

Trauma Center Need

Date

May 27, 2025 (Updated for v3.5.0.230317CP4 and ACS 2021 National Guidelines for the Field Triage of Injured Patients)

August 26, 2021

Definition

The patient is injured and meets the criteria for transport to a trauma center in the guidelines for field triage of injured patients.

Criteria Description

Patient care reports where:

- trauma triage criteria are met.

Pseudocode

Patient care reports where:

eInjury.03 - Trauma Triage Criteria (High Risk for Serious Injury)

- Any value

OR

eInjury.04 - Trauma Triage Criteria (Moderate Risk for Serious Injury)

- Any value

XPath Code

```
/EMSDataset/Header/PatientCareReport  
[  
  eInjury/eInjury.03[. != '']  
  or  
  eInjury/eInjury.04[. != '']  
]
```

SAS Code

```
proc sql;
  create table TraumaCenterNeedKey as
  select distinct pcrKey from
  (
    select pcrKey from nemsis.factPcrTraumaCriteria where eInjury_03 not in
      ('', '7701001', '7701003', '8801015')
    union
    select pcrKey from nemsis.factPcrInjuryRiskFactor where eInjury_04 not in
      ('', '7701001', '7701003', '8801015')
  )
  ;
quit;
```

Discussion

In 2023, NEMSIS v3.5.0.230317CP4 implemented the ACS 2021 *National Guidelines for the Field Triage of Injured Patients* by updating some labels adding values to eInjury.03 Trauma Triage Criteria (High Risk for Serious Injury) and eInjury.04 Trauma Triage Criteria (Moderate Risk for Serious Injury). Values from the CDC 2011 *Guidelines for field triage of injured patients* that were discontinued were marked as deprecated but not removed from the NEMSIS standard. Both the new and deprecated values are selected by this case definition.

The following items in Step 4 of the CDC 2011 trauma triage criteria are not available as choices in eInjury.04. They could be obtained from other NEMSIS data elements (for example, ePatient.15 and 16 for Age and Age Units), but it would not be possible to infer whether the attribute was in fact relevant to the decision to triage the patient to a trauma center. For example, if the patient had a minor injury but was over age 55, EMS may have considered the patient's age to be irrelevant to the triage decision because the injury was so minor.

- Age >55 years
- Falls in older adults (e.g., ground-level falls)
- Pediatric trauma transport

This same logic applies to other elements that could have been used in place of values that are available in eInjury.03 and 04 but may not have been recorded on a PCR. For example, eVitals.06 SBP (Systolic Blood Pressure) could be used to determine if the patient had an SBP less than 90, even if EMS did not document "Systolic Blood Pressure <90 mmHg" in eVitals.03; however, a low SBP may have been for other medical reasons and not relevant to the trauma triage decision. If EMS documents the low SBP in eInjury.03, we can assume it was relevant to the trauma triage decision.

References

Guidelines for field triage of injured patients — United States, 2011. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC).
[cdc.gov/mmwr/preview/mmwrhtml/rr6101a1.htm](https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6101a1.htm).

National Guidelines for the Field Triage of Injured Patients. (2021). American College of Surgeons (ACS).
[facs.org/quality-programs/trauma/systems/field-triage-guidelines/](https://www.facs.org/quality-programs/trauma/systems/field-triage-guidelines/).