- Only reported if Initial ED/Hospital Respiratory Rate is documented.
- 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 reported if "Initial ED/Hospital Respiratory Rate" is "Not Known/Not Recorded."

(1) Unassisted Respiratory Rate
(2) Assisted Respiratory Rate

Def. Source: NTDB
Data Base Column Name: EDAS_ARR_YN
Type of Element:
Length:
Report: #1

INITIAL ED/HOSPITAL OXYGEN SATURATION

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

- Relevant value for data element
- If reported, report additional data element: Initial ED/Hospital Supplemental Oxygen.
- Please note that first recorded hospital vitals do not need to be from the same assessment.

Def. Source: NTDB
Data Base Column Name: EDAS_SAO2
Type of Element:
Length:
Report: #1

INITIAL ED/HOSPITAL SUPPLEMENTAL OXYGEN

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.

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

(1) No Supplemental Oxygen
(2) Supplemental Oxygen

Def. Source: NTDB
Data Base Column Name: EDAS_SO2_YN
Type of Element:
Length:
Report: #1

INITIAL ED/HOSPITAL GCS-EYE
First recorded Glasgow Coma Score (Eye) in the ED/hospital within 30 minutes or less of ED/hospital arrival.

- 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: "opens eyes spontaneously," 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 provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- The null value "Not Known/Not Recorded" is reported if Initial ED/Hospital GCS 40 – Eye is documented.
- 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.
- If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no GCS is ever able to be obtained then report this GCS variable as 1.

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

Def. Source: NTDS
Data Base Column Name: ED_EYE
Type of Element: Numeric
Length: 2
Report: #1

INITIAL ED/HOSPITAL GCS-VERBAL
First recorded Glasgow Coma Score (Verbal) within 30 minutes or less of ED/hospital arrival.

- If patient is intubated, then the GCS Verbal score is equal to 1.
- 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.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- 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 or less of ED/hospital arrival.
- If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no GCS is ever able to be obtained then report this GCS variable as 1.

(1) No verbal response
(2) Incomprehensible sounds
(3) Inappropriate words
(4) Confused
(5) Oriented

Def. Source: NTDS
Data Base Column Name: ED_VRB
Type of Element: Numeric
Length: 2
Report: #1

INITIAL ED/HOSPITAL GCS-MOTOR

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

- 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 withdraws from a painful stimulus," a Motor 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 provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- The null value "Not Known/Not Recorded" is reported if Initial ED/Hospital GCS 40 – Motor is reported.
- The null value "Not Known/Not Recorded" is reported if the patient's Initial ED/Hospital GCS – Motor was not measured within 30 minutes or less of ED/Hospital arrival.
- If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no GCS is ever able to be obtained then report this GCS variable as 1.

(1) No motor response
(2) Extension to pain
(3) Flexion to pain
(4) Withdrawal from pain
(5) Localizing pain
(6) Obeys commands

Def. Source: NTDS
Data Base Column Name: ED_MTR
Type of Element: Numeric
Length: 2
Report: #1

INITIAL ED/HOSPITAL GCS-TOTAL
First recorded Glasgow Coma Score (total) within 30 minutes or less of ED/hospital arrival.

- 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," interpret this as GCS of 15 IF there is no other contradicting documentation.
- Please note that first recorded/hospital vitals do not need to be from the same assessment.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this 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.
- If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no GCS is ever able to be obtained then report GCS total as 3.

Def. Source: NTDS
Data Base Column Name: ED_GCS
Type of Element: Numeric
Length: 2
Report: #1

INITIAL ED/HOSPITAL GCS ASSESSMENT QUALIFIERS
Documentation of factors potentially affecting the first assessment of GCS within 30 minutes or less of ED/hospital arrival.

- 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 chemically paralyzed 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 first recorded/hospital vitals do not need to be from the same assessment.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this 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.

(S) Patient Chemically Sedated
(T) Patient Intubated
(TP) Patient Intubated and Chemically Paralyzed
(L) Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to eye
(V) Unknown
(X) Not Available
(Z) Inappropriate

Neuromuscular Blockers	
Trade Name	**Generic Name**
Anectine	succinylcholine
Tracrium	atracurium
Mivacron	mivacurium
Nimbex	cisatracurium
Pavulon	pancuronium
Norcuron	vecuronium
Zemuron	rocuronium

Def. Source: NTDS
Data Base Column Name: ED_CALCAQ
Type of Element: Character
Length: 2
Report: #1

INITIAL ED/HOSPITAL GCS 40 - EYE

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

- 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 Element Value "0. Not Testable" if unable to assess (e.g. swelling to eye(s)).
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- 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.

(1) None
(2) To Pressure
(3) To Sound
(4) Spontaneous

(0) Not Testable

Def. Source: NTDS
Data Base Column Name: GCS40EYE
Type of Element: Numeric
Length: 1
Report: #1

INITIAL ED/HOSPITAL GCS 40 - VERBAL

First recorded Glasgow Coma Score 40 (Verbal) within 30 minutes or less of 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 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 Element Value "0. Not Testable" if unable to assess (e.g. patient is intubated).
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- 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.

(1) None
(2) Sounds
(3) Words
(4) Confused
(5) Oriented
(0) Not Testable

Def. Source: NTDS
Data Base Column Name: GCS40VERBAL
Type of Element: Numeric
Length: 1
Report: #1

INITIAL ED/HOSPITAL GCS 40 - MOTOR

First recorded Glasgow Coma Score 40 (Motor) within 30 minutes or less of 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 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 Element Value "0. Not Testable" if unable to assess (e.g. neuromuscular blockade).
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- 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.

(1) None
(2) Extension
(3) Abnormal Flexion
(4) Normal Flexion
(5) Localizing
(6) Obeys Commands
(0) Not Testable

Def. Source: NTDS
Data Base Column Name: GCS40MOTOR
Type of Element: Numeric
Length: 1
Report: #1

INITIAL ED/HOSPITAL HEIGHT
First recorded height within 24 hours or less of ED/hospital arrival.

- Recorded in centimeters.
- May be based on family or self-report.
- 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 Height was not measured within 24 hours or less of ED/hospital arrival.

Def. Source: NTDS
Data Base Column Name: EDAS_HGT
Type of Element: Numeric
Length:
Report: #1

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

- 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.
- 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.

Def. Source: NTDS
Data Base Column Name: EDAS_WGT
Type of Element: Numeric
Length:
Report: #1

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

- Report 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.

(1) AMP (Amphetamine)
(2) BAR (Barbiturate)
(3) BZO (Benzodiazepines)
(4) COC (Cocaine)
(5) mAMP (Methamphetamine)
(6) MDMA (Ecstasy)
(7) MTD (Methadone)
(8) OPI (Opioid)

(9) OXY (Oxycodone)
(10) PCP (Phencyclidine)
(11) TCA (Tricyclic Antidepressant)
(12) THC (Cannabinoid)
(13) Other
(14) None
(15) Not Tested

Def. Source: NTDB
Data Base Column Name: ED_DRGC01, ED_DRGC02, ED_DRGC03, ED_DRGC04, ED_DRGC05, ED_DRGC06, ED_DRGC07, ED_DRGC08, ED_DRGC90, ED_DRGC10, ED_DRGC11, ED_DRGC12, ED_DRGC13
Type of Element:
Length:
Report: #1

ALCOHOL SCREEN

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

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

(1) Yes
(2) No

Def. Source: NTDB
Data Base Column Name: ETOH_BAC_SCRN_C
Type of Element:
Length:
Report: #1

ALCOHOL SCREEN RESULTS

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

- 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 reported for those patients who were not tested.

Def. Source: NTDS
Data Base Column Name: ETOH
Type of Element: Numeric
Length: 7
Report: #1

PROVIDER ARRIVAL DATE

The date of ED arrival of the trauma surgeon.

Def. Source:
Data Base Column Name: EDP_A_DATE01
Type of Element: Numeric
Length:
Null: Registry Default
Report: #1

PROVIDER ARRIVAL TIME

The time of ED arrival of the trauma surgeon.

Def. Source:
Data Base Column Name: EDP_A_TIME01

Type of Element: Numeric
Length:
Null: Registry Default
Report: #1

ELAPSED MINUTES FROM ED ARRIVAL TO PROVIDER ARRIVAL
The time in minutes from ED arrival of patient to ED arrival of trauma surgeon for highest level activations. This element is auto calculated by the registry.

Def. Source:
Data Base Column Name: EDP_ELAPSED_MIN01
Type of Element: Numeric
Length:
Null: Registry Default
Report: #1

ED DISCHARGE DISPOSITION
The care disposition the order was written for the patient to be discharged to from the ED. If disposition is OR, no order is required.

- The null value "Not Applicable" is reported 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".
- For patients who require Interventional Radiology in the radiology procedure suite, report the patient's disposition location following this procedure.
- If multiple orders were written, report the actual care being delivered to the patient upon disposition from ED.
- Reporting should indicate the actual and highest acuity care being delivered to the patient.
- Example 1: The ICU provides floor, step-down, and ICU care. The patient is admitted to the ICU and the
- documentation indicates the patient is provided floor care. Report as floor.
- Example 2: Floor beds can provide telemetry if patient need exists. The documentation indicates the patient
- receives telemetry monitoring on the floor. Report as telemetry (i.e., actual and highest acuity care).
- Example 3: Patient goes from ED to OR for airway management then ED to ICU. Report the first disposition of OR.

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

Def. Source: NTDS
Data Base Column Name: ED_DISP, ED_DISP_AS_TEXT
Type of Element: Character
Length: 15
Report: #1

ED DISCHARGE DATE
The date the patient was discharged from the ED.

- Collected as YYYY-MM-DD.
- The null value "Not Applicable" is reported 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 date as indicated on the patient's death certificate.

Def. Source: NTDS
Data Base Column Name: EDD_DATE
Type of Element: Character
Length: 1
Report: #1

ED DISCHARGE TIME
The time the patient was discharged from the ED.

- Collected as HH:MM military time.
- The null value "Not Applicable" is reported if the patient is directly admitted to the hospital.
- If ED Discharge Disposition is 5 Deceased/Expired, then ED Discharge Time is the time of death as indicated on the patient's death certificate.

Def. Source: NTDS
Data Base Column Name: EDD_TIME
Type of Element: Character (Time Format)
Length: 5
Validation Range: +/- 1 hour
Report: #1

DIRECT ADMIT
Enter whether patient was directly admitted to MTQIP accepting facility without ED evaluation (i.e. direct admit to floor or ICU).

(1) Yes (Y)
(2) No (N)

Def. Source:
Data Base Column Name: DIR_ADMIT
Type of Element: Character
Length: 1
Report: #1

ARRIVED FROM
The location where patient arrived from.

(1) Scene of Injury (Scene)
(2) Home (Home)
(3) Transfer from referring hospital ED (Refer Hospital)

Def. Source:
Data Base Column Name: ARRIV_FROM
Type of Element: Character
Length: 15
Report: #1

COMPLAINT
The description of event that caused the injury. If a matching description is not available, choose "other".

(1) Fall (Fall)
(2) Motor Vehicle Collision/Crash (MVC)
(3) Motor Cycle Collision/Crash (MCC)
(4) ATV Collision/Crash (ATV)
(5) Stab with object (Stab)
(6) Gunshot wound (GSW)

(7) Pedestrian vs. Motor Vehicle Collision (MPC)
(8) Bicycle (Injured while riding) (Bicycle)
(9) Other

Def. Source:
Data Base Column Name: CHIEFCOMP
Type of Element: Character
Length: 15
Report: #1

INTUBATION STATUS

The location of first intubation. LMA, King, Combitube and Hi-Lo airways, and tracheostomy count as an intubation.

(1) Never
(2) Field/Scene/En route
(3) ED
(4) OR
(5) ICU
(6) Other (Floor, Radiology, etc.)

Def. Source: MTQIP
Data Base Column Name: MTQIP_INT_STAT
Type of Element: Custom, Character
Length: 20
Report: #1

CPR

CPR performed in the ED of OSH or MTQIP hospital.

- Check yes if patient received chest compressions or external/internal cardioversion (defibrillation) in ED.
- Do not include respiratory arrest requiring rescue breathing or intubation.

(1) ED CPR (CPR Performed in ED)
(2) Not Performed (Not Performed)

Def. Source:
Data Base Column Name: CPR
Type of Element: Character
Length: 15
Report: #1

ADMIT SERVICE

The service that the patient was admitted to.

(1) Trauma
(2) Neurosurgery
(3) Orthopedics
(4) General Surgery
(5) Pediatric Surgery
(6) Cardiothoracic Surgery
(7) Burn Services
(8) Emergency Medicine
(9) Pediatrics
(10) Anesthesiology
(11) Cardiology
(14) Critical Care
(16) Documentation Recorder
(19) ENT
(20) Family Medicine

(21) GI
(23) Hospitalist
(24) Infectious Disease
(25) Internal Medicine
(27) Nephrology
(28) Neurology
(29) Nurse Practitioner
(30) Nursing
(32) Ob-Gyn
(34) Oncology
(35) Ophthalmology
(36) Oral Surgery
(37) Oromaxillo Facial Service
(38) Ortho-Spine
(43) Plastic Surgery
(45) Pulmonary
(46) Radiology
(48) Respiratory Therapist
(52) Thoracic Surgery
(53) Trauma Resuscitation Nurse
(54) Triage Nurse
(55) Urology
(56) Vascular Surgery
(98) Other Surgical
(99) Other Non-Surgical
? Unknown

Def. Source:
Data Base Column Name: ADMSERVICE
Type of Element: Character
Length: 15
Report: #1

TRAUMA SURGEON

Report the name and National Provider Identifier (NPI) of the trauma surgeon providing initial care to the patient in the ED and on admission.

- The NPI can be found on the NPI Registry at https://npiregistry.cms.hhs.gov/registry/provider-search?

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name (Resus Trauma Surgeons): EDP_MD_LNK01, EDP_MD_LNK01_AS_TEXT, EDP_MD_LNK01_NPI
Data Base Column Name (Admitting Trauma Surgeons): TSPHCODE, TSPHCODE_AS_TEXT, TSPHCODE_NPI
Type of Element: Character
Length: 10
Report: #1

HOSPITAL PROCEDURE INFORMATION

OPERATION

Surgical procedure performed in the operating room after arrival to your hospital.

- Also answer “YES” if the patient had a procedure performed elsewhere that is normally performed in the OR (e.g. bedside tracheostomy or IR PEG placement).
- Abstractors may use presence of an operative note as guide to determine if the case was an operation for cases performed outside of OR.
- Do not include simple laceration repairs, closed reductions performed under GETA, or cath lab procedures.

(1) Yes
(2) No

Def. Source: MTQIP
Data Base Column Name: MTQIP_OPERATE
Custom
Type of Element: Yes/No
Length: 1
Report: #1

EMERGENCY OPERATION
An emergency case is commonly performed as soon as possible after the patient sustained an injury.

- This is identified as emergent by the American Society of Anesthesiologists (ASA) Class.
- The presence of an "E" after ASA Class indicates an emergent operation. Answer "YES" if the surgeon and/or anesthesiologist report the case as emergent after arrival to your hospital.

(1) Yes
(2) No

Def. Source: MTQIP
Data Base Column Name: MTQIP_E_OPERATE
Custom
Type of Element: Yes/No
Length: 1
Report: #1

SERVICE PERFORMING OPERATIVE PROCEDURE
The service performing the operative procedure. Reporting of this element is only required for operations.

- Reporting for procedures (i.e. blood transfusions, CPR, radiology) is at the discretion of the center.

Def. Source:
Data Base Column Name: PR_SVCS_L_AS_TEXT, PR_SVCS_L
Type of Element:
Length:
Null: Registry Default
Report: #5

ELAPSED TIME ED ARRIVAL TO PROCEDURE START
The minutes elapsed between ED arrival and procedure start time.

- This variable is auto-calculated by the registry from the time entered for an operation and ED arrival.

Def. Source:
Data Base Column Name: PR_A_ELAPSED_MINSSC_L
Type of Element: Numeric
Length:
Null: Registry Default
Report: #5

ICD-10 HOSPITAL PROCEDURES
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 desired non-operative procedures that should be provided to NTDB.

- Major and minor procedure ICD-10 PCS procedure codes.

- The maximum number of procedures that may be reported for a patient is 200.
- The null value "Not Applicable" is used if the patient did not have procedures.
- The null value “Not Applicable” reported if not coding ICD-10.
- Include only procedures performed at your institution.
- Report all procedures performed in the operating room.
- Report all procedures in the ED, ICU, ward, or radiology department that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or their complications.
- Procedures with an asterisk have the potential to be performed multiple times during one episode of hospitalization. In this case, report only the first event.
- If there is no asterisk, report each event even if there is more than one.
- Procedures with a double asterisk are required reporting.
- Note that the hospital may report additional procedures.

Diagnostic & Therapeutic Imaging

Computerized tomographic Head *, **

Computerized tomographic Brain *, **

** Required reporting of first head/brain CT procedure code, date, and time on all patients who are on anticoagulant therapy or aspirin 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).

Computerized tomographic Chest *
Computerized tomographic Abdomen *
Computerized tomographic Pelvis *
Diagnostic ultrasound (includes FAST) *
Doppler ultrasound of extremities *
Angiography
Angioembolization
IVC filter *, ** (MTQIP process measure)
REBOA
Urethrogram

Cardiovascular
Open cardiac massage
CPR

CNS
Insertion of ICP monitor * (MTQIP process measure)
Ventriculostomy * (MTQIP process measure)
Cerebral oxygen monitoring * (MTQIP process measure)

Musculoskeletal
Soft tissue/bony debridements *
Closed reduction of fractures
Skeletal and halo traction
Fasciotomy

Genitourinary
Ureteric catheterization (i.e. Ureteric stent)
Suprapubic cystostomy

Transfusion

Transfusion of red cells * (only report the first 24 hours after hospital arrival)
Transfusion of platelets * (only report the first 24 hours after hospital arrival)
Transfusion of plasma * (only report the first 24 hours after hospital arrival)

Respiratory

Insertion of endotracheal tube * (exclude intubations performed in the OR)
Continuous mechanical ventilation *
Chest tube *
Bronchoscopy *
Tracheostomy

Gastrointestinal
Endoscopy (includes gastroscopy, sigmoidoscopy, colonoscopy)
Gastrostomy/jejunostomy (percutaneous or endoscopic)
Percutaneous (endoscopic) gastrojejunostomy

Other
TPN *, **

Def. Source: NTDS, MTQIP
Data Base Column Name: A_PR_ICD10
Type of Element: Character
Length: 5
Report: #5

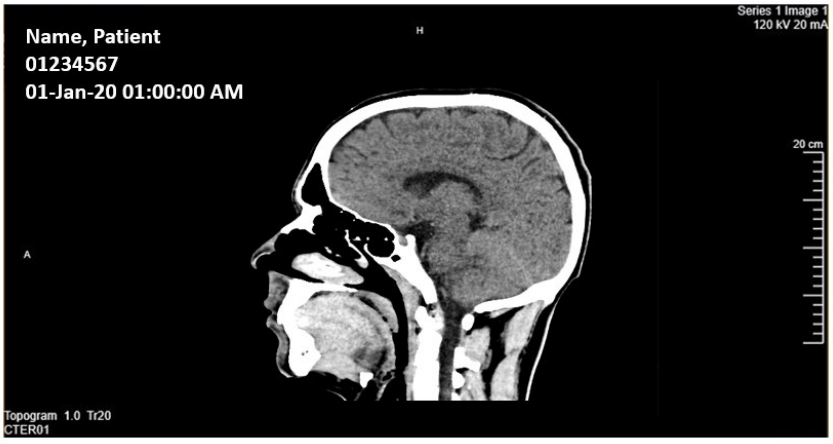
HOSPITAL PROCEDURE START DATE
The date operative and selected non-operative procedures were performed.

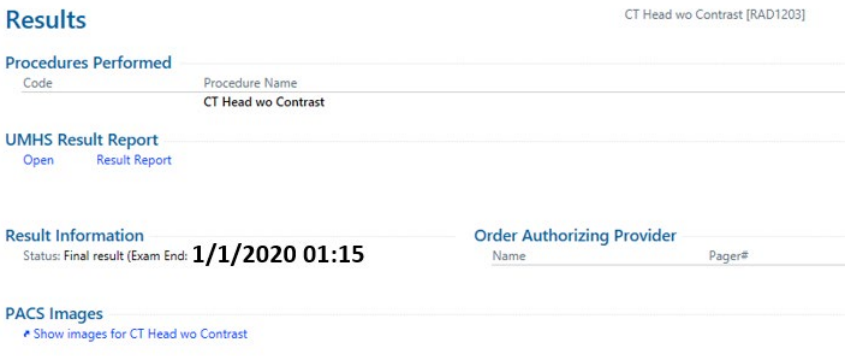
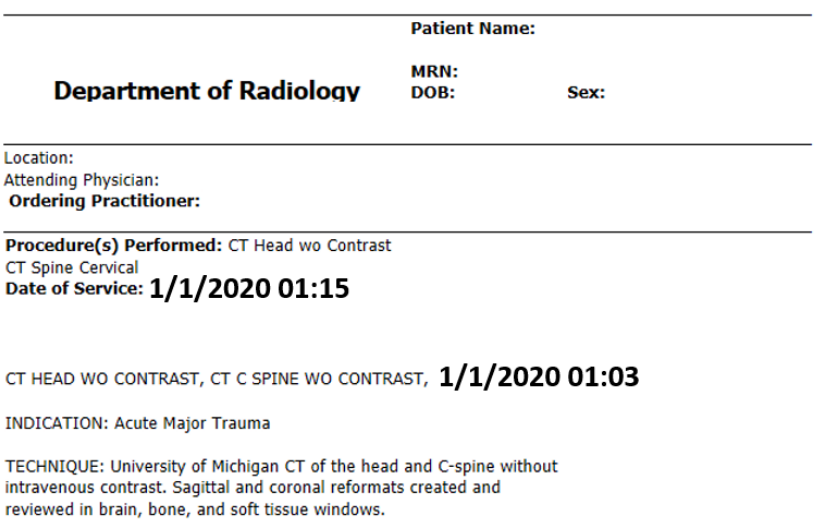
- Collected as YYYY-MM-DD.

Def. Source: NTDS
Data Base Column Name: A_OPDT
Type of Element: Date
Length: 8
Report: #5 (Include RECORDNO, OPNUMBER, OPDATE, OPTIME, OPCODE, OPSDESCR)

HOSPITAL PROCEDURE START TIME
The time operative and selected non-operative procedures were performed.

- Collected as HH:MM military time.
- Procedure start time is defined as the time the incision was made (or the procedure started).
- Head CT start time is defined as the time the imaging started (i.e., image 1). This is found on the time stamp on the digital image. Examples provided below.
- If distinct procedures with the same procedure code are performed, their start times must be different.

Resource	Common Meaning
	01-Jan-20 01:00:00 AM This is the head CT start time. It is the time the imaging started. Note on the top right we see this image labeled as image 1. Report this time as the head CT start time.

	1/1/20 01:15 This is the head CT end time. Do not report this time as head CT start time.
	1/1/2020 01:15 This is the head CT end time. Do not report this time as head CT start time.
	1/1/2020 01:15 This is the head CT end time. Do not report this time as head CT start time. 1/1/2020 01:03 This is the time the axial (i.e., transverse) cuts started. Note this is often not the first since the scout image time is first/earlier. Do not report these times as head CT start time.

Def. Source: NTDS
Data Base Column Name: A_OPTM
Type of Element: Character (Time Format)
Length: 5
Report: #5 (Include RECORDNO, OPNUMBER, OPDATE, OPTIME, OPCODE, OPSDESCR)

DIAGNOSES INFORMATION

PRE-EXISTING CONDITIONS
Pre-existing co-morbid factors present before patient arrival at the MTQIP ED/hospital.

- The null value "Not Applicable" is used for patients with no known co-morbid conditions.
- Check all that apply.
- Comorbidities should be submitted using numeric or alpha-numeric code under each variable.

Def. Source: NTDS
Data Base Column Name: A_COMORCODE
Type of Element: Character
Length: 4
Report: #4 (Include TRAUMA_NUM, COMORBIDITIES_ITEM, A_COMORCODE, A_COMORCODE_AS_TEXT)

GENERAL

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. This includes documentation that indicates to withhold life sustaining measures when a specified set of parameters are present (i.e. a documentation indicating to withhold life sustaining measures if a persistent vegetative state or other circumstances occur).

The verbiage “present prior to arrival at your center” is not limited to documentation in hand or scanned from a previous admission. “Present prior to arrival at your center” is defined as the medical record indicates the patient has an advanced directive that limits care completed prior to arrival at your center.

Advanced Directive Limiting Care (NTDS 13)
Def. Source: NTDS

ALCOHOL USE DISORDER
Evidence of chronic use, such as withdrawal episodes or the patient admits to drinking > 2 ounces of hard liquor or > two 12 oz. cans of beer or > two 6 oz. glasses of wine per day in the two weeks prior to admission. If the patient is a binge drinker, divide out the numbers of drinks during the binge by seven days, then apply the definition. Include evidence of chronic use, such as withdrawal episodes. May determine inclusion based on the brief screening tool used at your institution. Include patients who meet criteria for Alcohol Withdrawal Syndrome during the same stay. Exclude isolated elevated blood alcohol level in absence of history of abuse.

Alcohol Use Disorder (NTDS 2)
Def. Source: NSQIP, MTQIP

CURRENT SMOKER
A patient who reports smoking cigarettes every day or some days within the last 12 months. Excludes patients who smoke cigars, pipes, use smokeless tobacco (chewing tobacco or snuff), or e-cigarettes.

Current Smoker (NTDS 8)
Def. Source: NSQIP, NTDS

SUBSTANCE USE DISORDER
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. Present prior to arrival at your center. Include patients who have a positive drug screen for a non-prescribed drug. The word “disorder” is not required to be present for capture.

Substance Abuse Disorder (NTDS 36)
Def. Source: MTQIP

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). 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.

- Example 1: Chronic home oxygen use at all times (device = oxygen, ADL = walking)
- Example 2: Cane use (device = cane, ADL = walking).
- Do not include glasses, hearing aids, dentures, or prosthetic limbs as these devices or tools are used, but not necessarily ADL dependent.

Functionally Dependent Health Status (NTDS 15)
Def. Source: NTDS, MTQIP

PULMONARY

CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)
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:

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

- Do not include patients whose only pulmonary disease is acute asthma, chronic asthma, and/or diffuse interstitial fibrosis or sarcoidosis.

Chronic Obstructive Pulmonary Disease (NTDS 23)
Def. Source: WHO 2015, NTDS

HEPATOBILIARY

CIRRHOSIS
Documentation in the medical record of cirrhosis, which might also be referred to as end stage liver disease. 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. Cirrhosis should also be considered present if documented by diagnostic imaging studies or at laparotomy/laparoscopy.

Cirrhosis (NTDS 25)
Def. Source: NSQIP, NTDS

CARDIAC

CONGESTIVE HEART FAILURE
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. To be included, this condition must be noted in the medical record as CHF, congestive heart failure, or pulmonary edema with onset or increasing symptoms 30 days prior to injury. The 30-day interval criterion applies only to pulmonary edema.

Common manifestations are:

1. Abnormal limitation in exercise tolerance due to dyspnea or fatigue
2. Orthopnea (dyspnea on lying supine)
3. Paroxysmal nocturnal dyspnea (awakening from sleep with dyspnea)

4. Increased jugular venous pressure
5. Pulmonary rales on physical examination
6. Cardiomegaly
7. Pulmonary vascular engorgement

Congestive Heart Failure (NTDS 7)
Def. Source: NTDS

ANGINA PECTORIS
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.

Angina Pectoris (NTDS 32)
Def. Source: AHA, NTDS

MYOCARDIAL INFARCTION
The history of a non-Q-wave or a Q-wave myocardial infarction in the six months prior to injury.

Myocardial Infarction (NTDS 34)

Def. Source: NSQIP, NTDS

PERIPHERAL ARTERIAL DISEASE (PAD)
The narrowing or blockage of the vessels that carry blood from the heart to the legs, present prior to injury. It is primarily caused by the buildup of fatty plaque in the arteries, which is called atherosclerosis. PAD can occur in any blood vessel, but it is more common in the legs than the arms. Include patients with peripheral vascular disease (PVD) which is used interchangeably with PAD unless vein-only disease is specified. Exclude disease processes not caused by atherosclerosis such as Raynaud's and Buerger's disease.

Peripheral Arterial Disease (NTDS 35)
Def. Source: CDC, NTDS

HYPERTENSION
History of a persistent elevated blood pressure requiring medical therapy with medication. Present prior to injury. A diagnosis of Hypertension must be documented in the patient's medical record. Do not include if documentation reports medication noncompliance. Do not include hypertension controlled only with diet or exercise.

Hypertension (NTDS 19)
Def. Source: NSQIP, NTDS

RENAL

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

Chronic Renal Failure (NTDS 9)
Def. Source: NSQIP, NTDS

CENTRAL NERVOUS SYSTEM

CEREBROVASCULAR 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).

Cerebrovascular Accident (NTDS 10)
Def. Source: NSQIP, NTDS

DEMENTIA
Documentation in the patient's medical record of dementia including senile or vascular dementia (e.g. Alzheimer's). Present prior to injury.

Dementia (NTDS 26)
Def. Source: NTDS

PSYCHIATRIC

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.

Attention deficit disorder/attention deficit hyperactivity disorder (NTDS 30)
Def. Source NTDS

MENTAL/PERSONALITY DISORDER
Documentation of the presence of pre-injury depressive disorder, bipolar disorder, schizophrenia, anxiety/panic disorder, borderline or antisocial personality disorder, and/or adjustment disorder/post-traumatic stress disorder. The word "disorder" is not required to be present for capture. Example, if a provider documents that the patient has a history of "bipolar", "anxiety", or "depression" please capture as Mental/Personality Disorder.

- ICD-9 CM Code Range: 295.00-297.9, 300.0-300.09,301.0-301.7, 301.83, 309.81,311, V11.0-V11.2, V11.4-V11.8
- ICD-10 CM Code Range: F20.0 – F29 (Schizophrenia and non-mood psychotic disorders) F30.0 – F39 (Mood [affective] disorders) F44.0 – F44.9 (Dissociative and conversion disorders) F60.0 (Paranoid personality disorder) F60.1 (Schizoid personality disorder) F60.2 (Anti-social personality disorder) F60.3 (Borderline personality disorder) F60.4 (Histrionic personality disorder) F60.5 (Obsessive-compulsive disorder) F60.7 (Dependent personality disorder) F43.10 – F43.12 (PTSD) Z86.51(PH of combat and operational stress reaction) Z86.59 (PH of other mental & behavioral disorders)

Mental/Personality Disorder (NTDS 33)
Def. Source NTDS

NUTRITIONAL/IMMUNE/OTHER

CONGENITAL ANOMALIES
Documentation of a cardiac, pulmonary, body wall, CNS/spinal, GI, renal, orthopedic, or metabolic congenital anomaly, present prior to injury.

- Include anomalies that have been operatively fixed prior to injury.

Congenital Anomalies (NTDS 6)

Def. Source: NTDS

DISSEMINATED CANCER
Patients who have cancer present prior to injury that:

1. Has spread to one site or more sites in addition to the primary site.
   AND
2. In whom the presence of multiple metastases indicates the cancer is widespread, fulminant, or near terminal. Other terms describing disseminated cancer include "diffuse," "widely metastatic," "widespread," "carcinomatosis". Common sites of metastases include major organs (e.g., brain, lung, liver, meninges, abdomen, peritoneum, pleura, bone).

- Report Acute Lymphocytic Leukemia (ALL), Acute Myelogenous Leukemia (AML), and Stage IV Lymphoma under this variable.

- Do not report Chronic Lymphocytic Leukemia (CLL), Chronic Myelogenous Leukemia (CML), Stages I through III Lymphoma, or Multiple Myeloma as disseminated cancer.
- Example 1: A patient with a primary breast cancer with positive nodes in the axilla does NOT qualify for this definition. She has spread of the tumor to a site other than the primary site, but does not have widespread metastases. A patient with primary breast cancer with positive nodes in the axilla AND liver metastases do qualify, because she has both spread of the tumor to the axilla and other major organs.
- Example 2: A patient with colon cancer and no positive nodes or distant metastases does NOT qualify. A patient with colon cancer and several local lymph nodes positive for tumor, but no other evidence of metastatic disease does NOT qualify. A patient with colon cancer with liver metastases and/or peritoneal seeding with tumor does qualify.
- Example 3: A patient with adenocarcinoma of the prostate confined to the capsule does NOT qualify. A patient with prostate cancer that extends through the capsule of the prostate only does NOT qualify. A patient with prostate cancer with bony metastases DOES qualify.

Disseminated Cancer (NTDS 12)
Def. Source: NSQIP, NTDS

STEROID USE
Patients that required 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, inflammatory bowel disease. Exclude topical corticosteroids applied to the skin or corticosteroids administered by inhalation or rectally.

Steroid Use (NTDS 24)
Def. Source: NSQIP, NTDS

ANTICOAGULANT THERAPY
Documentation in the medical record of the administration of medication (anticoagulants, antiplatelet agents, thrombin inhibitors, factor Xa inhibitors, thrombolytic agents) that interferes with blood clotting, present prior to injury. Exclude patients who are on chronic Aspirin therapy. Some examples are provided below.

The following is a list of medications that impact the patient's risk for bleeding. Please utilize the associated time frames for discontinuation of medication to determine your answer to this variable.

Trade Names	Generic Names	Subclass	Time Frame
Aggrastat	tirofiban	Antiplatelet	4 hours
Agrylin	anagrelide	Antiplatelet	3 days
Coumadin	warfarin	Anticoagulant	5 days
Effient	prasugrel	Antiplatelet	10 days
Fragmin	dalteparin	Antiplatelet	24 hours
	heparin (IV only)	Anticoagulant	4 hours
Integrilin	eptifibatide	Antiplatelet	2 days
Lovenox	enoxaparin	Anticoagulant	12 hours
Plavix	clopidogrel	Antiplatelet	10 days
Pradaxa	dabigatran etexilate	Direct Thrombin Inhibitor	2 days
Reopro	abciximab	Antiplatelet	9 days
Ticlid	ticlopidine	Antiplatelet	14 days
Xarelto	rivaroxaban	Factor Xa Inhibitor	2 days

Anticoagulant Therapy (NTDS 31)
Def. Source: NTDS

BLEEDING DISORDER
A group of conditions that result when the blood cannot clot properly, present prior to injury (e.g. Hemophilia, von Willebrand Disease, Factor V Leiden).

- Do not include sickle cell disease.

Bleeding Disorder (NTDS 4)
Def. Source: NTDS, American Society of Hematology 2015

CHEMOTHERAPY FOR CANCER
A patient who is currently receiving 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 lymphomas, leukemia, and multiple myeloma.

- Do not include if treatment consists solely of hormonal therapy.

Active Chemotherapy (NTDS 5)
Def. Source: NTDS

DIABETES MELLITUS
Diabetes mellitus that requires exogenous parenteral insulin or an oral hypoglycemic agent. Present prior to injury.

- Do not include a patient if diabetes is controlled by diet alone or documentation reporting the patient has not been taking a medication.

Diabetes Mellitus (NTDS 11)
Def. Source: NSQIP, NTDS

PREGNANCY
Pregnancy confirmed by lab, ultrasound, or other diagnostic tool OR diagnosis of pregnancy documented in the patient's medical record. Present prior to arrival at your center.

Pregnancy (NTDS 38)
Def. Source: NTDS

PREMATURITY
Babies born before 37 weeks of pregnancy are completed. Present prior to injury.

Prematurity (NTDS 21)
Def. Source: NTDS

OTHER
Enter other chronic co-morbid conditions present prior to injury. Present prior to injury.

Other (NTDS 1)
Def. Source: NTDS

MEDICATIONS

ASPIRIN
Enter "YES" for patients who report use of aspirin within a 7-day time frame prior to injury. Include aspirin containing drugs. An example of an aspirin containing drug is Aggrenox (aspirin/dipyridamole).

D.05 Aspirin
Def. Source: MTQIP

ANTIPLATELET
Enter "YES" for patients who report use of an antiplatelet agent within a 10-day time frame prior to injury.

- Include any antiplatelet subclass agent with the mechanism of action via irreversibly binding to the P2Y12 adenosine diphosphate receptors or suppression of cAMP degradation, or augmentation of cGMP production, reducing platelet aggregation.
- These include agents such as Plavix, (clopidogrel), Effient (prasugrel), Pletal (cilostazol) Brilinta (ticagrelor), or dipyridamole.
- Do not capture aspirin under this variable.

D.06 Antiplatelet
Def. Source: MTQIP

WARFARIN

Enter "YES" for patients who report use of Coumadin (warfarin) within a 5-day time frame prior to injury.

D.02 Coumadin Therapy
Def. Source: MTQIP

BETA BLOCKER

Enter "YES" for patients who report use of beta blocker medication within a 2-week time frame prior to injury.

Beta Blockers	
Trade Names	**Generic Names**
Sectral	acebutolol
Tenormin, Tenoretic	atenolol
Betapace AF	sotalol AF
Kerlone	betaxolol
Zebeta, Ziac	bisoprolol
Brevibloc	esmolol
Bystolic	nebivolol
Coreg	carvedilol
Corgard	nadolol
Inderal, InnoPran XL	propranolol
Trandate	labetalol
Levatol	penbutolol
Lopressor, Toprol XL	metoprolol
	pindolol
	sotalol
Timolide	timolol

Z.02 Beta Blocker
Def. Source: MTQIP

STATIN

Enter "YES" for patients who report use of statin-class medication within a 2-week time frame prior to injury.

Statins	
Trade Names	**Generic Names**
Advicor, Altoprev, Mevacor	lovastatin
Caduet	atorvastatin
Crestor	rosuvastatin
Lescol	fluvastatin
Lipitor	atorvastatin
Pravachol	pravastatin
Simcor, Vytorin, Zocor	simvastatin

Z.03 Statin
Def. Source: MTQIP

DIRECT THROMBIN INHIBITOR

Enter “YES” for patients who report use of direct thrombin inhibitor class medication within a 2-day time frame prior to injury.

Direct Thrombin Inhibitors	
Trade Names	**Generic Names**
Argatroban	argatroban
Pradaxa	dabigatran etexilate

Z.04 Direct Thrombin Inhibitor
Def. Source: MTQIP

FACTOR XA INHIBITOR

Enter “YES” for patients who report use of a factor Xa inhibitor class medication within a 2-day time frame prior to injury.

Factor Xa Inhibitors	
Trade Names	**Generic Names**
Arixtra	fondaparinux
Eliquis	apixaban
Xarelto	rivaroxaban
Savaysa	endoxaban

Z.05 Factor Xa Inhibitor
Def. Source: MTQIP

ICD-10 INJURY DIAGNOSES

Diagnoses related to all identified injuries.

- Injury diagnoses as defined by ICD-10-CM code range S00-S99, T07, T14, T20-T28 and T30-T32.
- The maximum number of diagnoses that may be reported for an individual patient is 50.
- ICD-10-CM codes pertaining to other medical conditions (e.g., CVA, MI, co-morbidities, etc.) may also be included in this element.
- The null value "Not Applicable" is used if not coding ICD-10.

Def. Source: NTDS 2014
Data Base Column Name: A_DCODE
Type of Element: Character
Length: 6
Report: #2 (Include TRAUMA_NUM, DX_ITEM, A_DCODE, A_DCODE_AS_TEXT)

INJURY SEVERITY INFORMATION

AIS SEVERITY

The Abbreviated Injury Scale (AIS) severity codes that reflect the patient’s injuries. The required resource is AIS 2005. AIS code element output should be in the XXXXXX.X format with the predot and postdot codes in a single cell.

- The predot code is the 6 digits preceding the decimal point in an associated AIS code.
- The element value (9) “Not Possible to Assign” would be chosen if it is not possible to assign a severity to an injury.

(1) Minor Injury
(2) Moderate Injury
(3) Serious Injury
(4) Severe Injury
(5) Critical Injury
(6) Maximum Injury, Virtually Unsurvivable
(9) Not Possible to Assign

Def. Source: AAAM
Data Base Column Name: A_AISCODES
Type of Element: Character
Length: 8
Report: #3 (Include TRAUMA_NUM, DX_ITEM, A_AISCODES, A_AISCODE_AS_TEXT)

ISS

Calculated injury severity score from the trauma registry. Each injury is assigned an Abbreviated Injury Scale (AIS) score and is allocated to one of six body regions (Head, Face, Chest, Abdomen, Extremities (including Pelvis) and External). The 3 most severely injured body regions have their AIS score squared and added together to produce the ISS. Only the highest AIS score in each body region is used. The ISS takes values from 0 to 75. If an injury is assigned an AIS of 6 (unsurvivable injury), the ISS is automatically assigned to 75.

Def. Source: AAAM
Data Base Column Name: USRAIS_ISS
Type of Element: Numeric
Length: 2
Report: #1

NISS

Calculated new injury severity score from the trauma registry. Each injury is assigned an Abbreviated Injury Scale (AIS) score and is allocated to one of six body regions (Head, Face, Chest, Abdomen, Extremities (including Pelvis) and External). The 3 highest AIS scores regardless of regions are squared and added together to produce the nISS. The nISS takes values from 0 to 75. If an injury is assigned an AIS of 6 (unsurvivable injury), the nISS is automatically assigned to 75.

Def. Source:
Data Base Column Name: NISS
Type of Element: Numeric
Length: 2
Report: #1

MAX HEAD/NECK AIS

Maximum severity value of AIS from 0-6 of individual injuries as defined by Abbreviated Injury Scale for all injuries in the head/neck region. Head or neck injuries include injury to the brain or cervical spine, skull or cervical spine fractures.

Data Base Column Name: USRAIS_HN
Type of Element: Numeric
Length: 2
Report: #1

MAX FACE AIS

Maximum severity value of AIS from 0-6 of individual injuries as defined by Abbreviated Injury Scale for all injuries in the face region. Facial injuries include those involving mouth, ears, nose and facial bones.

Data Base Column Name: USRAIS_FAC
Type of Element: Numeric
Length: 2
Report: #1

MAX CHEST AIS

Maximum severity value of AIS from 0-6 of individual injuries as defined by Abbreviated Injury Scale for all injuries in the chest region. Chest injuries include all lesions to internal organs. Chest injuries also include those to the diaphragm, rib cage, and thoracic spine.

Data Base Column Name: USRAIS_CHS
Type of Element: Numeric
Length: 2
Report: #1

MAX ABDOMEN OR PELVIC CONTENTS AIS

Maximum severity value of AIS from 0-6 of individual injuries as defined by Abbreviated Injury Scale for all injuries in the abdomen region. Abdominal or pelvic contents injuries include all lesions to internal organs. Lumbar spine lesions are included in the abdominal or pelvic region.

Data Base Column Name: USRAIS_ABD
Type of Element: Numeric
Length: 2
Report: #1

MAX EXTREMITY OR PELVIC GIRDLE AIS

Maximum severity value of AIS from 0-6 of individual injuries as defined by Abbreviated Injury Scale for all injuries in the extremity 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.

Data Base Column Name: USRAIS_EXT
Type of Element: Numeric
Length: 2
Report: #1

MAX EXTERNAL AIS

Maximum severity value of AIS from 0-6 of individual injuries as defined by Abbreviated Injury Scale for all injuries in the external region. External injuries include lacerations, contusions, abrasions, and burns, independent of their locations on the body surface.

Data Base Column Name: USRAIS_ST
Type of Element: Numeric
Length: 2
Report: #1

OUTCOME INFORMATION

TOTAL ICU LENGTH OF STAY

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

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

Example #	Start Date	Start Time	Stop Date	Stop Time	LOS
A.	01/01/11	01:00	01/01/11	04:00	1 day (one calendar day)
B.	01/01/11	01:00	01/01/11	04:00	
	01/01/11	16:00	01/01/11	18:00	1 day (2 episodes within one calendar day)
C.	01/01/11	01:00	01/01/11	04:00	
	01/02/11	16:00	01/02/11	18:00	2 days (episodes on 2 separate calendar days)
D.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	18:00	2 days (episodes on 2 separate calendar days)

E.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	21:00	2 days (episodes on 2 separate calendar days)
F.	01/01/11	Unknown	01/01/11	16:00	1 day
G.	01/01/11	Unknown	01/02/11	16:00	2 days (patient was in ICU on 2 separate calendar days)
H.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	Unknown	2 days (patient was in ICU on 2 separate calendar days)
I.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	20:00	2 days (patient was in ICU on 2 separate calendar days)
J.	01/01/11	Unknown	01/02/11	16:00	
	01/03/11	18:00	01/03/11	20:00	3 days (patient was in ICU on 3 separate calendar days)
K.	Unknown	Unknown	01/02/11	16:00	
	01/03/11	18:00	01/03/11	20:00	Unknown (can't compute total)

Def. Source: NTDS
Data Base Column Name: ICUDAYS
Type of Element: Numeric
Length: 6
Validation Range: +/- 1 day
Report: #1

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

- 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 days.
- Reported in full day increments with any partial calendar day counted as a full calendar day.
- The calculation assumes that the date and time of starting and stopping Ventilator episode are recorded in the patient's chart.
- The null value "Not Known/Not Recorded" is reported if any dates are missing.
- At no time should the Total Vent Days exceed the Hospital LOS.
- The null value "Not Applicable" is reported if the patient was not on the ventilator according to the above definition.

Example #	Start Date	Start Time	Stop Date	Stop Time	LOS
A.	01/01/11	01:00	01/01/11	04:00	1 day (one calendar day)
B.	01/01/11	01:00	01/01/11	04:00	
	01/01/11	16:00	01/01/11	18:00	1 day (2 episodes within one calendar day)
C.	01/01/11	01:00	01/01/11	04:00	
	01/02/11	16:00	01/02/11	18:00	2 days (episodes on 2 separate calendar days)
D.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	18:00	2 days (episodes on 2 separate calendar days)
E.	01/01/11	01:00	01/01/11	16:00	
	01/02/11	09:00	01/02/11	21:00	2 days (episodes on 2 separate calendar days)
F.	01/01/11	Unknown	01/01/11	16:00	1 day

Example #	Start Date	Start Time	Stop Date	Stop Time	LOS
G.	01/01/11	Unknown	01/02/11	16:00	2 days (patient was on Vent on 2 separate calendar days)
H.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	Unknown	2 days (patient was on Vent on 2 separate calendar days)
I.	01/01/11	Unknown	01/02/11	16:00	
	01/02/11	18:00	01/02/11	20:00	2 days (patient was on Vent on 2 separate calendar days)
J.	01/01/11	Unknown	01/02/11	16:00	
	01/03/11	18:00	01/03/11	20:00	3 days (patient was on Vent on 3 separate calendar days)

Def. Source: NTDS
Data Base Column Name: VSUP_DAYS
Type of Element: Numeric
Length: 3
Validation Range: +/- 1 day
Report: #1

HOSPITAL DISCHARGE DATE

The date the patient was discharged from the hospital.

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

Def. Source: MTQIP
Data Base Column Name: DCDT
Type of Element: Date
Length: 8
Report: #1

HOSPITAL DISCHARGE TIME

The time the patient was discharged from the hospital.

- Collected as HH:MM military time.
- The null value "Not Applicable" is reported if ED Discharge Disposition = 5 (Deceased/expired).
- The null value "Not Applicable" is reported if ED Discharge Disposition = 4,6,9,10, or 11.
- If Hospital Discharge Disposition is 5 Deceased/Expired, then the Hospital Discharge Time is the date of death as indicated on the patient's death certificate.

Def. Source: MTQIP
Data Base Column Name: DCTM
Type of Element: Character (Time Format)
Length: 5
Report: #1

HOSPITAL DISCHARGE DISPOSITION

The disposition of the patient when discharged from the hospital.

- 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 reported if ED Discharge Disposition = 5 (Deceased/expired).
- The null value "Not Applicable" is reported 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 numbering gaps. Refer to the NTDS Change Log for a full list of retired Hospital Discharge Dispositions.
- Actual disposition of the patient as arranged and documented by discharge planning or case management. If no discharge planning or case management provided, report the final disposition order.

(1) Discharged/Transferred to a short-term general hospital for inpatient care
(2) Discharged/Transferred to an Intermediate Care Facility (ICF)
(3) Discharged/Transferred to home under care of organized home health service
(4) Left against medical advice or discontinued care
(5) Deceased/Expired
(6) Discharged home with no home services (routine discharge)
(7) Discharged/Transferred to Skilled Nursing Facility (SNF)
(8) Discharged/Transferred to hospice care (home hospice or hospice facility)
(10) Discharged/Transferred to court/law enforcement
(11) Discharged/Transferred to inpatient rehab or designated unit (acute rehabilitation or subacute rehabilitation)
(12) Discharged/Transferred to Long Term Care Hospital (LTCH, LTAC or Select Specialty)
(13) Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital
(14) Discharged/Transferred to another type of institution not defined elsewhere

Def. Source: NTDS, CMS UB-04
Data Base Column Name: HOSPDISP, HOSPDISP_AS_TEXT
Type of Element: Numeric, Character
Length: 30
Validation Range: Option 7 or 14 will be accepted for ECF disposition
Report: #1

DISCHARGE SERVICE
Choose the service that the patient was discharged from.

(1) Trauma
(2) Neurosurgery
(3) Orthopedics
(4) General Surgery
(5) Pediatric Surgery
(6) Cardiothoracic Surgery
(7) Burn Services
(8) Emergency Medicine
(9) Pediatrics
(10) Anesthesiology
(11) Cardiology
(14) Critical Care
(16) Documentation Recorder
(19) ENT
(20) Family Medicine
(21) GI
(23) Hospitalist
(24) Infectious Disease
(25) Internal Medicine
(27) Nephrology

(28) Neurology
(29) Nurse Practitioner
(30) Nursing
(32) Ob-Gyn
(34) Oncology
(35) Ophthalmology
(36) Oral Surgery
(37) Oromaxillo Facial Service
(38) Ortho-Spine
(43) Plastic Surgery
(45) Pulmonary
(46) Radiology
(48) Respiratory Therapist
(52) Thoracic Surgery
(53) Trauma Resuscitation Nurse
(54) Triage Nurse
(55) Urology
(56) Vascular Surgery
(98) Other Surgical
(99) Other Non-Surgical
? Unknown

Def. Source: MTQIP
Data Base Column Name: HOSDISSERV
Type of Element: Character
Length: 15
Report: #1

DEATH LOCATION

Record the location of patient death if death in the hospital occurred.

(1) ED (Emergency Department)
(2) Floor (Floor)
(3) ICU (Intensive Care Unit)
(4) OR (Operating Room)
(5) Radiology (Radiology)

Def. Source: MTQIP
Data Base Column Name: HODEATHLOC
Type of Element: Character
Length:
Report: #1

DEATH IN FIRST OR

Record as “YES” if patient expired during first OR (emergent). OR start time (incision) must be within 12 hours of injury.

(1) Yes
(2) No

Def. Source: MTQIP
Data Base Column Name: MTQIP_DEATH_FIRST_OR
Type of Element: Custom, Yes/No
Length: 1
Report: #1

TOTAL DAYS IN HOSPITAL

Total number of days spent in hospital (calculate from admit and discharge date).

Def. Source:

Data Base Column Name: HOSPDAYS
Type of Element: Numeric
Length: 4
Validation Range: +/- 1 day
Report: #1

FINANCIAL INFORMATION

PRIMARY METHOD OF PAYMENT
Primary source of payment for hospital care.

- No Fault Automobile, Workers Compensation, and Blue Cross/Blue Shield should NOT be reported as
- Private/Commercial Insurance. These entities will remain available in your registry and will map to Private/Commercial for non-MTQIP submissions.

(1) Medicaid
(2) Not Billed (for any reason)
(3) Self Pay
(4) Private/Commercial Insurance
(5) No Fault Automobile
(6) Medicare
(7) Other Government
(8) Workers Compensation
(9) Blue Cross/Blue Shield
(10) Other

Def. Source: NTDS
Data Base Column Name: INSUR
Type of Element: Character
Length: 15

HOSPITAL EVENTS

GENERAL
Any medical complication that occurred during the patient's stay at your hospital.

- The patient's stay begins on arrival to the emergency department.
- Do not include reported complications that are present prior to arrival. For example, a patient arrives with a urinary tract infection as indicated by symptoms present in documentation obtained on arrival and a culture obtained on arrival.
- Do not report contaminants that did not require treatment for infectious events. For example, a patient has a BAL or blood culture that demonstrates contaminant and therapy is not provided. If a provider documents a contaminant, but treatment is provided the event is reported.
- The null value "Not Applicable" should be used for patients with no complications.
- Check all that apply.

COMPLICATION CODE
Enter all corresponding codes provided below for complications.

- Retired NTDS variable codes are indicated below the variable for variables that the collaborative continues to report.

Def. Source: MTQIP
Data Base Column Name: TCODE
Type of Element: Character
Length: 4
Report: #6 (Include TRAUMA_NUM, TCODE, COMP_DESC, COMPOCDATE)

COMPLICATION DATE

For all outcomes, enter the corresponding date when the complication was first recognized.

- Recognition of the condition is based on satisfying the criteria listed below. The specific term describing the condition does not necessarily have to be identified in the progress notes.
- Example: A progress note states that the patient's incision was red with purulent drainage necessitating opening of the incision by staple removal. This is a positive result for superficial incisional SSI regardless if the note specifically mentions a wound infection.

Def. Source:
Data Base Column Name: COMPOCDATE
Type of Element: Date
Length: 8
Report: #6 (Include RECORDNO, TRAUMACTR, A_TCODE, A_TCODE_AS _TEXT, A_COMPOCDT)

WOUND OCCURENCES

SUPERFICIAL INCISIONAL SURGICAL SITE INFECTION
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.

http://www.cdc.gov/nhsn/xls/icd10-pcs-pcm-nhsn-opc.xlsx
http://www.cdc.gov/nhsn/xls/cpt-pcm-nhsn.xlsx

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

Comments

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

Reporting Instructions for Superficial SSI

The following do not qualify as criteria for meeting the NHSN definition of superficial SSI:
1. Diagnosis/treatment of cellulitis (redness/warmth/swelling), by itself, does not meet criterion d for superficial incisional SSI. An incision that is draining or that has organisms identified by culture or non-culture based testing is not considered a cellulitis.
2. A stitch abscess alone (minimal inflammation and discharge confined to the points of suture penetration)

3. A localized stab wound or pin site infection. While it would be considered either a skin (SKIN) or soft tissue (ST) infection, depending on its depth, it is not reportable under this module.
4. Note: A laparoscopic trocar site for an NHSN operative procedure is not considered a stab wound.
5. Circumcision is not an NHSN operative procedure. An infected circumcision site in newborns is classified as CIRC and is not reportable under this module.
6. An infected burn wound is classified as BURN and is not reportable under this module.

Def. Source: NTDS, CDC
Superficial Incisional Surgical Site Infection (NTDS 38)

DEEP INCISIONAL SURGICAL SITE INFECTION
Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in the table below

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

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

Comments

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

Selected NHSN Operative Procedures Table

30-day Surveillance	
Operative Procedure	Operative Procedure
Abdominal aortic aneurysm repair	Laminectomy
Limb amputation	Liver transplant
Appendix surgery	Neck surgery
Shunt for dialysis	Kidney surgery
Bile duct, liver or pancreatic surgery	Ovarian surgery
Carotid endarterectomy	Prostate surgery
Gallbladder surgery	Rectal surgery
Colon surgery	Small bowel surgery
Cesarean section	Spleen surgery
Gastric surgery	Thoracic surgery
Heart transplant	Thyroid and/or parathyroid surgery

Abdominal hysterectomy	Vaginal hysterectomy
Kidney transplant	Exploratory Laparotomy
90-day Surveillance	
Operative Procedure	
Breast surgery	
Cardiac surgery	
Coronary artery bypass graft with both chest and donor site incisions	
Coronary artery bypass graft with chest incision only	
Craniotomy	
Spinal fusion	
Open reduction of fracture	
Herniorrhaphy	
Hip prosthesis	
Knee prosthesis	
Pacemaker surgery	
Peripheral vascular bypass surgery	
Ventricular shunt	

Def. Source: NTDS, CDC
Deep Incisional Surgical Site Infection (NTDS 12)

ORGAN/SPACE SURGICAL SITE INFECTION
Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in the Selected NHSN Operative Procedures Table above.

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 the Specified Sites of an Organ/Space SSI below. These criteria are found in the Surveillance Definitions for Specific Types of Infections chapter.

Specified Sites of an Organ/Space SSI

Site	Site
Osteomyelitis	Other infections of the respiratory tract
Breast abscess mastitis	Mediastinitis
Myocarditis or pericarditis	Meningitis or ventriculitis
Disc space	Oral cavity (mouth, tongue, or gums)
Ear, mastoid	Other infections of the male or female reproductive tract
Endometritis	Periprosthetic Joint Infection
Endocarditis	Spinal abscess without meningitis
Eye, other than conjunctivitis	Sinusitis
GI tract	Upper respiratory tract
Hepatitis	Urinary System Infection
Intra-abdominal, not specified	Arterial or venous infection

Intracranial, brain abscess or dura	Vaginal cuff
Joint or bursa	

- An empyema is the result of accumulation or undrained fluid within the pleural cavity that becomes purulent. Enter "YES" for patients that had a chest tube placed and then developed an empyema that required management with placement of a new chest tube (empyema tube), VATS drainage, or thoracentesis with positive culture.

Def. Source: NTDS, MTQIP
Organ/Space Surgical Site Infection (NTDS 19)

WOUND DISRUPTION
Separation of the layers of a surgical wound, which may be partial or complete, with disruption of the fascia.

Def. Source: NSQIP, MTQIP
Would Disruption (NTDS 26)

ABDOMINAL FASCIA LEFT OPEN
Record as "YES" if the abdominal wall fascia was left open for any reason following first exploratory laparotomy.

Def. Source: CDC, NTDS, MTQIP
Abdominal Fascia Left Open (NTDS 3)

RESPIRATORY OCCURRENCES

ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS)

Timing	Within 1 week of known clinical insult or new or worsening respiratory symptoms
Chest imaging	Bilateral opacities – not fully explained by effusions, lobar/lung collapse, or nodules
Origin of edema	Respiratory failure not fully explained by cardiac failure of fluid overload. Need objective assessment (e.g., echocardiography) to exclude hydrostatic edema if one of the following risk factors are not present. Common risk factors: non-pulmonary sepsis, major trauma (ISS ≥ 20), pneumonia, pulmonary contusion, aspiration of gastric contents, non-cardiogenic shock, drug overdose, multiple transfusions, transfusion-associated acute lung injury (TRALI), pancreatitis, inhalation injury, pulmonary vasculitis, drowning, severe burns.
Oxygenation	Pa02/Fi02 ≤ 300 with PEEP or CPAP ≥ 5 cm H20

Def. Source: NTDS, New Berlin
Acute Respiratory Distress Syndrome (NTDS 5)

PNEUMONIA
Patients with evidence of pneumonia that develops during hospitalization. Patients with pneumonia must meet at least one of the following three criteria:

Criterion 1
Rales or dullness to percussion on physical examination of chest **AND** any of the following:

a. New onset of purulent sputum or change in character of sputum
b. Organism isolated from blood culture
c. Isolation of pathogen from specimen obtained by transtracheal aspirate, bronchial brushing, or biopsy

OR

Criterion 2

Chest radiographic examination shows new or progressive infiltrate, consolidation, cavitation, or pleural effusion **AND** any of the following:

a. New onset of purulent sputum or change in character of sputum
b. Organism isolated from blood culture
c. Isolation of pathogen from specimen obtained by transtracheal aspirate, bronchial brushing, or biopsy
d. Isolation of virus or detection of viral antigen in respiratory secretions
e. Diagnostic single antibody titer (IgM) or fourfold increase in paired serum samples (IgG) for pathogen
f. Histopathologic evidence of pneumonia

Criterion 3
Patient meets criteria for Ventilator-Associated Pneumonia (report under both VAP and Pneumonia).

Def. Source: MTQIP, CDC
Pneumonia (NTDS 20)

VENTILATOR-ASSOCIATED PNEUMONIA
(Consistent with the CDC defined VAP. Definition provided by the CDC.)

A pneumonia where the patient is on mechanical ventilation for > 2 consecutive 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.

- Note: For patients with Candida species, please see CDC hyperlink on page 6-4 for additional reporting commentary.

Table 2: Specific Site Algorithms for Pneumonia with Common Bacterial or Filamentous Fungal Pathogens and Specific Laboratory Findings (PNU2)

Imaging Test Evidence	**Signs/Symptoms**	**Laboratory**
Two or more serial chest imaging test results with at least ***one*** of the following[1,2,14]: New and persistent **or** Progressive and persistent • Infiltrate • Consolidation • Cavitation • Pneumatoceles, in infants ≤1 year old **Note**: In patients ***without*** underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.[1]	At least ***one*** of the following: • Fever (>38.0°C or >100.4°F) • Leukopenia (≤4000 WBC/mm^3) or leukocytosis (≥12,000 WBC/mm^3) • 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[3] or change in character of sputum[4], or increased respiratory secretions, or increased suctioning requirements • New onset or worsening cough, or dyspnea or tachypnea[5] • Rales[6] or bronchial breath sounds • Worsening gas exchange (for example: O_2 desaturations [for example: PaO_2/FiO_2 ≤240][7], increased oxygen requirements, or increased ventilator demand)	At least ***one*** of the following: • Organism identified from blood[8,13] • Organism identified from pleural fluid[9,13] • Positive quantitative culture or corresponding semi-quantitative culture result[9] from minimally-contaminated LRT specimen (specifically, BAL, protected specimen brushing or endotracheal aspirate) If no quantitative component is performed, capture if culture is positive. • ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (for example: Gram's stain) • Positive quantitative culture or corresponding semi-quantitative culture result [9]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

Table 3: Specific Site Algorithms for Viral, Legionella, and other Bacterial Pneumonias with Definitive Laboratory Findings (PNU2)

Imaging Test Evidence	Signs/Symptoms	Laboratory
Two or more serial chest imaging test results with at least ***one*** of the following[1,2]: New and persistent **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.[1]	At least ***one*** of the following: • Fever (>38.0°C or >100.4°F) • Leukopenia (≤4000 WBC/mm^3) or leukocytosis (≥12,000 WBC/mm^3) • 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[3] or change in character of sputum[4], or increased respiratory secretions, or increased suctioning requirements • New onset or worsening cough or dyspnea, or tachypnea[5] • Rales[6] or bronchial breath sounds • Worsening gas exchange (e.g., O_2 desaturations [e.g., PaO_2/FiO_2 ≤240][7], 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

Table 4: Specific Site Algorithm for Pneumonia in Immunocompromised Patients (PNU3)

Imaging Test Evidence	Signs/Symptoms	Laboratory
Two or more serial chest imaging test results with at least ***one*** of the following[1,2,14]: New and persistent **or** Progressive and persistent • Infiltrate • Consolidation • Cavitation • Pneumatoceles, in infants ≤1 year old **Note:** In patients ***without*** underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.[1]	Patient who is immunocompromised (see definition in footnote [10]) has at least ***one*** of the following: • Fever (>38.0°C or >100.4°F • For adults ≥70 years old, altered mental status with no other recognized cause • New onset of purulent sputum[3], or change in character of sputum[4], or increased respiratory secretions, or increased suctioning requirements • New onset or worsening cough, or dyspnea, or tachypnea[5] • Rales[6] or bronchial breath sounds • Worsening gas exchange (for example: O_2 desaturations [for example: PaO_2/FiO_2 ≤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 one of the following: sputum, endotracheal aspirate, BAL or protected specimen brushing.[11,12,13] • Evidence of fungi from minimally-contaminated LRT specimen (specifically BAL, protected specimen brushing or endotracheal aspirate) from one of the following: – Direct microscopic exam – Positive culture of fungi – Non-culture diagnostic laboratory test **OR** Any of the following from: **LABORATORY CRITERIA DEFINED UNDER PNU2**

Def. Source: CDC, NTDS
Ventilator-Associated Pneumonia (NTDS 35)

UNPLANNED INTUBATION
Patient requires placement of an endotracheal tube and mechanical or assisted ventilation manifested by severe respiratory distress, hypoxia, hypercarbia, or respiratory acidosis. In patients who were intubated in the field, emergency department, or those intubated for surgery, unplanned intubation occurs if they require reintubation >24 hours after extubation.

Def. Source: CDC, NTDS
Unplanned Intubation (NTDS 25)

PULMONARY EMBOLISM
A lodging of a blood clot in the 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. Exclude sub segmental PE's.

Def. Source: NTDS
Pulmonary Embolism (NTDS 21)

URINARY TRACT OCCURRENCES

ACUTE RENAL INSUFFICIENCY

The reduced capacity of the kidney to perform its function as evidenced by a rise in creatinine of >2 mg/dl from baseline value, but with no requirement for dialysis. Assume a baseline value of 1.0 mg/dl in the absence of additional information regarding the patient's pre-injury renal function. If continued decline in renal function meeting definition for acute kidney injury only report acute kidney injury.

Def. Source: NSQIP
Acute Renal Insufficiency (MTQIP 101)

ACUTE KIDNEY INJURY

A patient who did not require chronic renal replacement therapy prior to injury, who has worsening renal dysfunction after injury requiring renal replacement therapy. If the patient or family refuses treatment (e.g., dialysis), the condition is still considered to be present if a combination of oliguria and increased creatinine criteria are present. Exclude renal replacement therapy for the sole indication of drug clearance.

GFR criteria: Increase creatinine x3 or GFR decrease > 75%

Urine output criteria: UO < 0.3ml/kg/hr x 24 hr. or Anuria x 12 hrs.

Def. Source: NSQIP
Acute Kidney Injury (NTDS 4)

CATHETER-ASSOCIATED URINARY TRACT INFECTION

(Consistent with the January 2016 CDC defined CAUTI). 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.

CAUTI Criterion SUTI 1a:

Patient must meet 1, 2, and 3 below:

1. Patient has 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 (>38C)
    - 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 bacteria $>10^5$ CFU/ml.

Def. Source: CDC, NTDS
Catheter-Associated Urinary Tract Infection (NTDS 33)

CNS OCCURRENCES

DELIRIUM
Acute onset of behaviors characterized by restlessness, delusions, 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 (e.g., low sodium), medication, infection, surgery, 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.

- Must have occurred during the patient's initial stay at your hospital.
- EXCLUDE patients whose delirium is due to alcohol withdrawal.

Def. Source: NTDS
Cardiac Arrest with Delirium (NTDS 39)

STROKE/CEREBRAL VASCULAR ACCIDENT (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:

1. Change in level of consciousness,
2. Hemiplegia,
3. Hemiparesis,
4. Numbness or sensory loss affecting one side of the body,
5. Dysphasia or aphasia,
6. Hemianopia
7. Amaurosis fugax,
8. Or 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.

Def. Source: NSQIP, NTDS
Stroke/Cerebrovascular Accident (NTDS 22)

CARDIAC OCCURRENCES

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.

- Must have occurred during the patient's initial stay at your hospital.
- Cardiac arrest must be documented in the patient's medical record.
- EXCLUDE patients whose ONLY episode of cardiac arrest with CPR was on arrival to your hospital.
- INCLUDE patients who, after arrival at your hospital, had an episode of cardiac arrest evaluated by hospital personnel and received compressions or defibrillation or cardioversion or cardiac pacing to restore circulation.
- Enter date and location of CPR or similar advanced measures (e.g., open cardiac massage in the procedures section).

Def. Source: NSQIP, NTDS
Cardiac Arrest with CPR (NTDS 8)

MYOCARDIAL INFARCTION

An acute myocardial infarction (including NSTEMI type II) must be noted with documentation of an acute MI

AND

New elevation in troponin greater than three times the 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.

Def. Source: NSQIP, NTDS
Myocardial Infarction (NTDS 18)

OTHER OCCURRENCES

CENTRAL LINE ASSOCIATED BLOODSTREAM INFECTION
(Consistent with the January 2016 CDC defined CLABSI).

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.

January 2016 CDC Criterion LCBI 2:
Patient has at least one of the following signs or symptoms: fever (>38C), 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 reporting date of the positive blood, the 3 calendar days before and the 3 calendar days after.

Def. Source: CDC, NTDS
Central Line-Associated Bloodstrem Infection (NTDS 34)

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. This diagnosis may be confirmed by venogram, ultrasound, or CT scan.

INCLUDE:
- Patients with DVT treated with anticoagulation therapy and/or placement of a vena cava filter or clipping of the vena cava.
- Patients with DVT where the attending physician documents therapeutic anticoagulation contraindication due to bleeding risk.
- Patients with gastrocnemius or soleus vein thromboses if the patient receives treatment or contraindication is documented.
- Patients with non-extremity deep vein thromboses such as portal or internal jugular vein if the patient receives treatment or contraindication is documented.

EXCLUDE:
- Thrombosis of superficial veins of the upper or lower extremities, such as the cephalic or greater saphenous vein.
- Patients with no documented contraindication who only receive aspirin for treatment.

Def. Source: NSQIP, NTDS
Deep Vein Thrombosis (NTDS 14)

ALCOHOL WITHDRAWAL SYNDROME

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).

Def. Source: NTDS, WHO
Alcohol Withdrawal Syndrom (NTDS 36)

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 syndrome usually involves the leg but can also occur in the forearm, arm, thigh, and shoulder. Record as a complication if it is originally missed leading to late recognition, a need for late intervention, and has threatened limb viability. Answer "NO" if a fasciotomy is performed prophylactically without evidence of elevated compartment pressures (> 25mmHg).

Def. Source: NTDS, MTQIP
Extremity Compartment Syndrome (NTDS 15)

ABDMOMINAL COMPARTMENT SYNDROME
Defined as a condition in which there is swelling and sudden increase in pressure within the abdominal space (a fascial compartment) that presses on and compromises blood vessels and end organ function. Alterations typically occur to the respiratory mechanism, hemodynamic parameters, and renal perfusion. Answer "YES" if the abdomen must be opened or a percutaneous drain placed to lower the intra-abdominal pressure and relieve end organ dysfunction.

Def. Source: MTQIP
Abdominal Compartment Syndrome (NTDS 2)

OSTEOMYELITIS
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

Def. Source: NTDS, CDC 2016
Osteomyelitis (NTDS 29)

OTHER
Enter other complications post-injury present in physician documentation and requiring treatment, but not on NTDS list. The entry "Not applicable" indicates no complications present at all.

Def. Source: NTDS 2012
Other (NTDS 1)

SEPSIS

Sepsis is life-threatening organ dysfunction due to a dysregulated host response to infection. Septic shock is defined as a subset of sepsis in which particularly profound circulatory, cellular, and metabolic abnormalities substantially increase mortality. The baseline SOFA score should be assumed to be zero unless the patient is known to have preexisting (acute or chronic) organ dysfunction before the onset of infection.

Presence of infection

1. Documented infection

AND

Sepsis Quick Sequential Organ Failure Criteria (qSOFA) – 2 or more of the following are required:

1. Altered mentation (GCS $\leq$ 13)
2. Systolic blood pressure $\leq$ 100 mmHg
3. Respiratory rate $\geq$ 22 breaths/min

OR

Septic Shock - all required

1. Persistent hypotension requiring vasopressors to maintain MAP ≥65 mmHg
2. Serum lactate level >2 mmol/L (18 mg/dL) despite adequate volume resuscitation

Def. Source: SCCM 2016
Sepsis (NTDS 32)

PRESSURE ULCER

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. Excludes intact skin with non-blanching redness (NPUAP Stage I), which is considered reversible tissue injury.

Def. Source: NTDS, NPUAP
Pressure Ulcer (NTDS 37)

ENTEROCUTANEOUS FISTULA OR GI LEAK

Defined as a fistula of the gastrointestinal tract (stomach, duodenum, small bowel, or large bowel) to the skin, open wound, or body cavity resulting from injury, break down/leak of GI anastomosis. This is typically documented in the patient physical exam or by radiologic study with presence of leakage of gastrointestinal contents or contrast.

Def. Source: MTQIP

Enterocutaneous Fistula (NTDS 4005, 4001)

C. DIFF COLITIS

Defined as one of the following:

1. Diarrhea plus stool test positive for presence of toxigenic C. difficile or its toxins
2. Colonoscopy findings demonstrating pseudomembranous colitis
3. Histopathologic findings demonstrating pseudomembranous colitis

(1) Yes
(2) No

Def. Source: MTQIP
Data Base Column Name: MTQIP_C_DIFF
Custom
Type of Element: Yes/No*
Length:
Report: #1

UNPLANNED VISIT TO THE OPERATING ROOM
Patients with an unplanned operative procedure OR patients returned to the operating room after initial operation management of a related previous procedure. Unplanned is defined as an acute clinical deterioration requiring operative intervention.

- Must have occurred during the patient's initial stay at your hospital.
- EXCLUDE pre-planned, staged and/or procedures for incidental findings.
- EXCLUDE operative management related to a procedure that was initially performed prior to arrival at your center.
- Example 1: Patient is having difficulty weaning for the ventilator. Patient is scheduled and undergoes a tracheostomy. Do not report as an Unplanned Visit to the Operating Room.
- Example 2: Patient has an acute loss of airway requiring emergent tracheostomy in the OR for airway establishment. Report an Unplanned Visit to the Operating Room.

Def. Source: NTDS
Unplanned Visit to OR (NTDS 40)

UNPLANNED ADMISSION TO ICU

INCLUDE:
- Patients admitted to the ICU after initial transfer to the floor.
- Patients with an unplanned return to the ICU after initial ICU discharge.
- Patients who deteriorate in the post-anesthesia care unit (PACU) or intra-operatively with new resultant requirement for ICU admission.

EXCLUDE:
- Patients in which ICU care was required for postoperative care of a planned surgical procedure.

Def. Source: NTDS
Unplanned Admission to ICU (NTDS 31)

MEASURES FOR PROCESSES OF CARE

TRAUMATIC BRAIN INJURY

HIGHEST GCS TOTAL
Highest total GCS within 24 hours of ED/hospital arrival.

- Refers to highest total GCS within 24 hours 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. In many cases, the highest GCS may occur after ED discharge.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- 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," interpret 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 reporting criteria.
- The null value "Not Known/Not Recorded" is reported if reporting Highest GCS Motor 40.

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: MTQIP_TBI_GCS_H
Type of Element: Custom, Numeric
Length: 2
Report: #1

GCS MOTOR COMPONENT OF HIGHEST GCS TOTAL
Highest motor GCS within 24 hours of ED/hospital arrival.

- Refers to highest GCS motor score within 24 hours after arrival to index hospital, where index hospital is the hospital abstracting the data.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- Requires review of all data sources to obtain the highest GCS motor score. In many cases, the highest GCS motor score might occur after ED discharge.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- Best obtained when sedatives or paralytics are withheld as part of sedation holiday.
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to
- verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be reported, IF there is no other contradicting documentation.
- The null value "Not Known/Not Recorded" is reported if reporting Highest GCS Motor 40.

(1) No motor response
(2) Extension to pain
(3) Flexion to pain
(4) Withdrawal from pain
(5) Localizing pain
(6) Obeys commands

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: MTQIP_TBI_GCS_MR
Type of Element: Custom, Numeric
Length: 2
Report: #1

GCS ASSESSMENT QUALIFIER COMPONENT OF HIGHEST GCS TOTAL
Documentation of factors potentially affecting the highest GCS within 24 hours of ED/hospital arrival.

- Refers to highest GCS assessment qualifier score after arrival to index hospital, where index hospital is the hospital abstracting the data.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this assessment.
- 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 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.
- 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 5-10minutes.
- The null value “Not Known/Not Recorded” is reported if reporting Highest GCS Motor 40.

L Legitimate without intervention
E Obstruction to eye
S Chemically sedated
T Intubated
TP Intubated and chemically paralyzed
/ Not applicable

Neuromuscular Blockers	
Trade Name	**Generic Name**
Anectine	Succinylcholine
Tracrium	Atracurium
Mivacron	Mivacurium
Nimbex	Cisatracurium
Pavulon	Pancuronium
Norcuron	Vecuronium
Zemuron	Rocuronium

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: MTQIP_TBI_GCS_Q
Type of Element: Custom, Character
Length: 2
Report: #1

HIGHEST GCS 40 - MOTOR
Highest GCS 40 motor within 24 hours of ED/Hospital arrival.

- Refers to highest GCS 40 motor within 24 hours of arrival to index hospital, where index hospital is the hospital abstracting the data.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider’s note documents this assessment.
- 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 40 score within 24 hours of 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 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 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.

(1) None
(2) Extension
(3) Abnormal Flexion
(4) Normal Flexion
(5) Localizing
(6) Obeys Commands
(0) Not Testable

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: TBIGCS40MOTOR
Type of Element:
Length:
Report: #1

INITIAL ED/HOSPITAL PUPILLARY RESPONSE

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

- Please note that the first recorded hospital vitals do not need to be from the same assessment.
- The provider evaluation time, staff arrived time, and similar assessment time should be used when the specified provider's note documents this 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", both cranial nerves II & III intact, or no cranial nerve deficit submit 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 who do not meet the reporting criterion.

(1) Both reactive
(2) One reactive
(3) Neither reactive

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: PUPILLARY_RESPONSE
Custom
Type of Element: Numeric
Length: 2
Report: #1

MIDLINE SHIFT

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

- If there is documentation of "massive" midline shift in lieu of > 5 mm 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 > 5 mm 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)”.

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

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: MIDLINE_SHIFT
Custom
Type of Element: Numeric
Length: 2
Report: #1

CEREBRAL MONITOR
Enter the first (TBIMON1), and if applicable second (TBIMON2), and third (TBIMON3) cerebral monitors placed.

- 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.
- 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.
- Must also document under procedures if ICD9/ICD 10 code available.
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.

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

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: MTQIP_TBI_CMON1, MTQIP_TBI_CMON2, MTQIP_TBI_CMON3
Type of Element: Custom, Character (Numeric Output)
Length: 1
Report: #1

CEREBRAL MONITOR DATE
Date of first (MON1DATE), and if applicable, second (MON2DATE) and third (MON3DATE) cerebral monitors placed.

- Collected 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.

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: MTQIP_TBI_CMON1_DT, MTQIP_TBI_CMON2_DT, MTQIP_TBI_CMON3_DT
Type of Element: Custom, Date
Length: 8
Report: #1

CEREBRAL MONITOR TIME
Time of first (MON1TIME), and if applicable, second (MON2TIME) and third (MON3TIME) cerebral monitors placed.

Collected 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.

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: TQIP
Data Base Column Name: MTQIP_TBI_CMON1_TM, MTQIP_TBI_CMON2_TM, MTQIP_TBI_CMON3_TM
Type of Element: Custom, Character (Time Format)
Length: 5
Report: #1

REASON CEREBRAL MONITOR WITHHELD
The reason for withholding cerebral monitor placement.

- Coagulopathy refers to an elevated INR or low platelet count that might occur as a result of the injury or pre-existing conditions (e.g. Coumadin).
- Requires documentation in the medical record as to why cerebral monitor was withheld by a physician.
- If no reason documented, indicate Not Known/Not Recorded.
- If cerebral monitor was placed within 8 hours of ED/hospital arrival, then code as NA.

(0) Not Known/Not Recorded
(1) Decision to withhold life sustaining measures
(2) Death prior to correction of coagulopathy
(3) Expected to improve within 8 hours due to effects of alcohol and/or drugs
(4) Operative evacuation
(5) No ICP because of coagulopathy
(6) Attempt made, but unsuccessful due to technical issues
(7) Neurosurgical discretion

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s) AND highest total GCS < 8. Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_CWITH
Type of Element: Custom, Character (Numeric Output)
Length: 1
Report: #1

BETA BLOCKER TREATMENT

Enter "YES" for patients who receive scheduled administration of parenteral or oral beta blocker medication within 48 hours of admission time to the MTQIP institution.

- Do not include patients who receive prn or intermittent administration of beta blocker treatment.
- Example: Patient has one or intermittent orders for metoprolol 5 mg IV Q 15 min x 3, then report as "NO".

Beta Blockers	
Trade Names	**Generic Names**
Sectral	acebutolol
Tenormin, Tenoretic	atenolol
Betapace AF	sotalol AF
Kerlone	betaxolol
Zebeta, Ziac	bisoprolol
Brevibloc	esmolol
Bystolic	nebivolol
Coreg	carvedilol
Corgard	nadolol
Inderal, InnoPran XL	propranolol
Trandate	labetalol
Levatol	penbutolol
Lopressor, Toprol XL	metoprolol
	pindolol
	sotalol
Timolide	timolol

Reporting Criterion: Collect on patients with at least one injury in AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_BETA
Type of Element: Custom, Logical (True/False Output)
Length:
Report: #1

FIRST ED/HOSPITAL INR

Enter the first INR laboratory value obtained within 24 hours of admission to the index hospital, where the index hospital is the hospital abstracting the data.

Reporting Criterion: Collect on all patients on anticoagulant therapy (NTDS 31) or aspirin with at least one injury in the AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_INR
Type of Element: Custom, Numeric
Format: XX.X
Default: Blank
Length:
Report: #1

FIRST ED/HOSPITAL PTT

Enter the first PTT or APTT laboratory value obtained within 24 hours of admission to the index hospital, where the index hospital is the hospital abstracting the data.

Reporting Criterion: Collect on all patients on anticoagulant therapy (NTDS 31) or aspirin with at least one injury in the AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_PTT
Type of Element: Custom, Numeric
Format: XXX.X
Default: Blank
Length:
Report: #1

FIRST ED/HOSPITAL ANTI-XA ACTIVITY

Enter the first anti-Xa activity laboratory value obtained within 24 hours of admission to the index hospital, where the index hospital is the hospital abstracting the data.

Reporting Criterion: Collect on all patients on anticoagulant therapy (NTDS 31) or aspirin with at least one injury in the AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_ANTI_XA
Type of Element: Custom, Numeric
Format: X.XX
Default: Blank
Length:
Report: #1

TYPE OF FIRST THERAPY

Enter all the types of therapies below given within 24 hours of admission time to the index hospital, where the index hospital is the hospital abstracting the data.

(1) FFP
(2) PRBC
(3) PLT
(4) Vitamin K
(5) 4 Factor PCC (e.g. Kcentra)
(6) 3 Factor PCC
(7) Antifibrinolytic (e.g. TXA, aminocaproic acid)
(8) Desmopressin
(9) Protamine
(10) Dialysis / Continuous Renal Replacement
(11) Charcoal
(12) Monoclonal antibody fragment (e.g. Praxbind)
(13) Modified recombinant factor Xa (e.g. andexanet)
(14) Other

Reporting Criterion: Collect on all patients on anticoagulant therapy (NTDS 31) or aspirin with at least one injury in the AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_TYPE_FFP, MTQIP_TBI_TYPE_PR_BC, MTQIP_TBI_TYPE_PLT, MTQIP_TBI_TYPE_VITK, MTQIP_TBI_TYPE_4FPCC, MTQIP_TBI_TYPE_3FPCC, MTQIP_TBI_TYPE_ANTIFB,

MTQIP_TBI_TYPE_DESMO, MTQIP_TBI_TYPE_PROT, MTQIP_TBI_TYPE_HD, MTQIP_TBI_TYPE_CHAR, MTQIP_TBI_TYPE_MONAB, MTQIP_TBI_TYPE_FXA, MTQIP_TBI_TYPE_OTHER
Type of Element: Custom, Logic for each operation (1=Yes/2=No)
Format:
Default: 2
Length:
Report: #1

DATE OF FIRST THERAPY

Enter all the administration dates of therapies below given within 24 hours of admission time to the index hospital, where the index hospital is the hospital abstracting the data.

(1) FFP
(2) PRBC
(3) PLT
(4) Vitamin K
(5) 4 Factor PCC (e.g. Kcentra)
(6) 3 Factor PCC
(7) Antifibrinolytic (e.g. TXA, aminocaproic acid)
(8) Desmopressin
(9) Protamine
(10) Dialysis / Continuous Renal Replacement
(11) Charcoal
(12) Monoclonal antibody fragment (e.g. Praxbind)
(13) Modified recombinant factor Xa (e.g. andexanet)
(14) Other

Reporting Criterion: Collect on all patients on anticoagulant therapy (NTDS 31) or aspirin with at least one injury in the AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_DATE_FFP, MTQIP_TBI_DATE_PR_BC, MTQIP_TBI_DATE_PLT, MTQIP_TBI_DATE_VITK, MTQIP_TBI_DATE_4FPCC, MTQIP_TBI_DATE_3FPCC, MTQIP_TBI_DATE_ANTIFB, MTQIP_TBI_DATE_DESMO, MTQIP_TBI_DATE_PROT, MTQIP_TBI_DATE_HD, MTQIP_TBI_DATE_CHAR, MTQIP_TBI_DATE_MONAB, MTQIP_TBI_DATE_FXA, MTQIP_TBI_DATE_OTHER
Type of Element: Custom, Date
Format:
Default: NA
Length:
Report: #1

TIME OF FIRST THERAPY

Enter all the administration times of therapies below given within 24 hours of admission time to the index hospital, where the index hospital is the hospital abstracting the data.

(1) FFP
(2) PRBC
(3) PLT
(4) Vitamin K
(5) 4 Factor PCC (e.g. Kcentra)
(6) 3 Factor PCC
(7) Antifibrinolytic (e.g. TXA, aminocaproic acid)
(8) Desmopressin
(9) Protamine
(10) Dialysis / Continuous Renal Replacement
(11) Charcoal
(12) Monoclonal antibody fragment (e.g. Praxbind)

(13) Modified recombinant factor Xa (e.g. andexanet)
(14) Other

Reporting Criterion: Collect on all patients on anticoagulant therapy (NTDS 31) or aspirin with at least one injury in the AIS head region, excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s). Exclude injuries where the code itself is not included in the AIS head region of the AAAM book such as isolated asphyxiation/suffocation injuries.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TBI_TIME_FFP, MTQIP_TBI_TIME_PR_BC, MTQIP_TBI_TIME_PLT, MTQIP_TBI_TIME_VITK, MTQIP_TBI_TIME_4FPCC, MTQIP_TBI_TIME_3FPCC, MTQIP_TBI_TIME_ANTIFB, MTQIP_TBI_TIME_DESMO, MTQIP_TBI_TIME_PROT, MTQIP_TBI_TIME_HD, MTQIP_TBI_TIME_CHAR, MTQIP_TBI_TIME_MONAB, MTQIP_TBI_TIME_FXA, MTQIP_TBI_TIME_OTHER
Type of Element: Custom, Time
Format:
Default: NA
Length:
Report: #1

INFECTIOUS DISEASE

ANTIBIOTIC DAYS

The cumulative amount of days the patient received antibiotics administered intravenously at the index hospital.

- Each partial or full day of drug or multiple drugs should be measured as one calendar day.
- Reported in full days' increments with any partial day listed as a full day regardless of purpose of administration.
- Do not include antifungal, antiviral and antiparasitic agents.

Reporting Criterion: Collect on all patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_ABX_DAYS
Type of Element: Custom, Character (Numeric Output)
Length: 1
Validation Range: +/- 1 day
Report: #1

ANTIBIOTIC 1 TYPE

Report the first IV antibiotic class administered to the patient within 24 hours of arrival at your hospital.

- Must be given, not just ordered.
- Antibiotic reference available at www.mtqip.org > Resources > Education > Antibiotic Reference

0. None
1. Penicillin
2. Monobactam
3. Carbapenem
4. Macrolide
5. Lincosamide
6. Aminoglycoside
7. Quinolone
8. Sulfonamide
9. Tetracycline
10. Cephalosporin
11. Other

Reporting Criterion: Collect on all patients with open fractures.

Def. Source: Orange Book
Data Base Column Name: MTQIP_ABX_TYPE1
Type of Element: Custom, Character (Numeric Output)
Vendor Mapping: Values 1-11 map to NTDS element value (1) Yes for Antibiotic Therapy for NTDS data submission if within 24 hours of arrival and open fracture AIS code present.
Length: 2
Report: #1

ANTIBIOTIC 2 TYPE

Report the second IV antibiotic class administered to patient within 24 hours of arrival at your hospital for patient's receiving combination therapy.

- Combination therapy is defined as the addition of an antibiotic that provides coverage against a wider spectrum of bacteria.
- Must be given, not just ordered.
- Resource - Antibiotic classes: click here
- Resource - Antibiotic combination therapy: click here

0. None
1. Penicillin
2. Monobactam
3. Carbapenem
4. Macrolide
5. Lincosamide
6. Aminoglycoside
7. Quinolone
8. Sulfonamide
9. Tetracycline
10. Cephalosporin
11. Other

Reporting Criterion: Collect on all patients with open fractures.

Def. Source: Orange Book
Data Base Column Name: MTQIP_ABX_TYPE2
Type of Element: Custom, Character (Numeric Output)
Length: 2
Report: #1

ANTIBIOTIC DATE

Report the date of administration to patient of first IV dose of antibiotic administered to patient within 24 hours of arrival at your hospital.

- Collected as MM/DD/YYYY.

Reporting Criterion: Collect on all patients with open fractures.

Def. Source: Orange Book
Data Base Column Name: MTQIP_ABX_DATE
Type of Element: Date
Vendor Mapping: Element maps to Antibiotic Therapy Date for NTDS data submission if within 24 hours of arrival and open fracture AIS code present.
Length:
Report: #1

ANTIBIOTIC TIME
Report the time of administration to patient of first IV dose of antibiotic administered to patient within 24 hours of arrival at your hospital.

- Collected as HH:MM.
- HH:MM should be collected as military time.

Reporting Criterion: Collect on all patients with open fractures.

Def. Source: Orange Book
Data Base Column Name: MTQIP_ABX_TIME
Type of Element: Time
Vendor Mapping: Element maps to Antibiotic Therapy Time for NTDS data submission if within 24 hours of arrival and open fracture AIS code present.
Length: 5
Report: #1

VENOUS THROMBOEMBOLISM

VENOUS THROMBOEMBOLISM PROPHYLAXIS TYPE
Type of first dose of VTE prophylaxis or treatment administered to patient at your hospital.

- Must be given, not just ordered.
- Report heparin, LMWH, direct thrombin inhibitor and Xa inhibitor class agents regardless of the indication when it is administered first.
- Report Coumadin and 'other' agents when the indication of VTE prevention is identified in the medical record documentation.
- Do not include non-prophylactic dosing of agents, such as heparin administered for line clearance purposes.
- Please see drug reference for agents and dosing outside these parameters to determine class and/or indicated use.
- 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.
- Exclude sequential compression devices

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

Reporting Criterion: Collect on all patients.

Def. Source: TQIP, MTQIP
Data Base Column Name: MTQIP_VTE_PROP_TYPE
Type of Element: Custom, Character (Numeric Output)
Vendor Mapping: (9) Coumadin maps to (10) Other for NTDS submission. If Hospital Discharge Date and Time Order is prior to VTE Prophylaxis Date and Time, convert VTE Prophylaxis Type to "5. None" for NTDS submission.
Length: 1
Report: #1

VENOUS THROMBOEMBOLISM PROPHYLAXIS DATE
Date of administration of first dose of VTE prophylaxis or treatment administered to patient at your hospital.

Collected 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 = "5 None".

Reporting Criterion: Collect on all patients

Def. Source: TQIP
Data Base Column Name: MTQIP_VTE_PROP_DT
Type of Element: Custom, Date
Vendor Mapping: If Hospital Discharge Date and Time Order is prior to VTE Prophylaxis Date and Time, convert VTE Prophylaxis Date to “Not Applicable” for NTDS submission.
Length: 8
Report: #1

VENOUS THROMBOEMBOLISM PROPHYLAXIS TIME
Time of administration of first dose of VTE prophylaxis or treatment administered to patient at your hospital.

Collected as HH:MM military time.
Refers to time at which patient first received the prophylactic agent indicated in VTE TYPE element.
The null value "Not Applicable" is reported if VENOUS THROMBOEMBOLISM PROPHYLAXIS TYPE = "5 None".

Reporting Criterion: Collect on all patients

Def. Source: TQIP
Data Base Column Name: MTQIP_VTE_PROP_TM
Type of Element: Custom, Character (Time Format)
Vendor Mapping: If Hospital Discharge Date and Time Order is prior to VTE Prophylaxis Date and Time, convert VTE Prophylaxis Time to “Not Applicable” for NTDS submission.
Length: 5

Report: #1

HEMORRHAGE CONTROL

LOWEST ED/HOSPITAL SYSTOLIC BLOOD PRESSURE
Lowest systolic blood pressure measured within the first hour of ED/hospital arrival.

- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- If the patient has a cardiopulmonary arrest within 1 hour of arrival, then report BP as 0.

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

Def. Source: TQIP
Data Base Column Name: MTQIP_L_ED_SBP
Type of Element: Numeric
Length: 3
Report: #1

PACKED RED BLOOD CELLS UNITS (0-4 HOURS)
Enter the total number of units of packed red blood cells administered within first 4 hours after ED/hospital arrival. Refers to amount of transfused packed red blood cells within first 4 hours after arrival to your hospital.

- 1 unit PRBC = 350 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.

- Count all units spiked, hung and initiated, even if not completely given.
- If no packed red blood cells were given, then the units should be 0 (zero).
- EXCLUDE packed red blood cells transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_PR_BC_4
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

WHOLE BLOOD UNITS (0-4 HOURS)

Enter the total number of units of whole blood administered within first 4 hours after ED/hospital arrival. Refers to amount of transfused whole blood within first 4 hours after arrival to your hospital.

- 1-unit whole blood = 450 – 525 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not the aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no whole blood was given, then the units should be 0 (zero).
- EXCLUDE whole blood transfusing upon patient arrival.
- For Cell Saver or autotransfuser blood, every 500 ml of blood re-infused into the patient will equal 1 unit of whole blood. If less than 250 ml of Cell Saver blood is re-infused, enter 0.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_WHOLE_BL_4
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

PLASMA UNITS (0-4 HOURS)

Enter the total number units of plasma transfused within first 4 hours after ED/hospital arrival. Refers to amount of transfused fresh frozen, thawed, or never frozen plasma in units within first 4 hours after arrival to your hospital.

- 1 unit FFP = 150-400 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no plasma was given, then the units should be 0 (zero).
- EXCLUDE plasma transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_FFP_4
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

PLATELETS UNITS (0-4 HOURS)

Enter the total number of individual packs (i.e., individual units within the pool) of platelets administered within first 4 hours after ED/hospital arrival. Refers to amount of transfused platelets in units within first 4 hours after arrival to your hospital.

- 1 pack PLT = 50 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no platelets were given, then the units should be 0 (zero).
- EXCLUDE platelets transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_PLT_4
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

CRYOPRECIPITATE UNITS (0-4 HOURS)

Units of solution enriched with clotting factors transfused within first 4 hours after ED/hospital arrival. Refers to the amount of transfused cryoprecipitate within first 4 hours after arrival to your hospital.

- 1 unit = 10ml
- This blood product can be pooled (grouped in batch with multiple single units).
- Report each individual unit when a pooled unit is listed.
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no cryoprecipitate was given, then the units should be 0 (zero).
- EXCLUDE cryoprecipitate transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: TQIP
Data Base Column Name: MTQIP_CRYO_4
Type of Element: Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

IV FLUID LITERS PRE-HOSPITAL and FIRST 4 HOURS (0-4 HOURS)

Enter the total number of liters of IV fluid administered starting from the time of injury through 4 hours after documented arrival time of first ED. Count all bags spiked and hung, even if not completely given. Exclude fluids provided for medication administration.

Calculation steps
1. Combine similar fluid types together (i.e. albumin combined with starch, and NS combined with LR)
2. Add the total mL administered for each fluid type over 4 hours
3. Round each total to the nearest one hundred
4. Covert mL to L (see table below)
5. Add the rounded total of each fluid type together to obtain final total volume for all fluids given

Crystalloid: Crystalloid IV fluids are solutions of mineral salts or other water-soluble molecules. Common crystalloid IV fluids include: normal saline and Lactated Ringer's, D5LR, D5W and PlasmaLyte. Examples provided in table below for rounding to the nearest 1,000.

Colloid: Colloid IV fluids contain insoluble molecules. Common colloids include: albumin, hydroxyethyl starch (Hespan, Voluven), gelofusine. Examples provided in table below for rounding.

Colloid		Crystalloid	
Hypertonic Saline (mL)	Albumin, Hydroxyethyl Starch, Other (mL)	Normal saline, Lactated Ringer's (mL)	MTQIP Volume (L)
0-124	0-249	0-499	0
125-249	250-499	500-999	1
250-374	500-749	1000-1499	1
375-499	750-999	1500-1999	2
500-624	1000-1249	2000-2499	2
625-749	1250-1499	2500-2999	3
750-874	1500-1749	3000-3499	3
875-999	1750-1999	3500-3999	4
1000-1124	2000-2249	4000-4499	4
1125-1249	2250-2499	4500-4999	5
1250-1374	2500-2749	5000-5499	5
1375-1499	2750-2999	5500-5999	6
1500-1624	3000-3249	6000-6499	6

Reporting Criterion: Collect on all patients transfused with ≥ 5 units packed red blood cells within first 4 hours after ED/hospital arrival.

Def. Source: MTQIP

Data Base Column Name: MTQIP_IVF_4
Type of Element: Custom, Numeric
Length: 2
Validation Range: +/- 1 L
Report: #1

TRANEXAMIC ACID ADMINISTRATION (0-24 HOURS)

Tranexamic acid (Cyklokapron, Lysteda) and aminocaproic acid (Amicar) are drugs that prevent clot breakdown (antifibrinolytic). Enter "YES" if patient received tranexamic or aminocaproic acid administration within 0-24 hrs. after arrival to index hospital, where index hospital is the hospital abstracting the data. Report if administered regardless of the indication for administration. Do not include topical route of administration.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TXA
Type of Element: Yes/No
Length:
Report: #1

TRANEXAMIC ACID DATE (0-24 HOURS)

The date tranexamic acid was administered.

- Collected as MM/DD/YYYY.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TXA_DT
Type of Element: Date
Length:
Report: #1

TRANEXAMIC ACID TIME (0-24 HOURS)

The time tranexamic acid was administered.

- Collected as HH:MM.
- HH:MM should be collected as military time.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_TXA_TM
Type of Element: Time
Length:
Report: #1

PACKED RED BLOOD CELLS UNITS (0-24 HOURS)

Enter the total number of units of packed red blood cells administered within first 24 hours after ED/hospital arrival. Refers to amount of transfused packed red blood cells within first 24 hours after arrival to your hospital.

- 1 unit PRBC = 350 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no packed red blood cells were given, then the units should be 0 (zero).

- EXCLUDE packed red blood cells transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_PR_BC_24
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

WHOLE BLOOD UNITS (0-24 HOURS)

Enter the total number of units of whole blood administered within first 24 hours after ED/hospital arrival. Refers to amount of transfused whole blood within first 24 hours after arrival to your hospital.

- 1-unit whole blood = 450 – 525 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not the aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no whole blood was given, then the units should be 0 (zero).
- EXCLUDE whole blood transfusing upon patient arrival.
- For Cell Saver or autotransfuser blood, every 500 ml of blood re-infused into the patient will equal 1 unit of whole blood. If less than 250 ml of Cell Saver blood is re-infused, enter 0.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_WHOLE_BL_24
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

PLASMA UNITS (0-24 HOURS)

Enter the total number units of plasma transfused within first 24 hours after ED/hospital arrival. Refers to amount of transfused fresh frozen, thawed, or never frozen plasma in units within first 24 hours after arrival to your hospital.

- 1 unit FFP = 150-400 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no plasma was given, then the units should be 0 (zero).
- EXCLUDE plasma transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_FFP_24
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

PLATELETS UNITS (0-24 HOURS)

Enter the total number of individual packs (i.e., individual units within the pool) of platelets administered within first 24 hours after ED/hospital arrival. Refers to amount of transfused platelets in units within first 24 hours after arrival to your hospital.

- 1 pack PLT = 50 ml
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no platelets were given, then the units should be 0 (zero).
- EXCLUDE platelets transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: MTQIP
Data Base Column Name: MTQIP_PLT_24
Type of Element: Custom, Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

CRYOPRECIPITATE UNITS (0-24 HOURS)

Units of solution enriched with clotting factors transfused within first 24 hours after ED/hospital arrival. Refers to the amount of transfused cryoprecipitate within first 24 hours after arrival to your hospital.

- 1 unit = 10ml
- This blood product can be pooled (grouped in batch with multiple single units).
- Report each individual unit when a pooled unit is listed.
- Unit conversion provided for reference purposes only. Count by units if available.
- If converting a volume to a unit, the individual amounts should be used not aggregated sums of all product given to avoid marginal bias.
- Count all units spiked, hung and initiated, even if not completely given.
- If no cryoprecipitate was given, then the units should be 0 (zero).
- EXCLUDE cryoprecipitate transfusing upon patient arrival.

Reporting Criterion: All patients.

Def. Source: TQIP
Data Base Column Name: MTQIP_CRYO_24

Type of Element: Numeric
Vendor Mapping: Conversion logic for NTDS reporting
PRBC 1 unit = 350 ml
Whole Blood 1 unit = 500 ml
Plasma 1 unit = 200 ml
Platelets 1 unit = 50 ml
Cryoprecipitate 1 unit = 10 ml
Length: 2
Report: #1

IV FLUID LITERS IN FIRST 24 HOURS (0-24 HOURS)

Enter the total number of liters of IV fluid administered starting from the time of injury through 24 hours after documented arrival time of first ED. Count all bags spiked and hung, even if not completely given. Exclude fluids provided for medication administration.

Calculation steps
1. Combine similar fluid types together (i.e. albumin combined with starch, and NS combined with LR)
2. Add the total mL administered for each fluid type over 24 hours
3. Round each total to the nearest one hundred
4. Covert mL to L (see table below)
5. Add the rounded total of each fluid type together to obtain final total volume for all fluids given

Crystalloid: Crystalloid IV fluids are solutions of mineral salts or other water-soluble molecules. Common crystalloid IV fluids include: normal saline and Lactated Ringer's, D5LR, D5W and PlasmaLyte. Examples provided in table below for rounding to the nearest 1,000.

Colloid: Colloid IV fluids contain insoluble molecules. Common colloids include: albumin, hydroxyethyl starch (Hespan, Voluven), gelofusine. Examples provided in table below for rounding.

Colloid		Crystalloid	
Hypertonic Saline (mL)	Albumin, Hydroxyethyl Starch, Other (mL)	Normal saline, Lactated Ringer's (mL)	MTQIP Volume (L)
0-124	0-249	0-499	0
125-249	250-499	500-999	1
250-374	500-749	1000-1499	1
375-499	750-999	1500-1999	2
500-624	1000-1249	2000-2499	2
625-749	1250-1499	2500-2999	3
750-874	1500-1749	3000-3499	3
875-999	1750-1999	3500-3999	4
1000-1124	2000-2249	4000-4499	4
1125-1249	2250-2499	4500-4999	5
1250-1374	2500-2749	5000-5499	5
1375-1499	2750-2999	5500-5999	6
1500-1624	3000-3249	6000-6499	6

Reporting Criterion: Collect on all patients transfused with $\geq$ 5 units packed red blood cells within first 4 hours after ED/hospital arrival.

Def. Source: MTQIP
Data Base Column Name: MTQIP_IVF_24
Type of Element: Custom, Numeric
Length: 2

Validation Range: +/- 1 L
Report: #1

ANGIOGRAPHY

First interventional angiogram for hemorrhage control within first 24 hours of ED/Hospital Arrival.

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

(1) None
(2) Angiogram only
(3) Angiogram with embolization
(4) Angiogram with stenting
(5) Angiogram with embolization and stent graft

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

Def. Source: TQIP

Data Base Column Name: MTQIP_ANGIO
Type of Element: Custom, Numeric
Vendor Mapping: Value (5) Angiogram with embolization maps (3) Angiogram with embolization for NTDS Submission
Length: 2
Report: #1

EMBOLIZATION SITE

Organ / site of embolization for hemorrhage control.

- The null value "Not Applicable" is reported if the data element ANGIOGRAPHY = "1 None" or "2 Angiogram Only".
- The null value "Not Applicable" is reported for patients that do not meet the reporting criterion.
- Report all that apply.

(1) Liver
(2) Spleen
(3) Kidneys
(4) Pelvic (iliac, gluteal, obturator)
(5) Retroperitoneum (lumbar, sacral)
(6) Peripheral vascular (neck, extremities)
(7) Aorta (thoracic or abdominal)
(8) Other

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

Def. Source: TQIP
Data Base Column Name: MTQIP_EMB_SITE_L, MTQIP_EMB_SITE_S, MTQIP_EMB_SITE_K, MTQIP_EMB_SITE_P, MTQIP_EMB_SITE_R, MTQIP_EMB_SITE_NE
Type of Element: Custom, Logic for each region
Length: 2
Report: #1

ANGIOGRAPHY DATE

Date the first angiogram with or without embolization was performed.

- Collected as YYYY-MM-DD.
- The null value "Not Applicable" is reported if the data element ANGIOGRAPHY = "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.

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

Def. Source: TQIP
Data Base Column Name: MTQIP_ANGIO_DT
Type of Element: Custom, Date
Length: 8
Report: #1

ANGIOGRAPHY TIME

Time the first angiogram with or without embolization was performed.

- Collected as HH:MM military time.
- The null value "Not Applicable" is reported if the data element ANGIOGRAPHY = "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.

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival

Def. Source: TQIP
Data Base Column Name: MTQIP_ANGIO_TM
Type of Element: Custom, Time
Length: 5
Validation Range: +/- 1 hour
Report: #1

SURGERY FOR HEMORRHAGE CONTROL TYPE

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

- 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.

(1) None
(2) Laparotomy
(3) Thoracotomy
(4) Sternotomy
(5) Extremity
(6) Neck
(7) Mangled extremity/traumatic amputation
(8) Other skin/soft tissue
(9) Extraperitoneal Pelvic Packing

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

Def. Source: TQIP

Data Base Column Name: MTQIP_SURG_TYPE_L, MTQIP_SURG_TYPE_T, MTQIP_SURG_TYPE_S, MTQIP_SURG_TYPE_E, MTQIP_SURG_TYPE_N, MTQIP_SURG_TYPE_A, MTQIP_SURG_TYPE_O, MTQIP_SURG_TYPE_P
Type of Element: Custom, Logic for each operation
Length: 2
Report: #1

SURGERY FOR HEMORRHAGE CONTROL DATE

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

- Collected 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 the data element SURGERY FOR HEMORRHAGE CONTROL TYPE = "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).

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

Def. Source: TQIP
Data Base Column Name: MTQIP_SURG_DT
Type of Element: Custom, Date
Length: 8
Report: #1

SURGERY FOR HEMORRHAGE CONTROL TIME

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

- Collected 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 the data element SURGERY FOR HEMORRHAGE CONTROL TYPE = "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 date the incision was made (or the procedure started).

Reporting Criterion: Report on all patients with transfused packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.

Def. Source: TQIP
Data Base Column Name: MTQIP_SURG_TM
Type of Element: Custom, Time
Length: 5
Report: #1

WITHDRAWAL OF LIFE SUPPORTING TREATMENT

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

- 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-saving intervention (e.g. intubation).

- Excludes the discontinuation of CPR and typically involves prior planning.
- DNR order is not the same as withdrawal of care.
- The element value '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.
- Includes brain dead patients where care is withdrawn in coordination with Gift of Life.
- Includes patients changed to comfort care status, which may be documented in notes or orders.

(1) Yes
(2) No

Reporting Criterion: Collect on all patients.

Def. Source: TQIP
Data Base Column Name: MTQIP_WD_CARE
Type of Element: Custom, Yes/No
Length: 1
Report: #1

WITHDRAWAL OF LIFE SUPPORTING TREATMENT DATE

The date care was withdrawn.

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

Reporting Criterion: Collect on all patients.

Def. Source: TQIP
Data Base Column Name: MTQIP_WD_CARE_DT
Type of Element: Custom, Date
Length:
Report: #1

WITHDRAWAL OF LIFE SUPPORTING TREATMENT TIME

The time care was withdrawn.

- Collected as HH:MM military time.
- The null value "Not Applicable" is reported for patients where Withdrawal of Life Supporting Treatment is "2. No."
- Report the time the first of any existing life-sustaining intervention(s) is withdrawn (e.g. extubation). If no intervention(s) is in place, record the time the decision not to proceed with a lifesaving intervention(s) occurs (e.g. intubation).

Reporting Criterion: Collect on all patients.

Def. Source: TQIP
Data Base Column Name: MTQIP_WD_CARE_TM
Type of Element: Custom, Time
Length:
Validation Range: +/- 6 hours
Report: #1

ORGAN DONATION REQUEST

Was organ donation requested?

Def. Source:

Data Base Column Name: ORG_STAT_YN
Type of Element: Character
Length: 1
Null: Registry Default
Report: #1

ORGANS PROCURED DATE/TIME

The date and time the organs were procured. Preference for report of date/time of incision.

Def. Source:
Data Base Column Name: ORG_PROCURE_DATE, ORG_PROCURE_TIME
Type of Element: Character
Length:
Null: Registry Default
Report: #8

ORGAN PROCURED

The organ that was procured.

Def. Source:
Data Base Column Name: ORG_DNRS_L, ORG_DNRS_L_AS_TEXT
Type of Element: Character
Length:
Null: Registry Default
Report: #8

CHANGE HISTORY

3/16/10	Unplanned Intubation
4/28/10	First ED Temperature – Celsius from Fahrenheit.
4/28/10	First ED/Hospital GCS Eye (Eye) – Allow chart verbiage to be used in assigning GCS values.
4/28/10	First ED/Hospital GCS Verbal (Verbal) – Allow chart verbiage to be used in assigning GCS values.
4/28/10	First ED/Hospital GCS Motor (Motor) – Allow chart verbiage to be used in assigning GCS values.
4/28/10	ED/Hospital GCS Total (Cal'c GCS) – Allow chart verbiage to be used in assigning GCS values.
4/28/10	AIS – Preferred resource is AIS 2005.
4/28/10	Comorbidity - If no co-morbid conditions are present enter "No NTDS comorbidities are present". (NTDS 1)
4/28/10	Alcoholism – Determine based on brief screening tool.
4/28/10	Complication – Two digit NTDS code allowed.
4/28/10	Complication – Enter date complication recognized.
4/28/10	Deep Incisional SSI - If wound spontaneously opens as a result of infection, code for deep incisional SSI and wound disruption.
4/28/10	Unplanned Intubation - In patients who were intubated in the field, Emergency Department or other Hospital, or those intubated for their surgery, unplanned intubation occurs if they require reintubation after being extubated.
4/28/10	Cardiac Arrest Requiring CPR - Excludes patients that arrive at the hospital in full arrest.
4/28/10	Systemic Sepsis – Deleted anion gap information. Added: Sepsis with hypotension despite adequate fluid resuscitation combined with perfusion abnormalities that may include, but are not limited to, lactic acidosis, oliguria, or an acute alteration in mental status. Patients who are on inotropic or vasopressor agents may not be hypotensive at the time that perfusion abnormalities are measured.
8/9/10	Complication UTI – Deleted "postoperative" from definition description.
9/19/10	Complication Pneumonia – "Postoperative" changed to "pre-injury" in definition description.
9/19/10	Complication ARF – Deleted "postoperative". Changed "preoperative" to "pre-injury".
9/19/10	Acquired bleeding disorders – Added exclusion for coagulopathy of cirrhosis.
10/31/10	Complication DVT – Changed wording (should instead of must) and added clarification about what patients have a DVT. The patient should be treated with anticoagulation therapy and/or placement of a vena cava filter or clipping of the vena cava. Also include as a positive result, patients with deep vein thrombosis where the attending physician documents therapeutic anticoagulation contraindication due to bleeding risk. Do not include as a positive result, thrombosis of superficial veins of the upper or lower extremities, such as the cephalic or greater saphenous vein.
10/31/10	Complication Date – Variable and definition added.
12/12/10	Trauma Registry Inclusion Criteria – Added inclusion criteria and definition.
12/12/10	Trauma Center – Added codes and facility name for Detroit Receiving Hospital, Sparrow Hospital, Botsford Hospital, Covenant Hospital, Mount Clemons Regional Medical Center, Munson Hospital, Oakwood Hospital and Medical Center, Saint Mary's of Michigan, Saint Mary's Mercy Medical Center, and St. John Hospital and Medical Center
12/12/10	Age– Removed "Calculated age field from " and added "Patient's age at the time of injury (best approximation). "
12/12/10	Gender – Variable name changed from gender to sex. Deleted "Gender**:** Report the patient's gender as either:" and added "Sex**:** The patient's sex. "
12/12/10	Race – Removed "Report the patient's race as" and added "The patient's race. Patient race should be based upon self-report or identified by a family member. The maximum number of races that may be reported for an individual patient is 2." Deleted Hispanic and not available.
12/12/10	Injury Date – Added "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 time) should not be used."
12/12/10	Injury Time – Added "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 time) should not be used."
12/12/10	Primary E-code – Deleted "Relevant ICD-9-CM E-code value for the injury event." and added "The Primary E-code should describe the main reason a patient is admitted to the hospital. E-codes are used to auto-generate two calculated fields: Trauma Type (Blunt, Penetrating, Burn) and Intentionality (based upon CDC matrix). ICD-9-CM Codes were retained over ICD-10 due to CMS's continued use of ICD-9. Activity codes should not be reported in this field."
12/12/10	First ED HR – Deleted "Enter first recorded systolic blood pressure in the TQIP accepting ED/hospital." and added "First recorded pulse in the TQIP ED/hospital (palpated or auscultated), expressed as a number per minute."

12/12/10 GCS Assess Qualifier – Deleted “Document factors potentially affecting the first assessment of GCS upon arrival to TQIP center.” and “(1) Legitimate value, (2) Chemically sedated, (4) Intubated and chemically paralyzed.” Added “Documentation of factors potentially affecting the first assessment of GCS upon arrival in the ED/hospital. Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.).” “(1) Patient Chemically Sedated, (2) Obstruction to the Patient’s Eye, (4) Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to eye”

12/12/10 ED Discharge Disposition – Added definition “The disposition of the patient at the time of discharge from the ED.” Deleted the choice “DOA”. Added the following choices: Observation unit, Telemetry/step-down unit, Home with services, Other, Home without services, Left against medical advice, and Transferred to another hospital.

12/12/10 Signs of Life – Added variable. Added definition “Indication of whether patient arrived at ED/Hospital with signs of life. A patient with no signs of life is defined as having none of the following: organized EKG activity, pupillary responses, spontaneous respiratory attempts or movement, and unassisted blood pressure. This usually implies the patient was brought to the ED with CPR in progress.” Added the following choices: arrived with NO signs of life or arrive with signs of life.

12/12/10 ICD-9-CM Code – Added definition “Diagnoses related to all identified injuries. Injury diagnoses as defined by (ICD-9-CM) codes (code range: 800-959.9). The maximum number of diagnoses that may be reported for an individual patient is 50.”

12/12/10 AIS – Added definition “The Abbreviated Injury Scale (AIS) severity codes that reflect the patient’s injuries.” AIS 2005 became required resource. Added list of severity codes.

12/13/10 Comorbidy – Added “The value "Not Applicable" should be used for patients with no known co-morbid conditions”

12/13/10 Current Smoker – Added variable and definition.

12/13/10 Diabetes Mellitus – Combined variable diabetes mellitus requiring therapy with insulin and diabetes mellitus requiring therapy with oral hypoglycemic to one variable.

12/13/10 Functionally Dependent Health Status – Added variable and definition.

12/13/10 Obesity – Added variable, definition, and chart.

12/13/10 Respiratory Disease – Deleted “History of Severe COPD” component of variable. Added diffuse interstitial fibrosis and sarcoidosis to definition.

12/13/10 Ascites within 30 Days – Added variable and definition.

12/13/10 Cirrhosis – Changed variable name from “Docmented History of Cirrhosis/Ascites.”

12/13/10 Esophageal Varices – Removed “gastric” from variable and definition.

12/13/10 History of Angina within past 1 month – Added variable and definition.

12/13/10 History of MI within past 6 months – Added “within 6 months” to variable and definition.

12/13/10 History of Revascularization / Amputation for PVD – Added variable and definition.

12/13/10 History of atrial fibrillation – Deleted variable.

12/13/10 Currently Requiring or on Dialysis – Changed variable name from chronic renal failure requiring dialysis.

12/13/10 History of Seizure Disorder – Deleted variable.

12/13/10 Pregnancy – Deleted variable.

12/13/10 Congenital Anomalies – Added variable and definition.

12/13/10 Prematurity – Added variable and definition.

12/13/10 Other – Added variable and definition.

12/13/10 Hospital Procedures / Operation ICD-9 Code – Expanded definition of procedures to be captured and provided list.

12/13/10 Laboratory Data – Deleted variables for admission platelet count, PTT, and INR.

12/13/10 Primary Method of Payment – Added variable and definition.

12/13/10 Wound Disruption – Deleted variable and definition.

12/13/10 Abdominal Fascia Left Open – Deleted variable and definition.

12/13/10 Abdominal Compartment Syndrome – Deleted variable and definition.

12/13/10 Enterocutaneous Fistula/ GI Leak – Deleted variable and definition.

12/13/10 C.Diff Colitis – Deleted variable and definition.

12/19/10 Drug or Alcohol Withdrawal Syndrome – Added variable and definition.

12/19/10 Systemic Sepsis – Variable name change to Severe Sepsis.

12/19/10 Graft/Prosthesis/Flap Failure - Added variable and definition.

12/19/10 Catheter-Related Blood Stream Infection - Added variable and definition.

12/19/10 Osteomyelitis - Added variable and definition.

12/19/10 Unplanned Return to the OR - Added variable and definition.

12/19/10 Unplanned Returb to the ICU - Added variable and definition.

12/19/10	Other - Added variable and definition.
12/19/10	UTI – Deleted criteria 2.
12/19/10	UTI – Deleted frequency from criteria 1 and added WBC > 100,000 or < 3000 per cubic millimeter.
12/19/10	Myocardial Infarction – Deleted “transmural”.
1/19/11	Functionally Dependent Health Status – Deleted phrasing with “or” referring to equipment, devices or another person.
1/19/11	Complication Other – Definition of when to use “Not applicable” added.
1/31/11	Obesity – Changed from BMI 30 or > to BMI 40 or > per NTDS 2011
1/31/11	Signs of Life – Option instructions added for software that have not added this variable.
2/15/11	Procedures – Deleted procedures to coincide with NTDS 2011.
2/28/11	UTI – Word symptomatic removed.
3/6/11	Abd Fascia Left Open, Wound Disruption, C.difficle Colitis, Enterocutaneous Fistula, Abdominal Compartment Syndrome – Returned to definitions.
3/13/11	Process Measures – Added variables for TBI and VTE.
3/15/11	Primary Method of Payment updated
3/15/11	Marquette code changed from MA to MG
4/1/11	Respiratory Disease – Changed to NTDS 2011 for consistency.
5/1/11	Process Measures – Revised for TBI.
12/31/11	Pre-hospital cardiac arrest with CPR – Deleted from pre-hospital section. Added to comorbidities section.
12/31/11	Hospital Procedures – Added asterisk to Diagnostic ultrasound (includes FAST), Insertion of ICP monitor, Ventriculostomy
12/31/11	Hospital Procedure Start Time – Add sentence ” If distinct procedures with the same procedure code are performed, their start times must be different.”
12/31/11	Congestive Heart Failure – Added requirement for associated symptoms documented 30 days prior to injury
12/31/11	Current Smoker – Removed the 1 year history of use requirement
12/31/11	Currently Requiring or on Dialysis – Variable name change to Chronic Renal Failure and removal of inclusion of ultrafiltration
12/31/11	DNR Status – Variable name change to Advanced Directive Limiting Care
12/31/11	Esophageal Varices – Removed phrasing requiring identification prior to injury
12/31/11	Obesity – BMI criteria decreased from 40 to 30
12/31/11	Steroid Use – Deleted exclusion of patients who receive short course steroids (< 10 day course)
12/31/11	Dementia – Variable and definition added
12/31/11	Major Psychiatric Illness – Variable and definition added
12/31/11	Drug Abuse or Dependence – Variable and definition added
12/31/11	Total ICU Length of Stay – Add example table and clause that LOS unable to be calculated if data missing
12/31/11	Total Ventilator Days – Add example table and clause that LOS unable to be calculated if data missing
12/31/11	Discharge Date – Name change to Hospital Discharge Date and added if ED Disposition = 4, 5, 6, 9, 10, 11 then output should be NA
12/31/11	Discharge Time – Name change to Hospital Discharge Time and added if ED Disposition = 4, 5, 6, 9, 10, 11 then output should be NA
12/31/11	Hospital Discharge Disposition – Added definitions for ICF, Home Health Services, Hospice, and Skilled Nursing Care
12/31/11	Acute Renal Failure Requiring Dialysis – Name change to Acute Kidney Injury
12/31/11	ARDS – Name changed to ALI/ARDS. Parameters increased from PaO2/FiO2 of $\leq$ 200 to < 300. Removed 36 hour requirement for persistence.
12/31/11	Extremity Compartment Syndrome – Definition changed to capture only cases where late diagnosis/threat to limb
12/31/11	Myocardial Infarction – Deleted requirement for manifestation of Q waves post MI
12/31/11	Unplanned Intubation – Added “patients who were intubated in the field or Emergency Department, or those intubated for surgery, unplanned intubation occurs if they require reintubation > 24 hours after extubation”
12/31/11	UTI – Criteria 1: frequency returned to definition and temperature requirement decreased from 38.5C to 38. Criteria 2: entire option added back for consistency.
12/31/11	Catheter-Related Blood Stream Infection: Deleted 48 culture requirement. Added criterion 3 for patients < 1 year.
12/31/11	Severe Sepsis – Deleted criterion for tachycardia and tachypnea. Increased requirement for immature bands from 10% to 20%.

12/31/11	Process Measures – Output for measures not received changed from “leave blank” to “code as NA”
12/31/11	VTE Thromboembolism Prophylaxis Type: changed from 1: Heparin, 2:LMWH, 3:None to 1: Heparin, 2: Lovenox, 3: Fragmin, 4: Other LMWH, 5: None
12/31/11	GCS Assessment Qualifier Component of Highest GCS Total: Previously 1. S=Patient chemically sedated or paralyzed, 2. T=Obstruction to the patient’s eye, 3. TP=Patient is intubated, 4. L=Valid GCS” patient was note sedated, not intubated, and did not have obstruction to eye.
12/31/11	Traumactr: Deleted column for reports 1,2,3,4,5,6. Continue to use as center file name identifier
12/31/11	Factor 7a Total – Variable deleted
12/31/11	CRBSI – Added “and” before signs and symptoms component. Add “or” between each of the criteria options.
12/31/11	C.difficile – Deleted incorrect NTDS complication code 11. Added identifier as a custom data point ().
12/31/11	Direct Thrombin Inhibitor – Added to medications.
12/31/11	Bleeding Disorder – Added Pradaxa to medication list.
12/31/11	GCS Assessment Qualifier Component of Highest GCS Total: Added options available on upcoming new MTQIP tab anticipated early 2012.
2/22/12	Factor Xa Inhibitor – Added to medications
2/22/12	Bleeding Disorder – Added Xarelto to medication list.
2/22/12	TBI Process Measures: Highest GCS Total, GCS Motor Highest, GCS Assessment Qualifier of Highest GCS Total, Cerebral Monitor, Cerebral Monitor Date/Time – Deleted capture criteria. Pg 41-44
1/1/13	Trauma Registry Inclusion Criteria – Addition of ICD 10 code injuries
1/1/13	Race – Hispanic option returned
1/1/13	Sex – Deleted option 3 for not available/not known/not recorded
1/1/13	Primary E-Code – Deleted “ICD-9 codes retained over ICD-10 codes” verbiage and addition of “ICD-9 and ICD-10 codes will be accepted”
1/1/13	Protective Devices – Variable and definition added to MTQIP
1/1/13	Initial ED/Hospital Systolic Blood Pressure, Pulse, Temperature, and all GCS elements – Addition of phase “within 30 min or less” and addition of phrase “vitals do not need to be from the same assessment”
1/1/13	GCS Qualifiers – One to many outputs deleted and one to one outputs, which are current registry options kept
1/1/13	Signs of Life – Removed variable for MTQIP data dictionary
1/1/13	Operation – Definition returned to dictionary
1/1/13	Emergency Operation – Addition of ASA criteria as option for capture
1/1/13	Hospital Procedures – Addition of ICD-10 as option and addition of Transfusions
1/1/13	Pre-Hospital CPR – Addition of “with resuscitative efforts by healthcare provider” to definition name
1/1/13	ICD-9-CM Code – Addition of “or ICD-10-CM code” phrase
1/1/13	AIS Severity – Addition of format example with pre-dot and post-dot in a single field
1/1/13	Deep Surgical Site Infection – Addition of Phrase under #2 “A culture-negative finding does not meet this criterion”
1/1/13	Unplanned Intubation – Deleted phrase “intubation followed by extubation the same day for a planned operative intervention is not considered an unplanned intubation”
1/1/13	Acute Kidney Injury – Addition of GFR and urine output to criteria
1/1/13	Urinary Tract Infection – Criteria #1 temperature changed from >38 to $\geq$38 degrees, WBC changed from >100,000 to >10,000
1/1/13	C. Diff – Deleted WBC criteria and added options for histopathologic or colonoscopic findings
1/1/13	Catheter Related Blood Stream Infection – Change criteria #2 from WBC > 100,000 to WBC > 10,000 and addition of phase that criteria 1 & 2 can be used for patients of any age
1/1/13	Deep Vein Thrombosis – Delete thrombophlebitis from variable name
1/1/13	TBI Process Measures (All) – Addition of capture criteria of “Collect on patients with at least one injury in AIS head region”
1/1/13	Reason Cerebral Monitor Withheld – Deleted 8 hour criteria from decision to withhold life sustaining measures
1/1/13	VTE Type – Regrouped agents based on class
1/1/13	VTE Date – Change verbiage to include all VTE agents captured under VTE type
1/1/13	Lowest ED Systolic Blood Pressure, Transfusion Blood Units (4 hours), Transfusion Plasma Units (4 hours), Transfusion Platelets Units (4 hours), Cryoprecipitate Units, (4 hours), Angiography, Embolization Site, Angiography Date, Angiography Time, Surgery for Hemorrhage Control Type, Surgery for Hemorrhage Control Date, Surgery for Hemorrhage Control Time, Withdrawal of Care Date, Withdrawal of Care Time - Addition of variables and definitions. Note blood for TQIP is captured in measure of volume. Enter blood in measure of units and this can be converted to volume measure.

1/1/13	ED/Transport PRBC, PRBC Total, FFP Total, Platelets Total – Variables removed
1/1/13	Reason Cerebral Monitor Withheld, Beta Blocker for TBI Process Measure – Changed capture criterion to of "Collect on patients with at least one injury in AIS head region"
1/1/13	Tranexamic Acid Administration, Date, Time – Added variables and definitions
1/1/13	Case Number – Changed column name for reports to TRAUMA_NUM for all reports
1/1/13	Trauma Center – removed from reports
1/1/13	C.diff – Changed variable requirement for diarrhea to be present on path and colonoscopy.
1/14/13	Surgery for Hemorrhage Control Type – Deleted phrase "Multiple sites are possible." Deleted phrase "No choice should be duplicated." Added word "first" before type to allow for only one selection.
3/15/13	Hemorrhage Control Process Measures Blood (Blood 4hrs, Plasma 4hrs, Platelets 4hrs, Cryo 4hrs, TXA 24hr, TXA Date, TXA Time, Blood 24hrs, Plasma 24hrs, Platelets 24hrs, Cryo 24hrs) – Deleted "Collection Criterion: Collect on all patients with transfusion blood within first 4 hours after ED/hospital arrival. Added "Collection Criterion: All patients."
4/18/13	GCS Motor Component of Highest GCS Total: Added phrase "Please code as 'Not Applicable' if patient does not meet collection criterion." to be consistent with TQIP change.
4/18/13	Cerebral Monitor: Added phrase "Please code as 'Not Applicable' if patient does not meet collection criterion." to be consistent with TQIP change.
4/18/13	Cerebral Monitor Date: Added phrase "Please code as 'Not Applicable' if patient does not meet collection criterion."
4/18/13	Cerebral Monitor Time: Added phase "Please code as 'Not Applicable' if patient does not meet collection criterion."
4/18/13	Lowest ED/Hospital Systolic Blood Pressure: Added requirement for measurement within first hour.
4/18/13	Angio/Hemorrhage Control Measures: Added phrase to code as 'Not Applicable'.
1/1/14	Hematocrit – Changed from first measured at MTQIP ED/hospital to first measured at MTQIP hospital
1/1/14	Trauma Surgeon – Variable added
1/1/14	Acute Renal Insufficiency – Variable added
1/1/14	IV Fluid 0-4 Hours – Variable added
1/1/14	IV Fluid 0-24 Hours – Variable added
1/1/14	Reason Cerebral Monitor Withheld – Added options #6 and #7 to pick list. Added "AND highest total GCS ≤ 8" to collection criteria
3/1/14	VTE Type – Deleted "oral" from "oral Xa inhibitor"
3/1/14	IV Fluid (0-4) and (0-24) – Removed previous verbiage indicating clock starting at first ED. Added verbiage indicating capture time from time of injury through 4 and 24 hours after first ED arrival time.
1/1/15	Formatting – Blue font added to identify MTQIP specific variables, verbiage, or clarifications.
1/1/15	Patient Inclusion Criteria – Change to title from "Trauma Registry Inclusion Criteria." Addition of ICD-10 character modifiers.
1/1/15	Trauma Center – Addition of MidMichigan two letter identifier of MI.
1/1/15	Activation Level – Variable and definition added.
1/1/15	Date Arrival/Admit TQIP Institution – Variable name change to "ED/Hospital Arrival Date"
1/1/15	Time Arrival/Admit TQIP Insitution – Variable name change to "ED/Hospital Arrival Time"
1/1/15	Initial ED/Hospital Height – Variable and definition added.
1/1/15	Initial ED/Hospital Weight – Variable and definition added.
1/1/15	ED Discharge Date - Variable and definition added.
1/1/15	ED Discharge Time - Variable and definition added.
1/1/15	Intubation Status – Definition updated to include King airway capture.
1/1/15	Operation – Verbiage updated to clarify meaning "Also answer "YES" if"
1/1/15	Emergency Operation – Retired 12 hour criteria for capture. Capture deferred to ASA criteria.
1/1/15	Procedures – NTDS removed criteria for coding capture for transfusion of greater than 10 units of blood.
1/1/15	Alcohol Use Disorder – Variable name changed.
1/1/15	Drug Use Disorder – Variable name changed. Added clarification for marijuana.
1/1/15	Current Smoker – Added clarification for exclusion of e-cigarettes.
1/1/15	Functionally Dependent Health Status – Definition updated removing verbiage describing partially and totally dependent. This removed the "and" operator. Current definition dependent upon equipment, devices "or" another person.
1/1/15	Esophageal Varices – Retired.
1/1/15	Obesity – Retired.
1/1/15	Ascites within 30 Days – Retired.
1/1/15	Pre-Hospital Cardiac Arrest – Retired in co-morbid. Added to Pre-Hospital. Definition verbiage change.
1/1/15	Respiratory Disease – Variable name changed to Chronic Obstructive Pulmonary Disease (COPD).

1/1/15 History of Angina within 1 Month – Variable name changed to History of Angina within 30 Days. Description of angina updated.
1/1/15 CVA with Neuro Deficit – Variable name changed to Cerebrovascular Accident (CVA).
1/1/15 Plavix – Definition clarified to include Pletal (cilostazol).
1/1/15 ADD/ADHD – Variable and definition added.
1/1/15 Major Psychiatric Illness - Addition of ICD-9 and ICD-10 CM Code Ranges for clarification.
1/1/15 Primary Method of Payment – Verbiage added continuing current capture method. Clarification regarding vendor mapping for non-MTQIP submissions added.
1/1/15 Complications – Definition of "stay" clarified. Example added.
1/1/15 ALI/ARDS – Variable name changed to ARDS. Definition criteria changed.
1/1/15 Acute Kidney Injury – Definition criteria changed.
1/1/15 Cardiac Arrest with CPR – Definition and criteria updated to including capture of date and location.
1/1/15 DVT – Variable name changed to DVT/thrombophlebitis.
1/1/15 Abdominal Compartment Syndrome – Retired verbiage "Answer "NO" if abdomen was left open and did not require reopening for revision of the temporary closure for abdominal compartment syndrome.
1/1/15 ECF/GI Leak – Variable name clarified to ECF or GI leak and verbiage updated to remove open abdominal fascia option.
1/1/15 Unplanned Return to ICU – Definition criteria clarified for patient's location history.
1/1/15 Cerebral Monitor, Date, Time – Added verbiage for capture when placed at referring facility. Added option for (5) None.
1/1/15 Antibiotic Days – Variable and definition added.
1/1/15 Lowest ED SBP – Addition of verbiage for clarification of the word sustained to include "that you consider valid" to avoid capture of clearly aberrant values
1/1/15 Blood, Plasma (0-4), (0-24) – Added verbiage to account for autotransfuser blood.
1/1/15 IV Fluid (0-4), (0-24) – Added verbiage for capture of all units spiked and hung.
1/1/15 TXA Date – Updated format for current submission format being received.
1/1/15 Antibiotic Days – Clarified route of administration
1/1/15 Angiograph – Changed interval from 48 hours to 24 hours for capture
1/1/15 Unplanned Return to ICU – Variable name change to Unplanned Admission to ICU. Changed verbiage from "readmitted" to "admitted" in first line.
4/3/15 Cardiac Arrest with CPR – Removed verbiage that indicated "Were pulseless but did not receive defibrillation attempts or CPR by hospital personnel.
7/1/15 Antibiotic Days – All routes deleted except IV administration
7/1/15 IV Fluid 0-4, 0-24 hours – Capture criteria updated to only capture this variable on patients who receive $\geq$ 5 units PRBC within 4 hours of ED/Hospital arrival. Definition clarified to exclude fluids provided for medication administration.
1/1/16 Provider Arrival Date – Variable added
1/1/16 Provider Arrival Time – Variable added
1/1/16 Elapsed Minutes from ED Arrival to Provider Arrival – Variable added
1/1/16 Transport Mode – Variable added
1/1/16 Service Performing Operative Procedure – Variable added
1/1/16 Elapsed Time ED Arrival to Procedure Start – Variable added
1/1/16 Organ Donation Request – Variable added
1/1/16 Organs Procured Date/Time – Variables added
1/1/16 Organ Procured – Variable added
1/1/16 Trauma Center – VH added for Providence Hospital and LM added for St. Mary's Livonia (acceptance pending)
1/1/16 Ethnicity – Variable added
1/1/16 Activation level – Addition of second column capture to allow vendors to map as well as provide raw data
1/1/16 Initial ED/Hospital Systolic Blood Pressure – Addition of verbiage
1/1/16 Initial ED/Hospital Pulse – Addition of verbiage
1/1/16 Initial ED/Hospital GCS-Total – Deleted verbiage
1/1/16 ED Discharge Date – Verbiage changed to blue font "The date the patient was discharged from the ED." Addition of verbiage "If ED Discharge Disposition is 5 Deceased/Expired, then ED Discharge Date is the date of date as indicated on the patient's death certificate.
1/1/16 ED Discharge Time - Addition of verbiage "If ED Discharge Disposition is 5 Deceased/Expired, then ED Discharge Date is the date of date as indicated on the patient's death certificate.
1/1/16 Trauma Surgeon – Verbiage added for capture of name with NPI for ID.
1/1/16 Hospital Discharge Date - Verbiage changed to blue font "The date the patient was discharged from the

	hospital." Addition of verbiage "If Hospital Discharge Disposition is 5 Deceased/Expired, then the Hospital Discharge Date is the date of death as indicated on the patient's death certificate."
1/1/16	Hospital Discharge Time - Verbiage changed to blue font "The time the patient was discharged from the hospital." Addition of verbiage "If Hospital Discharge Disposition is 5 Deceased/Expired, then the Hospital Discharge Time is the date of death as indicated on the patient's death certificate."
1/1/16	Hospital Discharge Disposition – Clarification for capture of subacute as rehab disposition. Clarification for capture of LTAC or Select as Long Term Care Hospital. Clarification for capture of Extended Care Facility as Other or SNF.
1/1/16	Hospital Complications – Addition of verbiage For all Hospital Complications that follow the CDC definition [e.g., VAP, CAUTI, CLABSI, Osteomyelitis] always use the most recent definition provided by the CDC.
1/1/16	TBI Process Measure, GCS Motor Component of Highest GCS Total – Portion of title changed to blue font "GCS Motor Component"
1/1/16	Initial ED/Hospital Pupillary Response – Variable added
1/1/16	Midline Shift – Variable added
1/1/16	Cerebral Monitor – Verbiage added for capture in those patients with TBI indication for placement.
1/1/16	Blood, Plasma, Platelets, Cryoprecipitate (0-4) and (0-24)- Verbiage added "Count all units spiked, hung and initiated, even if not completely given." Verbiage added if blood product transfusion upon patient arrival, count as 1 unit.
1/1/16	Surgery for Hemorrhage Control Type – Option added for "Other skin/soft tissue"
1/1/16	Alcohol Use Disorder – Variable name changed to blue font
1/1/16	Chronic Obstructive Pulmonary Disease (COPD) – Deleted verbiage "chronic asthma; cystic fibrosis"
1/1/16	Chronic Renal Failure – Addition and blue font applied to word "Current" to indicate a patient who currently has renal failure. Deleted verbiage "Excludes Transplant Patients."
1/1/16	Current Smoker – Addition of verbiage "within the last 12 months"
1/1/16	Dementia – Reworded "Documentation in the patient's medical record of dementia including senile or vascular dementia (e.g. Alzheimer's)."
1/1/16	Drug Use Disorder - Variable name changed to blue font
1/1/16	Acute Kidney Injury – Deleted verbiage in title "(with DIALYSIS)"
1/1/16	Urinary Tract Infection – Variable removed
1/1/16	Catheter-Associated Urinary Tract Infection – Variable added
1/1/16	Catheter Related Blood Stream Infection – Variable removed
1/1/16	Central Line Associated Bloodstream Infection – Variable added
1/1/16	Decubitus Ulcer – Verbiage added "Deeper tissues may or may not be involved."
1/1/16	Deep Incisional Surgical Site Infection – Verbiage added to clarify DIP and DIS.
1/1/16	Deep Vein Thrombosis (DVT) – Deleted "Thrombophlebitis" from variable name
1/1/16	Osteomyelitis – Definition updated to reflect CDC definition.
1/1/16	Pneumonia – Criteria 3 added to also capture this if VAP is being captured.
1/1/16	Ventilator-Associated Pneumonia - Definition updated to reflect CDC definition.
1/1/16	ICD-9 and ICD-10 Hospital Procedures – Added verbiage "The null value "Not Applicable" is used if not coding ICD-9."
1/1/16	Initial ED/Hospital Systolic Blood Pressure – Added verbiage "If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no BP is ever able to be obtained then capture BP as 0."
1/1/16	Initial ED/Hospital Pulse – Added verbiage "If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival, and no pulse is ever able to be obtained then capture pulse as 0.
1/1/16	Initial ED/Hospital GCS-Eye, Verbal, Motor, Total – Added verbiage "If the patient has a cardiopulmonary arrest prior to arrival or within 15 minutes of arrival and no GCS is ever able to be obtained then capture as GCS 1 for eye, verbal, and motor, and 3 for total.
1/1/16	Total ICU Length of Stay – Added verbiage "If the documentation reflects a patient is receiving ICU care in a non-ICU setting due to bed availability issues then capture as an ICU day."
1/1/16	Antibiotic Days – Added clarification for capture of antibiotics administered at the index hospital.
1/1/16	IV Fluid – Added clarification for capture of D5LR and D5W as crystalloid fluids.
1/1/16	Acute Renal Insufficiency – Updated the reference to Acute Renal Injury to reflect the updated variable name indicated above
1/1/16	ED Discharge Disposition – Added second column for reporting variable with vendor mapping
1/1/16	Tranexamic Acid Administration – Added clarification for inclusion of aminocaproic acid
1/1/16	Abdominal Fascia Left Open – Removed verbiage ". No primary surgical closure of the fascia, or intra-abdominal packs left at conclusion of primary laparotomy (damage control)" to improve clarity

1/1/16	Withdrawal of Care –Added clarification for inclusion of Gift of Life patients
1/1/16	Acute Kidney Injury – definition reverted to 2014
1/1/16	Age – Added verbiage for standardized capture as age 50 when no age identified in the documentation
1/1/16	VTE Prophylaxis Type – Added clarification for indications and dosing.
1/1/16	Procedures – Added double asterisk to TPN indicated required capture
5/1/16	PRQ Variables – Added red color identifiers to variables specific for the PRQ online reporting that will not be validated. If validation is requested in the future, then a notification will be provided and the change log updated.
5/13/16	Trauma Center – Name updated at center request for VH and MM.
1/1/17	Patient Inclusion Criteria – Retired ICD-9 criteria.
1/1/17	Case Number – Deleted reference to NTRACS version.
1/1/17	Trauma Center – Updated center names for Beaumont facilities. Updated reporting for CDM portal.
1/1/17	Race – Added bullet to select all that apply.
1/1/17	ICD-9 Primary External Cause Code – Retired variable.
1/1/17	Transport Mode – Added variable for interfacility variable that is being used by DI centers with mode.
1/1/17	Activation Level – Added pick options.
1/1/17	Initial ED/Hospital GCS-Eye – Added appropriate chart verbiage for GCS component.
1/1/17	Initial ED/Hospital GCS-Verbal – Added appropriate chart verbiage for GCS component.
1/1/17	Initial ED/Hospital GCS Assessment Qualifiers – Corrected text to reflect correct modifier when patient has received neuromuscular blockade.
1/1/17	Initial ED/Hospital Weight – Verbiage updated.
1/1/17	Intubation Status – Clarified verbiage for capture of Hi-Lo endotracheal tubes.
1/1/17	ETOH – Variable renamed to Alcohol Screen Results and associated NTDS verbiage added.
1/1/17	Hematocrit – Retired.
1/1/17	Admit Service – Added standardized picklist.
1/1/17	Trauma Surgeon – Clarified reporting for vendors.
1/1/17	ICD-9 Hospital Procedures – Retired variable.
1/1/17	ICD-10 Hospital Procedures – Retired select verbiage indicating to submit procedures that center had captured and that not all hospitals submit all provided procedures. Specified CT capture by body region. Deleted echocardiography, cystogram, urethrogram, central venous catheter, pulmonary artery catheter, cardiac output monitoring. Added REBOA. Verbiage added to exclude intubations performed in the OR.
1/1/17	Comorbidities – Verbiage added indicating comorbidities should be submitted using numeric or alpha-numeric code under each variable.
1/1/17	Advanced Directive Limiting Care – Verbiage updated.
1/1/17	Drug Use Disorder – Variable name changed to Substance Abuse Disorder. Added new NTDS code.
1/1/17	COPD – Verbiage updated.
1/1/17	History of Angina – Variable name changed to Angina Pectoris. Added new NTDS code. Added new definition verbiage.
1/1/17	History of Myocardial Infarction - Variable name changed to Myocardial Infarction. Added new NTDS code.
1/1/17	History of Peripheral Vascular Disease – Retired
1/1/17	Peripheral Arterial Disease – Added variable and definition. Added new NTDS code.
1/1/17	Hypertension Requiring Rx – Transition of prescription requirement to blue font.
1/1/17	Chronic Renal Failure – Deleted “Current acute or” verbiage.
1/1/17	ADD/ADHD – Updated verbiage.
1/1/17	Major Psychiatric Illness – Variable name changed to Mental/Personality Disorder. Added new NTDS code. Deleted the descriptor of “major” associated with depressive disorder.
1/1/17	Anticoagulant Therapy – Added new variable and definition. Added new NTDS code.
1/1/17	Bleeding Disorder – Deleted verbiage relating to blood clotting abnormalities induced by drugs.
1/1/17	Plavix – Added capture for Brilinta (ticagrelor).
1/1/17	Factor Xa Inhibitor – Added capture for Savaysa (endoxaban).
1/1/17	ICD-9 Injury Diagnoses- Retired variable.
1/1/17	Total ICU Length of Stay – Added verbiage indicating that the null should be Not Known/Not Recorded if dates are missing.
1/1/17	Total Ventilator Days – Added verbiage indicating that the null should be Not Known/Not Recorded if dates are missing.
1/1/17	Hospital Discharge Disposition – Added verbiage notifying of numbering gaps related to retired variables.
1/1/17	Discharge Service – Added standardized picklist.
1/1/17	Hospital Complications - Added verbiage notifying of numbering gaps related to retired variables.

1/1/17	Complication Code – Verbiage added indicating comorbidities should be submitted using numeric or alpha-numeric code under each variable.
1/1/17	Superficial Incisional Surgical Site Infection – Variable renamed Superficial Incisional Surgical Site Infection. Added new NTDS code. Verbiage updated.
1/1/17	Deep Incisional Surgical Site Infection – Verbiage updated.
1/1/17	Organ/Space Surgical Site Infection – Verbiage updated including clarification for capture of patients who develop empyema after chest tube placement.
1/1/17	Adult Respiratory Distress Syndrome (ARDS) – Variable renamed Acute Respiratory Distress Syndrome.
1/1/17	Ventilator-Associated Pneumonia - Verbiage updated.
1/1/17	Catheter-Associated Urinary Tract Infection – Verbiage updated.
1/1/17	Cardiac Arrest with CPR – Verbiage updated to exclude those patients who are receiving CPR on arrival to your hospital.
1/1/17	Myocardial Infarction – Verbiage updated.
1/1/17	Central Line Associated Bloodstream Infection – Verbiage updated.
1/1/17	Deep Vein Thrombosis (DVT) – Added clarification for inclusion capture of gastrocnemius and soleus thromboses if treated or documentation reflects contraindication.
1/1/17	Drug or Alcohol Withdrawal Syndrome – Variable renamed Alcohol Withdrawal Syndrome. Added new NTDS code. Verbiage updated.
1/1/17	Graft/Prosthesis/Flap Failure – Retired.
1/1/17	Osteomyelitis – Verbiage updated.
1/1/17	Sepsis – Verbiage updated.
1/1/17	Decubitus Ulcer – Variable renamed Pressure Ulcer. Added new NTDS code. Verbiage updated.
1/1/17	TBI Process Measures – Collection criterion verbiage added to excluding patients with isolated scalp abrasion(s), scalp contusion(s), scalp laceration(s) and/or scalp avulsion(s).
1/1/17	Cerebral Monitor Date – Verbiage added to indicate that null value of “Not Applicable” is used if the data field for Cerebral Monitor is “5. None”.
1/1/17	Cerebral Monitor Time – Verbiage added to indicate that null value of “Not Applicable” is used if the data field for Cerebral Monitor is “5. None”.
1/1/17	Reason Cerebral Monitor Withheld – Changed option 5 from “Operative evacuation with improvement post-op” to “Operative evacuation”.
1/1/17	Antibiotic Days – Added verbiage to exclude antifungal, antiviral and antiparasitic agents.
1/1/17	Antibiotic 1 Type – Added variable and verbiage.
1/1/17	Antibiotic 2 Type – Added variable and verbiage.
1/1/17	Antibiotic Date – Added variable and verbiage.
1/1/17	Antibiotic Time – Added variable and verbiage.
1/1/17	Venous Thromboembolism Prophylaxis Type - Added verbiage notifying of numbering gaps related to retired variables.
1/1/17	Blood Products (Blood, Plasma, FFP, Cryoprecipitate) – Add verbiage clarifying that when converting a volume to a unit, the individual amounts should be used not the aggregated sum.
1/1/17	IV Fluid – Added verbiage clarifying capture of PlasmaLyte as a crystalloid.
1/1/17	Tranexamic Acid Administration (TXA) – Added verbiage clarifying that topical administration should be excluded.
1/1/17	Angiography – Added option for Angiogram with stent graft and Angiogram with embolization and stent graft.
1/1/17	Embolization Site – Added option for Other.
1/1/17	Angiography Time – Added validation range for +/- 1 hour.
1/1/17	Surgery for Hemorrhage Control Type – Added verbiage for capture as none if field value is not listed in pick list.
1/1/17	Withdrawal of Care, Date, Time – Variable name change to Withdrawal of Life Supporting Treatment. Verbiage update changing “care” to “treatment” throughout the definition. Clarification to include if comfort care documented.
3/1/17	Ventilator Associated Pneumonia – Tables updated consistent with CDC Jan 2017 update
7/1/17	ARDS – Definition clarified per New Berlin. Hyperlink added to New Berlin.
7/1/17	Sepsis – Deleted the provided example.
7/1/17	Procedures – Head CT – Added capture of date and time for all patients on anticoagulant therapy or aspirin who have head injury.
1/1/18	First ED/Hospital INR, First ED/Hospital PTT, First ED/Hospital Anti-Xa Activity, Type of First Therapy, Date of First Therapy, Time of First Therapy – Variables and definitions added.
1/1/18	Trauma Center – Added 3 new centers (Beaumont Hospital – Troy, Henry Ford Allegiance, Mercy Health

Muskegon).

1/1/18 Advanced Directive Limiting Care – Clarified to include documentation that reflects capture for documentation that includes parameter-based withholding of care.

1/1/18 Complication General, VAP, CAUTI, CLABSI, Osteomyelitis – Removed verbiage requiring use of the most current CDC version and specified version to be followed.

1/1/18 ED Discharge Disposition – Clarified that IR procedures should have their disposition captured that follows the procedure. Clarified the disposition capture should reflect the care provided to the patient.

1/1/18 CHF – Clarified and transitioned to the definition that places the 30-day requirement only on the pulmonary edema sign.

1/1/18 Diabetes Mellitus – Clarified to not capture when documentation indicates the patient has not been taking the medication.

1/1/18 ICD-10 eCode Additional - Variables and definitions added.

1/1/18 Patients Home Zip/Postal Code, Patient's Home Country, Patient's Home State, Patient's Home County, Patient's Home City, Alternate Home Residence, Date of Birth, Age Units, Work-Related, Patient's Occupational Industry, Patient's Occupation, ICD-10 Place of Occurrence eCode, Incident Location Zip/Postal Code, Incident Country, Incident State, Incident County, Incident City, Airbag Deployment, Report of Physical Abuse, Investigation of Physical Abuse, Caregiver at Discharge, EMS Dispatch Date, EMS Dispatch Time, EMS Unit Arrival Date at Scene or Transferring Facility, EMS Unit Arrival Time at Scene or Transferring Facility, EMS Unit departure Date From Scene or Transferring Facility, EMS Unit Departure Time From Scene or Transferring Facility, Other Transport Mode, Initial field Systolic Blood Pressure, Initial Field Pulse Rate, Initial field Respiratory Rate, Initial Field Oxygen Saturation, Initial Field GCS-Eye, Initial Field GCS-Verbal, Initial Field GCS-Motor, Initial Field GCS-Total, Initial ED/Hospital Respiratory Rate, Initial ED/Hospital Respiratory Assistance, Initial ED/Hospital Oxygen Saturation, Initial ED/Hospital Supplemental Oxygen, Drug Screen Results, Alcohol Screen, Signs of Life - Variables and definitions added as part of the State of Michigan project.

1/1/18 Angiogram – Added "interventional" verbiage.

1/23/18 FFP 0-4, 0-24 – Verbiage added to emphasize the count as units and expanded reference volumes that users may see documented on flowsheets.

2/14/18 VAP – Added verbiage to account for centers without quantitative reporting to capture if culture positive.

10/18/18 Center Name – St. Mary's of Michigan name changed to Ascension St. Mary's Hospital

10/31/18 Center Name – St. John Hospital name changed to Ascension St. John Hospital

1/1/19 Patient's Home State – Added the null value "Not Applicable" is reported for non-US hospitals

1/1/19 Patient's Home County - Added the null value "Not Applicable" is reported for non-US hospitals

1/1/19 Patient's Home City - Added the null value "Not Applicable" is reported for non-US hospitals

1/1/19 Date of Birth - Removed used to calculate patient age in minutes, hours, day, months, or years

1/1/19 Age - Removed used to calculate patient age in minutes, hours, day, months, or years

1/1/19 Age - Added the null value "Not Applicable" is reported if Date of Birth is documented

1/1/19 Age Units - Added 6. Weeks

1/1/19 Age Units - Added the null value "Not Applicable" is reported if Date of Birth is reported

1/1/19 ICD-10 Primary External Cause Code - Changed ICD-10-CM codes are accepted for this data element. Activity codes are not collected under the NTDS and should not be reported in this field.

1/1/19 ICD-10 Primary External Cause Code - Added Multiple Cause Coding Hierarchy

1/1/19 ICD-10 Place of Occurrence External Cause Code - Removed Multiple Cause Coding Hierarchy

1/1/19 ICD-10 Additional External Cause Code - Removed External cause codes are used to auto-generate two calculated fields Trauma Type (Blunt, Penetrating, Burn) and Intentionality (based on CDC matrix)

1/1/19 Protective Devices - Added if documented that a "Child Restraint (booster seat or child care seat)" was used or worn, but not properly fastened, either on the child or in the car, report Field Value "1. None."

1/1/19 Report of Physical Abuse - Added "….as defined by state/local authorities."

1/1/19 EMS Dispatch Date - Removed Used to auto generate an additional calculated field Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

1/1/19 EMS Dispatch Time - Removed Used to auto generate an additional calculated field Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

1/1/19 EMS Unit Arrival Date at Scene or Transferring Facility - Removed Used to auto generate an additional calculated field Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

1/1/19 EMS Unit Arrival Time at Scene or Transferring Facility - Removed Used to auto generate an additional calculated field Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

1/1/19 EMS Unit Departure Date from Scene or Transferring Facility - Removed Used to auto generate an additional calculated field Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

1/1/19	EMS Unit Departure Time from Scene or Transferring Facility - Removed Used to auto generate an additional calculated field Total EMS Time (elapsed time from EMS dispatch to hospital arrival)
1/1/19	Initial Field Systolic Blood Pressure - Added The null value "Not Known/Not Recorded" is reported if the patient's first recorded initial field systolic blood pressure was NOT measured at the scene of injury
1/1/19	Initial Field Pulse Rate - Added 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
1/1/19	Initial Field Oxygen Saturation - Added 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
1/1/19	Initial Field GCS - Eye - Added 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.
1/1/19	Initial Field GCS - Eye - Added The null value “Not Known/Not Recorded” is reported if Initial Field GCS 40 - Eye is reported.
1/1/19	Initial Field GCS - Eye - Removed Used to calculate overall GCS - EMS Score
1/1/19	Initial Field GCS - Verbal - Removed Used to calculate overall GCS - EMS Score
1/1/19	Initial Field GCS - Verbal - Added 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.
1/1/19	Initial Field GCS - Verbal - Added The null value “Not Known/Not Recorded” is reported if Initial Field GCS 40 - Verbal is reported.
1/1/19	Initial Field GCS - Motor - Removed Used to calculate overall GCS - EMS Score
1/1/19	Initial Field GCS - Motor - Added 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.
1/1/19	Initial Field GCS - Motor - Added The null value “Not Known/Not Recorded” is reported if Initial Field GCS 40 - Motor is reported.
1/1/19	Initial Field GCS - Total - Added 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.
1/1/19	Initial Field GCS - Total - Added The null value “Not Known/Not Recorded” is used if Initial Field GCS 40 - Total is reported.
1/1/19	Initial Field GCS 40 - Eye – New variable
1/1/19	Initial Field GCS 40-Verbal – New variable
1/1/19	Initial Field GCS 40 - Motor – New variable
1/1/19	ED/Hospital Arrival Date - Removed Used to auto-generate two additional calculated fields 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).
1/1/19	ED/Hospital Arrival Time - Removed Used to auto-generate two additional calculated fields 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).
1/1/19	Initial ED/Hospital Supplemental Oxygen - Removed Only complete if a value is reported for Initial ED/Hospital Oxygen Saturation, otherwise report as "Not Applicable".
1/1/19	Initial ED/Hospital Supplemental Oxygen - Added The null value “Not Applicable” is reported if the Initial ED/Hospital Oxygen Saturation is “Not Known/Not Recorded
1/1/19	Initial ED/Hospital GCS - Eye - Removed Used to calculate Overall GCS - ED Score
1/1/19	Initial ED/Hospital GCS - Eye - Added The null value “Not Known/Not Recorded” is reported if Initial Field GCS 40 – Eye is documented.
1/1/19	Initial ED/Hospital GCS - Eye - Added 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.
1/1/19	Initial ED/Hospital GCS - Verbal - Removed Used to calculate Overall GCS - ED Score
1/1/19	Initial ED/Hospital GCS - Verbal - Added The null value “Not Known/Not Recorded” is reported if Initial ED/Hospital GCS 40 – Verbal is reported.
1/1/19	Initial ED/Hospital GCS - Verbal - Added The null value “Not Known/Not Recorded” is reported if the patient’s Initial ED/Hospital GCS – Verbal was not measured within 30 minutes or less of ED/Hospital arrival.
1/1/19	Initial ED/Hospital GCS - Motor - Added The null value “Not Known/Not Recorded” is reported if Initial ED/Hospital GCS 40 – Motor is reported.
1/1/19	Initial ED/Hospital GCS - Motor - Added 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.
1/1/19	Initial ED/Hospital GCS - Total - Added The null value “Not Known/Not Recorded” is reported if Initial ED/Hospital GCS 40 is reported.
1/1/19	Initial ED/Hospital GCS - Total - Added 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.
1/1/19	Initial ED/Hospital GCS Assessment Qualifiers - Added The null value “Not Known/Not Recorded” is reported if Initial ED/Hospital GCS 40 is reported.
1/1/19	Initial ED/Hospital GCS Assessment Qualifiers - Added 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.
1/1/19	Initial ED/Hospital GCS 40 - Eye – New variable
1/1/19	Initial ED/Hospital GCS 40 - Verbal - New variable
1/1/19	Initial ED/Hospital GCS 40 - Motor - New variable
1/1/19	Initial ED/Hospital Height - Added The null value “Not Known/Not Recorded” is reported if the patient’s
1/1/19	Initial ED/Hospital Height was not measured within 24 hours or less of ED/hospital arrival.
1/1/19	Initial ED/Hospital Weight - Changed First recorded weight within 24 hours or less of ED/hospital arrival.
1/1/19	Initial ED/Hospital Weight - Added The null value “Not Known/Not Recorded” is reported if the patient’s
1/1/19	Initial ED/Hospital Weight was not measured within 24 hours or less of ED/hospital arrival.
1/1/19	Alcohol Screen Results - Changed collect as X.XX grams per deciliter (g/dl)
1/1/19	ED Discharge Date - Removed Used to auto generate calculated field Total ED Time (elapsed time from ED admit to ED discharge)
1/1/19	ED Discharge Time - Removed Used to auto generate calculated field Total ED Time (elapsed time from ED admit to ED discharge)
1/1/19	ICD-10 Hospital Procedures - Changed Major and minor procedure ICD-10 PCS procedure codes
1/1/19	ICD-10 Hospital Procedures - Removed ICD-10 04L03DZ (REBOA Code)
1/1/19	ICD-10 Injury Diagnoses - Removed Used to auto generate additional calculated fields Abbreviated Injury Scale (six body regions) and Injury Severity
1/1/19	Pulmonary Embolism - Updated to exclude sub segmental PE's
1/1/19	Unplanned Intubation - Updated to remove cardiac failure
1/1/19	Highest GCS Total - Added The null value “Not Known/Not Recorded” is reported if reporting Highest GCS Motor 40.
1/1/19	Highest GCS Motor - Added The null value “Not Known/Not Recorded” is reported if reporting Highest GCS Motor 40.
1/1/19	GCS Assessment Qualifier Component of Highest GCS Total - Added The null value “Not Known/Not Recorded” is reported if reporting Highest GCS Motor 40.
1/1/19	Highest GCS-40 Motor – New variable
1/1/19	Venous Thromboembolism Prophylaxis Type - Retire 1. Heparin
1/1/19	Venous Thromboembolism Prophylaxis Type - Added 11. Unfractionated Heparin (UH)
1/1/19	Venous Thromboembolism Prophylaxis Type - Added Exclude sequential compression devices
1/1/19	Lowest ED/Hospital Systolic Blood Pressure - Removed sustained (> 5 min) from the definition
1/1/19	Angiography - Added 4. Angiogram with stenting
1/1/19	Angiography Date - Added Procedure start date is the date of needle insertion in the groin
1/1/19	Angiography Time - Added Procedure start time is the date of needle insertion in the groin 1/1/19
1/1/19	Surgery for Hemorrhage Control Type - Added 9. Extraperitoneal Pelvic Packing
1/1/19	Angiography - Added Only report Field Value "4. Angiogram with stenting" if stenting was performed specifically, for hemorrhage control.
1/1/19	Trauma Center – Added Metro Health and Providence Novi
1/1/19	ED Trauma Response – Updated content. Intent unchanged.
1/1/19	Alcohol Use Disorder – Added inclusion of capture of patients who meet criteria for complication of Alcohol Withdrawal Syndrome
1/1/19	Substance Abuse Disorder – Clarified for inclusion of all patients with positive drug screen for non-prescribed medications
1/1/19	Functionally Dependent Health Status – Added examples
1/1/19	Peripheral Arterial Disease (PAD) – Clarified for inclusion of patients with non-venous PVD and exclusion of Raynaud’s and Buerger’s
1/1/19	Aspirin, Plavix, Warfarin, Beta Blocker, Statin, Direct Thrombin Inhibitor, Factor Xa Inhibitor – Clarified verbiage changing minimum interval to time frame. Intent unchanged.
1/1/19	Total ICU Length of Stay – Clarified to capture for patient’s receiving ICU level of care in ICU only
1/1/19	Deep Vein Thrombosis (DVT) – Clarified to include non-extremity DVT that receive treatment. Clarified to exclude cases where no contraindication to treatment documented and patient only receives aspirin for treatment.
1/1/19	Myocardial Infarction – Clarified to include capture of NSTEMI type II

1/1/19	TBI Process Measures – Clarified to exclude cases with isolated asphyxiation/suffocation as codes are not located in the head chapter of the AAAM book
1/1/19	First ED/Hospital PTT – Clarified to include APTT in capture of this variable
1/1/19	GCS 40 – Field Value "0" was assigned to all Not Testable options
1/1/19	Co-Morbid Conditions – Renamed Pre-Existing Conditions
1/1/19	Hospital Complications – Renamed Hospital Events
1/1/19	NPI – changed “or” to “and” for reporting resuscitation and admitting trauma surgeon NPI
1/1/19	Open Fracture Antibiotic Type 1, Type 2, Date, Time – changed “at your hospital” to blue font
1/1/19	Multiple variables – changed “collect”, “used”, “completed”, “capture” to “report” or “reported” with no impact or change to meaning
1/1/19	Hospital Events – Clarified exclusion of contaminants not requiring treatment
1/1/19	VAP – Updated to CDC Jan 2019 tables
1/1/19	COPD – Updated based on TQIP clarification to exclude chronic asthma and include prn bronchodilators
1/1/19	Functionally Dependent Health Status - Updated based on TQIP clarification to not include prosthetics, dentures, glasses, and hearing aids
1/1/19	Hospital Disposition – Updated based on TQIP clarification to assign home hospice to hospice
1/1/19	Congenital Anomalies - Updated based on TQIP clarification to include anomalies that have been operatively fixed prior to injury.
1/2/19	Trauma Center – Borgess Medical Center name change to Ascension Borgess Hospital
2/12/19	Advanced Directive Limiting Care – Clarified “present prior to arrival at your center” is not limited to the patient having the documentation in hand or scanned from a previous admit. This phrasing includes any documentation in the medical record indicating an advanced directive that limits care was in place prior to arrival at index hospital.
1/1/20	Patient Inclusion Criteria – Updated criteria to now only include patients sustaining a traumatic injury within 14 days of initial hospital counter. The patient inclusion criteria were updated removing verbiage indicating “defined by your trauma registry inclusion criteria.” Verbiage added excluding cases for elective and/or planned surgical interventions. Verbiage clarified to include in-patient admission and/or observed. Definition for an acute care hospital was added with supporting hyperlink.
1/1/20	Standardized verbiage – Throughout dictionary “collection” was changed to “reporting” where used in the context of data capture. Throughout dictionary “field” was changed to “element” where used in the context of a database.
1/1/20	Alternate Home Residence – Updated to report all that apply.
1/1/20	Report of Physical Abuse – Retired.
1/1/20	Investigation of Physical Abuse – Retired.
1/1/20	Caregiver at discharge – Retired.
1/1/20	ED Discharge Disposition – Clarified reporting of the care disposition from the ED based on the order with exception if the disposition is OR, no order is required. For multiple orders, report the highest acuity of the actual care provision. Additional examples provided.
1/1/20	Signs of Life – Retired.
1/1/20	Mental/Personality Disorder – Clarified the word “disorder” is not required for capture and examples provided.
1/1/20	Pregnancy – New variable and definition.
1/1/20	Substance Use Disorder – Variable renamed. Definition reworded. Clarified the word “disorder” is not required for capture. Types of substance use examples provided.
1/1/20	Cardiac Arrest with CPR – Clarified must occur during initial stay and be documented in the medical record. Exclude patients whose only episode of cardiac arrest was prior to arrival.
1/1/20	Delirium - New variable and definition.
1/1/20	Myocardial Infarction Hospital Event – “Or” modifiers for criteria changed to “and” for events that occur after arrival at your center.
1/1/20	Unplanned Visit to the Operating Room – Variable renamed. Clarified that this event must occur during initial stay. Exclude planned visits to the operating room and repeat procedures for operations not initially performed at your center.
1/1/20	Venous Thromboembolism Prophylaxis Date and Time – Deleted verbiage relating specifically to heparin or other anticoagulants.
1/1/20	Packed Red Blood Cells Units, Whole Blood Units, Plasma Units, Platelet Units, Cryoprecipitate Units – Variables renamed. Clarified reporting of transfusions at your hospital. Clarified reporting should be done in units if available. Excluded reporting of blood products transfusing on arrival. Vendor mapping conversion logic table provided.
1/1/20	Whole Blood Units – New variable and definition. Cell Saver and autotransfuser blood removed from

	Packed Red Blood Cells Units and Plasma Units and added to this variable.
1/1/20	Lowest ED/Hospital Systolic Blood Pressure – Variable renamed. Added verbiage for reporting when patients arrest within 1 hour of arrival, report lowest systolic blood pressure as zero.
1/1/20	Angiography, Embolization Site, Angiography Date and Time, and Surgery for Hemorrhage Control Type, Date, and Time – Specified reporting for the indication of hemorrhage control. Updated reporting criterion to include either packed red blood cells or whole blood within first 4 hours after ED/hospital arrival.
1/1/20	Surgery for Hemorrhage Control Type, Date, and Time – Clarified the procedure start time is when the incision was made. In the absence of this, report when the procedure started.
1/1/20	Patient's First Name – New variable and definition.
1/1/20	Patient's Last Name – New variable and definition.
1/1/20	Patient's Middle Initial – New variable and definition.
1/1/20	Patient's Home Street 1 – New variable and definition.
1/1/20	Patient's Home Street 2 – New variable and definition.
1/1/20	Patient's Email Address – New variable and definition.
1/1/20	Patient's Medical Record Number– New variable and definition.
1/1/20	Operation and Emergency Operation – Clarified reporting for operations performed at your hospital.
1/1/20	Total Days in Hospital – Added the validation range of acceptability.
1/1/20	Hospital Discharge Disposition – Clarified reporting of the documented discharge planning or case management. If no discharge planning or case management documentation, report the final disposition order.
1/1/20	Pneumonia – Added CDC resource reference hyperlink.
1/1/20	Antiplatelet – Plavix variable renamed Antiplatelet. Added additional antiplatelet mechanisms of action. Added inclusion of dipyridamole.
1/1/20	ED Trauma Response – Updated for reporting of the final level of care provided to the patient. Added clarifying examples.
1/1/20	Unplanned Admission to ICU – Clarified reporting of patients who deteriorate in PACU and require ICU admission.
1/1/20	Intubation Status – Clarified inclusion of locations where the patient's first intubation is a tracheostomy.
1/1/20	Antibiotic 1 Type, Antibiotic 2 Type, Antibiotic Date and Time – Added requirement for IV administration. Added requirement for administration within 24 hours of arrival. Requested vendor logic for NTDS reporting.
1/1/20	Antibiotic 2 Type – Clarified intent of "combination therapy" and added two resource reference hyperlinks.
1/1/20	Hypertension – Clarified exclusion of noncompliance, and sole management with diet or exercise.
1/1/20	Venous Thromboembolism Type, Date and Time - Requested vendor logic for NTDS reporting.
1/1/20	Initial ED/Hospital Pupillary Response – Clarified cranial nerve documentation that corresponds to both reactive reporting.
1/1/20	ICD-10 Hospital Procedures – Added CT brain reporting as required.
1/1/20	Trauma Center – Updated membership list with center's new names.
1/1/20	Beta Blocker Treatment – Clarified administration at your center. Provided example.
1/20/20	Pre-Hospital Cardiac Arrest – Removed requirement of healthcare provider provision of care.
4/17/20	Unplanned Visit to the Operating Room – Clarified the meaning of the verbiage "unplanned."
7/1/20	Procedure Start Time – Head CT start time clarified as the time the imaging started. This is located on the time stamp on the digital image. Examples provided.
7/1/20	Initial ED/Hospital GCS – Eye, Verbal, Motor, Total – Clarified provider time should be used in reporting when documented.
7/1/20	Initial ED/Hospital GCS 40 – Eye, Verbal, Motor – Clarified provider time should be used in reporting when documented.
7/1/20	TBI Highest GCS – Total, Motor, Qualifier Pupil Reactivity – Clarified provider time should be used in reporting when documented.
7/1/20	TBI Highest GCS 40 – Motor – Clarified provider time should be used in reporting when documented.
7/1/20	VAP – Clarified based on CDC/NHSN confirmation the need for consecutive ventilator days.