Implementation Guide for Emergency Medical Services Leaders

2011 Guidelines for Field Triage of Injured Patients

Fact Sheet

Accurate field triage is an essential component of providing optimal injury care to trauma patients and the decision to transport a patient to a trauma center or a nontrauma center can have an impact on that patient's outcome. The National Study on the Costs and Outcomes of Trauma (NSCOT) identified a 25% reduction in mortality for severely injured adult patients who received care at a Level I trauma center rather than at a nontrauma center. The 2011 Guidelines for Field Triage of Injured Patients will assist you in ensuring that injured patients within your system are transported to the right place, in the right time.

The 2011 Field Triage Decision Scheme includes four steps:

Step 1 **Physiologic criteria:** The EMS provider determines whether the patient has physiologic changes that mandate preferential transport to the highest level of care within the defined trauma system.

Step 2 **Anatomic criteria:** If the patient is physiologically stable, the provider determines whether the patient has anatomic injuries that mandate preferential transport to the highest level of care within the defined trauma system.

Step 3 **Mechanism of injury criteria:** If the patient does not meet physiologic or anatomic criteria for transport to the highest level of care, the provider then considers whether the mechanism of injury suggests a high risk for serious injury that warrants transfer to a trauma center, which, depending upon the defined trauma system, need not be the highest level trauma center.

Step 4 **Special patient or system considerations**: If the patient does not meet any of the criteria in the first three steps, the provider determines whether any special patient or system circumstances exist that might place the patient at a higher risk for severe injury or indicate the need for specialized care.

Training the 2011 Guidelines

Preparing what to say when training your EMS providers can take a lot of time. To help make your preparation as easy as possible, we have created a set of PowerPoint slides and sample talking points.

Find the plan to save lives and money, at **www.cdc.gov/Fieldtriage**

Modifications to the 2011 Guidelines for the Field Triage of Injured Patients

Below is a brief summary of changes, which include additions, modifications, and deletions.

Step 1. Physiologic Criteria

MODIFIED:

Glasgow Coma Scale (GCS) from <14 to GCS ≤ 13

This was clarified because experience with the 2006 Guidelines indicates that many readers interpreted this criterion as recommending that patients with a GCS of 14 or less should be taken to trauma centers.

ADDED:

Need for ventilatory support

After reviewing the literature, the Panel added "or need for ventilatory support" to the respiratory rate criterion, recognizing that adults and children requiring ventilatory support represent a very high-risk group.

Step 2. Anatomic Criteria

MODIFIED:

Crushed, degloved, mangled, or pulseless extremity

"Pulseless" was added to the criteria for crushed, degloved, or mangled extremity since vascular injuries of the extremity may lead to significant morbidity and mortality.

Chest wall instability or deformity (e.g., flail chest)

"Flail chest" was changed to "chest wall instability or deformity (e.g., flail chest)" because this broader terminology ensures that additional blunt trauma to the chest will be identified.

Penetrating injuries to head, neck, torso and extremities proximal to elbow or knee

The wording of this criterion was modified from "elbow and knee" to "elbow or knee" to recognize that these types of injuries generally occur separately and that each can represent a severe injury.

Amputation proximal to wrist or ankle

Changed "amputation proximal to wrist and ankle" to "amputation proximal to wrist or ankle" recognizing that these types of injuries most commonly occur separately and that each can represent a severe injury.

Step 3. Mechanism-of-Injury Criteria

MODIFIED:

High-risk automobile crash

"Including roof" was added to the intrusion category since this is an important predictor of trauma center need.

Step 4. Special Patient or System Considerations

MODIFIED:

Older adults

In order to strengthen this criterion, and address the problem of undertriage in older adults, the Panel added "SBP <110 may represent shock after age 65 years" and "low impact mechanisms (e.g., ground level falls) may result in severe injury" to older adults.

Anticoagulation and bleeding disorders

In order to highlight the potential for rapid deterioration in anticoagulated patients with head injuries, the Panel modified this criterion to highlight the fact that anticoagulated patients with head injuries need to be evaluated at a hospital capable of rapid evaluation and imaging of these patients and initiation of reversal of anticoagulation if necessary.

REMOVED:

End-stage renal disease requiring dialysis

This criterion was removed because there is no research demonstrating the value of dialysis as a triage criterion for identifying patients with serious injury.

Time sensitive extremity injury

With the addition of "pulseless" to Step Two criteria, this criterion was redundant.

Decision Scheme Layout

MODIFIED:

Transition boxes

The transition boxes were modified in order to simplify the appearance of the Guidelines, clarify the intent of the Guidelines, and simplify communication of action steps in the Guidelines across a variety of providers and systems.