HAWAII TRAUMA DATA STANDARD



TRAUMA REGISTRY DATA DICTIONARY

2026 ADMISSIONS - DRAFT

osure and Reference Statement of Resources: mation within in this data dictionary is based upon the American College of Surgeons (ACS), National Traudards (NTDS), the National Trauma Data Bank (NTDB), and Trauma Quality Improvement Program (TQ els while incorporating the State of Hawaii Department of Health, Emergency Medical Services and ention Systems Branch, specific regulatory and trauma data requirements for trauma center required to partine the State of Hawaii Trauma System.	IP) data d Injury
right © 2025 by the State of Hawaii, Department of Health, Emergency Medical Services and Injury Pre ms Branch (EMSIPSB). All rights reserved.	vention
ins branch (Livish 3b). All rights reserved.	
PSB materials are protected by US copyright, with all rights reserved by the State of Hawaii Department of F l). DOH materials may be cited in academic publications as well as downloaded and printed for individua	l non-
nercial use, where specifically permitted. All other use is prohibited without EMSIPSB express written permit materials may not be distributed, resold, reproduced in whole or in part, or used to create revenue-general by any person or entity other than DOH without the express written permission of DOH. Additionally, rials, including all data and content, cannot be copied, distributed, posted, displayed, published, modificated in or used as part of presentations, publications, third-party applications, platforms, software, or we but prior express written authorization from DOH. This restriction explicitly includes, but is not limited to ration of DOH content into tools leveraging artificial intelligence (AI), machine learning, large language mode	rating DOH ed, or bsites o, the

generative AI technologies and infrastructures. Violation of this policy may result in immediate revocation of access,

termination of user accounts, and legal action as deemed appropriate by DOH.

INTRODUCTION

HAWAII TRAUMA DATA STANDARD(HITDS) BACKGROUND

The State of Hawai'i has long recognized that high-quality trauma care requires accurate, standardized, and timely data. Early efforts to develop a statewide trauma system began in the 1990s, but the foundational statutory authority for trauma data collection was strengthened in the early 2000s when Hawai'i Revised Statute § 321-230 authorized the Department of Health (DOH) to implement and maintain a trauma registry for statewide injury surveillance and system evaluation.

Following the American College of Surgeons (ACS) Trauma System Consultation in 2005, the Legislature directed the DOH to develop a statewide trauma system plan and established the Trauma System Special Fund to support data infrastructure, system development, and trauma center designation. Additional ACS system consultations in 2017 reinforced the need for standardized statewide trauma data, consistent registry definitions, and integrated performance improvement activities across all islands.

To align with national standards, Hawai'i adopted the American College of Surgeons National Trauma Data Standard (NTDS) as the foundation for uniform trauma data collection across the state. The NTDS ensures consistent data definitions, supports participation in ACS programs such as TQIP, Verification Review and Consultation (VRC), and Performance Improvement and Patient Safety (PIPS), and provides the framework for statewide benchmarking and quality improvement.

In 2025, Hawai'i implemented a major system milestone: all designated trauma centers across the state fully transitioned to a single, unified trauma data platform, enabling real-time data exchange, statewide performance dashboards, and standardized NTDS-compliant reporting. This modernization strengthens the state's ability to monitor outcomes, guide resource allocation, support clinical practice guideline development, and coordinate trauma care across all islands.

The Hawai'i Trauma Data Standard represents the integration of statutory authority, ACS recommendations, and modern data interoperability, ensuring that Hawai'i's trauma system has the high-quality data necessary to improve care for injured patients statewide.

HAWAII TRAUMA DATA STANDARD OBJECTIVE

The objective of the Hawai'i Trauma Data Standard (HITDS) is to establish a unified set of clinical data elements that accurately characterize trauma care statewide while ensuring full compliance with the National Trauma Data Standard (NTDS) and the Trauma Quality Improvement Program (TQIP). By standardizing trauma data across all islands, the HITDS enables meaningful inter-island comparisons of trauma care and supports equitable systemwide quality improvement. The HITDS serves as the foundational framework for the State of Hawai'i TQIP Collaborative, the State Trauma Performance Improvement and Patient Safety Plan, and statewide research initiatives that drive continuous improvement in the care of injured patients throughout Hawai'i.

HAWAII TRAUMA DATA STANDARD (HITDS) PATIENT INCLUSION CRITERIA

DESCRIPTION: To ensure consistent data collection and injury surveillance data are collected across the State of Hawaii in compliance with HRS §§321-22.5, 321-230, 321-23, 321-28, 321-29, 321-37, 321-311, 321-314, 321-341, 321-471, 321-472 and using the following criteria for a trauma patient. **A trauma patient is defined as a patient sustaining a traumatic injury within 30 days of initial hospital encounter and meeting the following criteria:**

<u>All Patients</u> who receive a trauma activation (full or modified, including downgrades) no matter the International Classification of Diseases, Tenth Revisions (ICD-10-CM);
OR

<u>Patients with at least ONE</u> 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-T34 (burns, corrosion, and frostbite injuries)
- T70 (effects of air pressure and water pressure injuries)
- 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-T34, T70, and T79.A1-T79.A9):

- Death resulting from the traumatic injury (independent of hospital admission or hospital transfer status);
- Patients transferred from one acute care hospital* to another acute care hospital;

OR

Patients transferred/discharged to hospice (e.g., hospice facility, hospice unit, home hospice);

OR

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

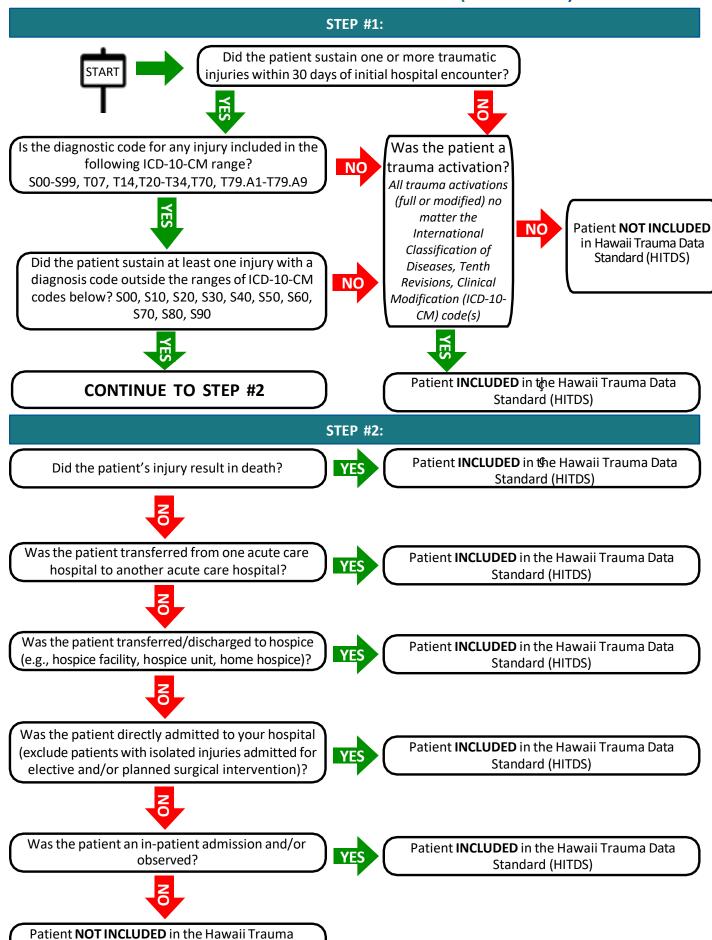
OR

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

*Include patient injuries sustained at facility after initial ED/hospital arrival and before hospital discharge, and all data associated with that injury event (e.g. Patient falls and fractures hip in the emergency department when visiting for COVID symptoms.)

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

HITDS PATIENT INCLUSION CRITERIA (ALGORITHM)



Data Standard (HITDS)

COMMON NULL VALUES

DESCRIPTION

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

ELEMENT VALUES

Forward Slash "/" - means Not Applicable (NA)

Question Mark "?" – means Not Known/Not Recorded (NK/NR)

"Select" - means a black value for a drop-down list

Blank Field – means no information has been entered and is reported within Insights as "N\A"

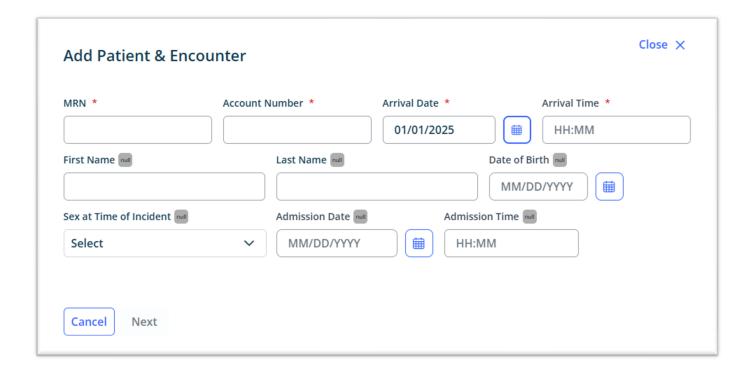
REFERENCES TO OTHER DATADASETS

- Compare with NHTSA NEMSIS
- Compare with ACS NTDS 2026

DATA ELEMENT LEGEND

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

ADD PATIENT & ENCOUNTER INFORMATION



PATIENTS MEDICAL RECORD NUMBER / "MRN"

ELEMENT INTENT

The patients medical record number (MRN) assigned by the hospital for linking data.

DESCRIPTION

The patient's full medical record number (MRN) for the injury encounter.

ELEMENT VALUES

• Relevant hospital electronic health record (EHR) value for data element

ADDITIONAL INFORMATION

None

DATA SOURCE HIERARCHY GUIDE

- Face Sheet
- Billing Sheet
- Admission Form
- Emergency Medical Services Record

Rule ID	Level	Message
HI-0002	2	Element cannot be blank
HI-0040	1	Single Entry Max exceeded

PATIENTS ACCOUNT NUMBER "ACCOUNT NUMBER"

ELEMENT INTENT

The patients unique per-encounter account number assigned by the hospital EHR for linking data .

DESCRIPTION

The patient's full account number for the injury encounter.

ELEMENT VALUES

Relevant hospital electronic health record (EHR) value for data element

ADDITIONAL INFORMATION

None

DATA SOURCE HIERARCHY GUIDE

- Face Sheet
- Billing Sheet
- Admission Form
- Emergency Medical Services Record

Rule ID	Level	Message
HI-0102	2	Element cannot be blank
HI-0140	1	Single Entry Max exceeded

PATIENTS HOSPITAL ARRIVAL DATE "ARRIVAL DATE"

ELEMENT INTENT

To analyze the timeline of the care event and the timeliness of interventions. To calculate metrics such as hospital length of stay, provider response times, and medical intervention start times.

DESCRIPTION

The patient's hospital arrival date to the hospital in MM/DD/YYYY format.

ELEMENT VALUES

- MM/DD/YYYY
- The patient's hospital arrival date is not always the same as the patient's hospital admission date (e.g.
 A patient may arrive to the front desk of the hospital or to a hospital based clinic, during such arrival the
 patient has an incident which results in an injury, the patient would have a different patient hospital
 arrival date, from the patient's hospital admission date and patient's emergency department arrival
 date.)
- The patient's hospital arrival date, patient's emergency department arrival date, activation date, and patient's hospital admission date may all be the same date in some cases, not all.
- If the patient was directly admitted to the hospital, report the patient hospital arrival date and the patient hospital admitted date as the same when applicable.

ADDITIONAL INFORMATION

- The date cannot be in the future
- The date can be in the past

DATA SOURCE HIERARCHY GUIDE

- Face Sheet
- Billing Sheet
- Admission Form
- Emergency Medical Services Record
- EMS Run Sheet

Rule ID	Level	Message
HI-0202	2	Element cannot be blank
HI-0240	1	Single Entry Max exceeded
HI-0250	1	Element cannot be later than record add date
HI-0211	3	Hospital Arrival Date is earlier than Date of Birth
HI-0213	3	Hospital Arrival Date occurs more than 30 days after Injury Incident Date
HI-0201	3	Patients Hospital Arrival Date and Patients Hospital Arrival Time are the same as Patients Hospital Admission Date and Patients Hospital Admission Time however patient is not listed as a Direct Admission
HI-0202	1	Patients Hospital Arrival Date and Time, Emergency Depart Arrival Date and Time, and Hospital Admission Date and Time should not be the same.

PATIENTS ARRIVAL TIME "ARRIVAL TIME"

ELEMENT INTENT

To analyze the timeline of the care event and the timeliness of interventions.

DESCRIPTION

The patient's arrival time to the hospital in military time HHMM.

ELEMENT VALUES

HHMM

ADDITIONAL INFORMATION

- The time cannot be in the future.
- Reported as HHMM military time.
- The patient's hospital arrival time is not always the same as the patient's hospital admission time (e.g.
 A patient may arrive to the front desk of the hospital or to a hospital based clinic, during such arrival the
 patient has an incident which results in an injury or trauma team activation, the patient would have a
 different patient hospital arrival time, from the patient's hospital admission time and patient's
 emergency department arrival time.)
- The patient's hospital arrival time, patient's emergency department arrival time, and activation time, may all be the same time in some cases.
- The patient's hospital admission time should never be the same as the emergency department arrival time.

DATA SOURCE HIERARCHY GUIDE

- Face Sheet
- Billing Sheet
- Admission Form
- Emergency Medical Services Record
- EMS Run Sheet

1.00000			
Rule ID	Level	Message	
HI-0302	2	Element cannot be blank	
HI-0340	1	Single Entry Max exceeded	
HI-0351	1	Element cannot be later than record add time	
HI-0301	3	Patients Hospital Arrival Date and Patients Hospital Arrival Time are the same as Patients Hospital Admission Date and Patients Hospital Admission Time however patient is not listed as a Direct Admission	
HI-0302	1	Patients Hospital Arrival Date and Time, Emergency Depart Arrival Date and Time, and Hospital Admission Date and Time should not be the same.	

PATIENT'S FIRST NAME / "FIRST NAME"

ELEMENT INTENT

To identify the specific patient for analyses or for linkage with other DOH and DOH EMISPB data sources.

DESCRIPTION

The patient's full first name.

ELEMENT VALUES

Relevant value for data element

ADDITIONAL INFORMATION

• Should not be entered in all capital letters

DATA SOURCE HIERARCHY GUIDE

- State of Hawaii ID
- Face Sheet
- Billing Sheet
- Admission Form
- Emergency Medical Services Record

Rule ID	Level	Message
HI-0402	2	Element cannot be blank
HI-0440	1	Single Entry Max exceeded

PATIENT'S LAST NAME / "LAST NAME"

ELEMENT INTENT

To identify the specific patient for analyses or for linkage with other DOH and DOH EMISPB data sources.

DESCRIPTION

The patient's full last name.

ELEMENT VALUES

Relevant value for data element

ADDITIONAL INFORMATION

• Should not be entered in all capital letters

DATA SOURCE HIERARCHY GUIDE

- State of Hawaii ID
- Face Sheet
- Billing Sheet
- Admission Form
- Emergency Medical Services Record

Rule ID	Level	Message
HI-0502	2	Element cannot be blank
HI-0540	1	Single Entry Max exceeded

DATE OF BIRTH

ELEMENT INTENT

To calculate the patient's age at the time of the injury event, which is used for reporting and as a predictor of adverse outcomes.

DESCRIPTION

The patient's date of birth.

ELEMENT VALUES

Relevant value for data element

ADDITIONAL INFORMATION

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

DATA SOURCE HIERARCHY GUIDE

- Face Sheet
- Billing Sheet
- Admission Form
- Triage/Trauma Flow Sheet
- EMS Run Report

- 1000				
Rule ID	Level	Messager		
HI-0601	1	Date is not valid		
HI-0602	1	Date out of range		
HI-0603	2	Element cannot be blank		
HI-0612	2	Date of Birth + 120 years must be less than <i>Injury Incident Date</i>		
HI-0613	2	Element cannot be "Not Applicable"		
HI-0650	1	Date cannot be later than registry entry date		
HI-0640	1	Single Entry Max exceeded		
HI-0650	3	If pediatric trauma center and age is >16		

SEX ASSIGNED AT TIME OF INCIDENT

ELEMENT INTENT

To analyze variations in injury patterns and outcomes.

DESCRIPTION

The patient's preferred sex assigned at time of incident.

ELEMENT VALUES

1. Male	2. Female	3. Intersex
4. Ambiguous	5. Undetermined	NK/NR

ADDITIONAL INFORMATION

- The sex the patient is assigned at the time of incident
- The patient's assigned sex at the time of incident is not always the same as the binary or biological sex assigned time of birth
- A patient's preferred sex, when it differs from sex assigned at birth, may also be referred to as sexual identity, preferred sex, or chosen sex.
- Sex, Gender, and Gender Identity are distinct concepts and unique data points: As such they are not interchange able; sex can be defined as a biological classification based on physical characteristics like chromosomes and reproductive organs typically assigned at birth. Sex can also be defined as a patient's internal, deep-seated sense of being male, female, both, or neither which may or may not align with binary or biological. Gender is a social construct of roles and expectations. Gender Identity is an individual patient's internal sense of self and may or may not align with a patient's sex assigned at birth, and is different from gender expression, which is how patient's outwardly present their gender.

DATA SOURCE HIERARCHY GUIDE

- Patient
- EMS Run Report
- Transferring Hospital Electronic Medical Record
- Face Sheet
- Billing Sheet
- Admission Form
- Triage/Trauma Flow Sheet
- History and Physical

Rule ID	Level	Message
HI-0701	1	Value is not a valid menu option
HI-0702	2	Element cannot be blank
HI-0703	2	Element cannot be "Not Applicable"
HI-0740	1	Single Entry Max exceeded

HOSPITAL ADMISSION DATE "ADMISSION DATE"

ELEMENT INTENT

To analyze the timeline of the care event and the timeliness of interventions. To calculate metrics such as hospital length of stay, provider response times, and medical intervention start times.

DESCRIPTION

The date the patient was admitted to the hospital.

ELEMENT VALUES

Relevant value for data element

ADDITIONAL INFORMATION

- MM-DD-YYYY.
- The hospital admission date is not the same as the patient's hospital arrival date or emergency department arrival date.
- Patients who are transferred out from an emergency department to another acute care or trauma center should not have a hospital admission date unless they are bedded in the Emergency Department as an admission pending transport to a higher level of care.
- The patient's hospital admission date is not always the same as the patient's hospital arrival date (e.g. A patient may arrive to the front desk of the hospital or to a hospital based clinic, during which time the patient has an incident which results in an injury or trauma team activation, the patient would have a different patient hospital arrival date, from the patients hospital admission date and patients emergency department arrival date.)
- The patient's hospital admission date, patient's hospital arrival date, patient's emergency department arrival date, and trauma activation date may all be the same date.

DATA SOURCE HIERARCHY GUIDE

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

	ACCOUNTED EDIT CHECKS			
Rule ID Level Message			Message	
	HI-0801	1	Date is not valid	
	HI-0802	1	Date out of range	
	HI-0803	803 2 Element can only be blank when patient is not an admission		
	HI-0805	2	Element cannot be "Not Known/Not Recorded"	
	HI-0811	3	Hospital Admission Date is earlier than Date of Birth	
	HI-0813	3	Hospital Admission Date occurs more than 30 days after Injury Incident Date	
	HI-0816	3	Hospital Admission Date is earlier than Injury Incident Date	
	HI-0850	1	Date cannot be later than entry date	
	HI-0840	1	Single Entry Max exceeded	

HOSPITAL ADMISSION TIME "ADMISSION TIME"

ELEMENT INTENT

To analyze the timeline of the care event and the timeliness of interventions. To calculate metrics such as hospital length of stay, provider response times, and medical intervention start times.

DESCRIPTION

The time the patient was admitted to the hospital.

ELEMENT VALUES

Relevant value for data element

ADDITIONAL INFORMATION

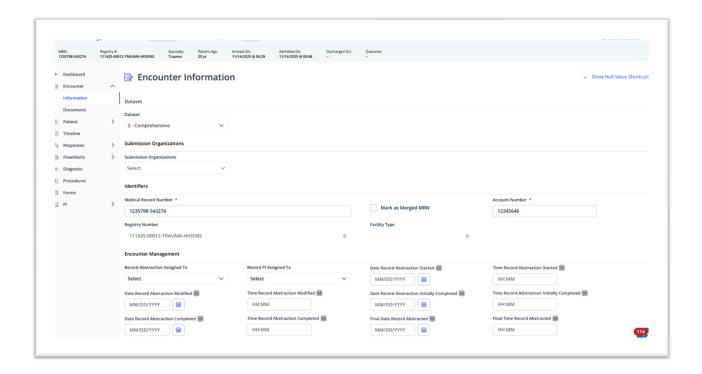
- HHMM military time
- The hospital admission time is not the same as the patient's hospital arrival time or emergency department arrival time.
- Patients who are transferred out from an emergency department to another acute care or trauma center should not have a hospital admission time unless they are bedded in the Emergency Department as an admission pending transport to a higher level of care.
- The patient's hospital admission time is not always the same as the patient's hospital arrival time (e.g. A patient may arrive to the front desk of the hospital or to a hospital based clinic, during which time the patient has an incident which results in an injury or trauma team activation, the patient would have a different patient hospital arrival time, from the patients hospital admission time, trauma activation time, and patients emergency department arrival time.)
- The patient's hospital admission date and time, patient's hospital arrival date and time, may be the same date and time for direct admissions.

DATA SOURCE HIERARCHY GUIDE

- 6. Triage/Trauma Flow Sheet
- 7. ED Record
- 8. Face Sheet
- 9. Billing Sheet
- 10. Discharge Summary

A0000IATED EDIT OTTEORO			
Rule ID	Level	Message	
HI-0901	1	Time is not valid	
HI-0902	1	Time out of range	
HI-0903	2	Element can only be blank when patient is not an admission	
HI-0905	2	Element cannot be "Not Known/Not Recorded"	
HI-0911	3	Hospital Admission Date and Time are earlier than Date of Birth	
HI-0913	3	Hospital Admission Date and Time occurs more than 30 days after Injury Incident Date and Time	
HI-0916	3	Hospital Admission Date and Time are earlier than Injury Incident Date and Time	
HI-0950	1	Time cannot be later than entry date and time	
HI-0940	1	Single Entry Max exceeded	

ENCOUNTER INFORMATION and DOCUMENTS



DATASET

ELEMENT INTENT

To all for quick data entry of hospital specific data elements for workflow process.

DESCRIPTION

Documentation of the type of dataset being used for data entry of the trauma registry encounter.

ELEMENT VALUES

1 - Core	2 - Comprehensive
1 0010	2 Comprehensive

ADDITIONAL INFORMATION

- Core value and use is optional by trauma centers based on workflow processes.
- Comprehensive is required for all trauma registry encounters that meet 2026 Hawaii, 2026 TQIP, or 2026 NTDS submission organization inclusion criteria

DATA SOURCE HIERARCHY GUIDE

- State of Hawaii 2026 Trauma Registry Inclusion Criteria
- ACS 2026 NTDS / TQIP Inclusion Criteria

Rule ID	Level	Message
HI-1001	1	Value is not a valid menu option
HI-1002	2	Element cannot be 1 Core when encounter meets 2026 – Hawaii, 2026 – TQIP or 2026 – NTDB submission inclusion criteria

SUBMISSION ORGANIZATIONS

ELEMENT INTENT

To identify which submission organizations inclusion criteria the specific registry encounter should be included within for validation and submission.

DESCRIPTION

Select the submission organizations for which the registry encounter should be submitted.

ELEMENT VALUES

2026 - Hawaii	2026 - TQIP	2026 - NTDS
---------------	-------------	-------------

ADDITIONAL INFORMATION

- Multiple selections are acceptable for the submission organizations section
- This field will drive real time record data validation for each submission organization
- The 2026 Hawaii submission organization should be selected for all records that meet 2026 Hawaii Trauma Registry inclusion criteria as listed on pages 2 and 3 of this data dictionary
- The 2026 TQIP submission organization should be selected for all records that meeting 2026 National Trauma Data Standard (NTDS) / Trauma Quality Improvement Program (TQIP) inclusion criteria as listed within the American College of Surgeons (ACS) 2026 National Trauma Data Standard Data Dictionary
- The 2026 National Trauma Data Standard should only be selected by centers who are not part of the ACS TQIP program.
- A blank value is acceptable for patients who meet Hospital / Trauma Center specific inclusion criteria but do not meet the State of Hawaii or NTDS / TQIP Inclusion Criteria (e.g. A trauma center wants to include all trauma readmission within 30 days of discharge into the trauma registry for performance improvement and patient safety, these would have a blank submission organization.)

DATA SOURCE HIERARCHY GUIDE

- State of Hawaii 2026 Trauma Registry Inclusion Criteria
- ACS 2026 NTDS / TQIP Inclusion Criteria

Rule ID	Level	Message
HI-1101	1	Value is not a valid menu option
HI-1102	2	Element cannot be blank when encounter has a trauma activation reported
HI-1103	3	Element is blank, validate encounter only meets hospital specific inclusion criteria
HI-1140	1	Element can not be blank when encounter meets State of Hawaii inclusion criteria based on reported ICD-10-CM codes within the diagnosis section.
HI-1150	1	Element can not be blank when encounter meets NTDS / TQIP inclusion criteria based on reported ICD-10-CM codes within the diagnosis section.
HI-1141	1	Element must have 2026 Hawaii selected as record meets Hawaii inclusion criteria please validate trauma activation and diagnosis sections
HI-1151	1	Element must have 2026 TQIP selected as record meets 2026 TQIP inclusion criteria based on hospital arrival date, injury date, and diagnosis sections