

A Consensus-Based Criterion Standard for the Requirement of a Trauma Team

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Abstract

Background Trauma team activation (TTA) represents a considerable expenditure of trauma centre resources. It is mainly triggered by field triage criteria. The overall quality of the criteria may be evaluated based on the rate of over- and undertriage. However, there is no gold standard that defines which adult patients truly require a trauma team. The objective of this study was to develop consensus-based criteria defining the necessity for a trauma team.

Methods A consensus group was formed by trauma specialists experienced in emergency and trauma care with a specific interest in field triage and having previously participated in guideline development. A literature search was conducted to identify criteria that have already been used or suggested. The initial list of criteria was discussed in two Delphi round and two consensus conferences. The entire process of discussion and voting was highly standardized and extensively documented, resulting in a final list of criteria.

Results Initially 95 criteria were identified. This was subsequently reduced to 20 final criteria to appropriately indicate the requirement for attendance of a trauma team. The criteria address aspects related to injury severity, admission to an intensive care unit, death within 24 h, need for specified invasive procedures, need for surgical and/or interventional radiological procedures, and abnormal vital signs within a defined time period.

Conclusions The selected criteria may be applied as a tool for research and quality control concerning TTA. However, future studies are necessary to further evaluate for possible redundancy in criteria that may allow for further reduction in criteria.

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