

Measuring the Key Objectives of the Major Trauma Service The Key Performance Indicators

Dr Crawford McGuffie
Vice Chairman
STAG

Redesign of major trauma services in Scotland

- In 2013, NPF outlined possible ways to enhance existing major trauma services for all ages in Scotland.
- Patients with major trauma have a better outcome if they are quickly taken to a hospital where all the specialist services they will require are available, often referred to as definitive care.
- Introduction of MTCs, where patients with suspected major trauma will be taken to either directly or after initial assessment and treatment in a TU or LEH.
- Work to achieve this objective is well underway.

How will it work?

- The system will rely on the right patients being taken to the right facility and the Scottish Ambulance Service, Major Trauma Centres, Trauma Units and Local Emergency Hospitals will play a key role in the whole service being effective for all trauma patients.
- Patients will require the right care at the right time.

STAGs role

- National Key Performance Indicators (KPIs) should be agreed and measured to help monitor the success of the major trauma service and drive improvements.
- 3 stages – pre-hospital, early hospital and ongoing hospital care.

Pre-hospital

- Pre hospital care encompasses the response from the call alerting the emergency services, to on-scene care, triage and primary transfer.
- Scotland's geography makes the provision of equitable trauma care inherently more challenging. The KPIs take cognisance of this fact, and are, in no small part, aimed at ensuring the correct functioning of the network, prior to patients' arrival at a hospital.

1.1 Pre hospital Triage

Patients who have suffered significant trauma are assessed by the SAS using the SAS Trauma Triage Tool.

1.2 Pre alert

Patients who are triaged as requiring Major Trauma Centre (MTC) care are notified to the receiving hospital (pre alert).

1.3 Diversion to lower level of care

Patients who are triaged as requiring MTC care are taken directly to a MTC if they are within 45 minutes travel time.

Early hospital Care

Early hospital care includes initial reception of the patient in the ED and inter-hospital transfer (if required), through to the patient being discharged to a rehabilitation service or home.

2.1.1 Consultant led reception for patients triaged and taken to MTC care

Patients who are triaged and taken to MTC care are received by a consultant led trauma team.

Paediatric Emergency Medicine Consultant: Same definition as adult from 8.00-23.59. Seen by a consultant within 30 minutes from 00.00 to 7.59.

2.1.2 Consultant review for patients triaged to MTC care and taken to a Trauma Unit (TU)

Patients who are triaged to MTC care and are taken to a TU should be seen by a consultant within 60 minutes of arrival.

2.2 Time to Major Trauma Centre care

Major trauma patients who are not taken directly to a MTC and are later transferred to a MTC are transferred within 24 hours.

2.3 Time to secondary transfer

Time to secondary transfer to a MTC for patients who have suffered major trauma is minimised to \leq four hours from time of call to SAS to departure.

Paediatrics

Referral to mobilisation of transfer team is <60 minutes.

Referral to team arrival with patient <3 hours (road/mainland responses).

Referral to team arrival with patient <4 hours (island/air responses).

2.4.1 Time to CT head

Patients with a severe head injury have a CT scan within 60 minutes of arrival.

2.4.2 Time to CT head written report

Patients with a severe head injury have a CT scan written report sent within one hour.

2.5 Major Trauma Centre care for patients with a severe head injury

Patients who have suffered a severe head injury are managed in a MTC.

2.6 Management of severe open long bone fractures

Patients with a severe open long bone fracture will receive IV antibiotics within three hours of arrival.

2.7 Administration of Tranexamic Acid in patients with severe haemorrhage

Trauma patients with severe haemorrhage start the administration of tranexamic acid within three hours of first contact with emergency services.

2.8 Specialist care

Patients who have suffered major trauma and are taken to a MTC, are admitted under the care of a Major Trauma Service.

Ongoing hospital care

Ongoing hospital care includes rehabilitation of the patient within a hospital setting and/or within the community, and Patient Reported Outcomes Measure (PROMS) to assess the patients functional outcome and quality of life following major trauma.

3.1.1 Assessment of rehabilitation needs

Trauma patients admitted to the Trauma ward of a MTC have a rehabilitation plan written.

3.1.2 Time to assessment of rehabilitation needs

Trauma patients admitted to the Trauma ward of a MTC have their rehabilitation plan written within three days of admission.

3.2 Functional outcome

Patients who have survived major trauma have their functional outcomes assessed at specified timelines.

These KPIs will help to monitor the performance of the network as a whole, and, over time, drive its ongoing development and improvement.

The KPIs themselves will be reviewed and updated regularly, to ensure that they are fit for purpose, and capture the necessary information.