Recommendations for uniform reporting of data following major trauma—the Utstein style. An International Trauma Anaesthesia and Critical Care Society (ITACCS) initiative

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Consensus statement

Basic and advanced care of trauma patients has always been an important aspect of prehospital and immediate in-hospital emergency medicine, involving a broad spectrum of disciplines, specialties and skills. This complex background has, however, hindered the development of a uniform pattern of criteria and definitions with the consequence that differing systems or protocols of care cannot be readily evaluated or compared with acceptable validity.

Guided by a previous consensus on ‘Uniform reporting of data following cardiac arrest—the Utstein style’;2 an international working group of The International Trauma Anaesthetic and Critical Care Society (ITACCS) has drafted a similar document on major trauma.

The reporting system for out- and in-hospital care is based on the following considerations:

- It should permit the compilation of data and statistics on major trauma care, facilitating and validating the independent or comparative audit of performance and quality of care.
- It should permit intra- and intersystem evaluation to improve the quality of delivered care and identification of the relative benefits of different systems and innovative initiatives.
- It should facilitate studies setting out to improve the epidemiological understanding of trauma.

The document includes a glossary of terms used in the pre-hospital and early hospital phases, including definitions, time points and intervals, and uses a scheme for illustrating the different process time clocks (patient, dispatch centre, ambulance and hospital).

Data should be reported as core data (i.e. always obtained) and optional data (obtained under specific circumstances). The document highlights the following:

- The development of structured data using object-oriented modelling.
- Terms and definitions for describing different types of trauma.
- The circumstances of the injury, such as: its cause; its severity (pre-hospital basic abbreviated injury score); its mechanism; its demographics.
- System factors, subdivided into:
  (i) Pre-hospital, inter-hospital transfer and trauma centre/receiving factors: the trauma team, its membership and their respective experience; the facilities available during the 24-h period; arrival data at different transit/treatment locations.
  (ii) Patient factors defining physical characteristics such as age, gender, dimensions and the co-morbidity that may be most important for survival. Co-morbidity is graded ordinally from 1 = healthy to 4 = systemic illness, a constant threat to life.
  (iii) Outcome, i.e. mortality (time, date, location of death, place, confirmation, cause of death and adverse factors) and morbidity, defined as all non-fatal problems leading from impairment to disability, reversible and irreversible.

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(iv) Ethical issues, placing special emphasis on patient consent to trauma research, on medical futility, DNAR and DNR directives, deliberate self-inflicted harm, care of relatives and advanced directives.

(v) Documentation underlining the need for data collection to be planned, including details such as manual, automatic and electronic data collection, entry of data, and data collection forms.

The document provides the basis for uniform documentation of data after trauma from the scene to the hospital. It may serve as a tool for both quality control (core data) and/or scientific evaluation (core and optional data) and allows intrasystem evaluation as well as intersystem comparison.

**References**
