## MAJOR TRAUMA MTC Quality Indicators

Indicator Name	Indicator Code	Indicator Description
Patient Experience - Information about the service for patients and families/carers	D15/S/a - 19 - 201B	The patient and/or their family/carers should be provided with written information specific to the MTC about the facilities, care and rehabilitation as specified in the NICE guideline – Major Trauma (NG39).
Patient Experience - Patients have a key worker	D15/S/a - 19 - 202B	Each patient should have an identified key worker to be a single point of contact for them, their carer(s) or family doctor. The key worker should be a health care professional. The name of the patient's key worker should be recorded in the patient's notes Notes - The key worker may change throughout the pathway
Patient Experience - Collecting and evaluating patient experience	D15/S/a 19 - 203B	The MTC has a mechanism in place for collecting and evaluating patient experience This should include participation in the TARN PROMS and PREMS.
Reception and resuscitation - Trauma team leaders	D15/S/a - 19-001B	There must be a medical consultant trauma team leader on site 24/7 to lead the trauma team and available in 5 minutes of arrival of the patient. The trauma team leader should have an agreed list of responsibilities and have attended trauma team leader training.

Reception and resuscitation - Emergency Trauma Nurses/AHPs	D15/S/a - 19-002B	The nursing/AHP trauma team(s) should be overseen by an Emergency Department nurse/AHP of AFC band 7 or above 24/7. There should be a nurse/AHP available for major trauma 24/7 who has successfully attained the adult competency and educational standard of level 2 (as described in the NMTNG guidance).
Reception and resuscitation - Competency based training programme	D15/S/a - 19-003B	There must be a competency based training programme for all staff involved in the care of major trauma patients and which includes: - all nursing and AHP staff caring for major trauma patients should attain level 1 competency and educational standard as specified in the NMTNG guidance 2017 - all adult critical care nurses caring for major trauma patients should complete the additional trauma competencies (NMTNG & CC3N, 2017) as part of the specialist step competencies (CC3N, 2018) relevant to the case mix of the unit.
		There should be a ward-based nurse involved in the care of adult trauma patients 24/7 who has attained the competency standard of level 1 (as described in the NMTNG guidance). Notes - An individual may fulfil more than one of the roles on the list, compatible with their discipline and status. There should be written pathways for the safe management of patients in place for any specialties that do not meet the requirement.

Reception and resuscitation - CT and MRI scanning and reporting	D15/S/a - 19-004B	There should be a CT scanner in the located in the emergency department and CT and MRI scanning available 24/7. Reporting should include: for CT scanning - a 'hot' report documented within 5 minutes for both CT and MRI - a detailed radiological report documented within 1 hour from the start of the scan; - a report by a consultant radiologist within 24 hours.
Reception and resuscitation - Provision for heamorrhage control	D15/S/a - 19-005B	Patients requiring acute intervention for haemorrhage control should be in an operating room or intervention suite within 60 minutes.
Reception and resuscitation- Access to Consultant Specialists	D15/S/a - 19-006B	The following staff must be available on site 24/7: a general surgeon ST3 or above a trauma and orthopaedic surgeon ST3 or above an anaesthetist ST3 or above a neurosurgeon ST2 or above.

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Reception and	D15/S/a -	The following consultants should be available to attend
resuscitation - Access	19-007B	an emergency case within 30 minutes:
to Consultant		- emergency department physicians
Specialists		- a general surgeon
		- an anaesthetist
		- an intensivist
		<ul> <li>- a trauma and orthopaedic surgery</li> </ul>
		- a neurosurgeon
		- an interventional radiologist
		- a radiologist
		- a plastic surgeon
		- a cardiothoracic surgeon
		- a vascular surgeon
		- a urology surgeon
		- a maxillofacial surgeon
		- an ENT surgeon
		- an opthalmic surgeon
		Notes - An individual may fulfil more than one of the
		roles on the list, compatible with their discipline and
		status.
		There should be written pathways for the safe
		management of patients in place for any specialities that
		do not meet the requirement.
Decention and		There should be exception and facilities
Reception and	D15/S/a -	There should be specialist surgeons and facilities
resuscitation -	19-008B	(theatre/equipment) available to provide stabilisation of
Surgeons and Facilities		pelvic ring injuries within 24 hours.
for Pelvic Ring Injuries		
Reception and	D15/S/a -	There should be a 7/7 specialist acute pain service for
resuscitation -	19-009B	major trauma patients.
Specialist Acute Pain	15 0050	The MTC should have pain management pathways for:
Service		
JEIVILE		- patients with severe chest injury and rib fractures;
		- early access to epidural pain management (within 6
		hours).
		The MTC should audit the pain management of major
		trauma patients including patients with severe chest
		(AIS3+)' who were not ventilated and who received
		epidural analgesia.

Definitive Care - Major trauma lead clinician	D15/S/a - 19-010B	There should be a lead clinician for the Major Trauma Centre (MTC) who should be a consultant with managerial responsibility for the service and a minimum of 2PAs specified in their job plan.
Definitive Care - Major Trauma Service	D15/S/a - 19-011B	There should be a major trauma service led by consultants which takes responsibility for the holistic care and co-ordination of management of major trauma patients on a daily basis. The service should have a single daily multi-specialty meeting for the presentation and discussion of all new major trauma patients following admission and include that all major trauma patients have a formal tertiary survey completed to identify previously unrecognised injuries. The meeting should include: - relevant specialist consultants - major trauma co-ordinator - major trauma rehabilitation co-ordinator
Definitive Care - Major trauma co-ordinator service	D15/S/a - 19-012B	There should be a major trauma co-ordinator service available 7 days a week for the co-ordination of care of major trauma patients. The co-ordinator service should be provided by nurse or allied health professionals of band 7 or above. Notes - This post can be shared with the rehabilitation co- ordinator.
Definitive Care - Dedicated major trauma ward/clinical area	D15/S/a - 19-013B	There should be a separate major trauma ward / clinical area where major trauma patients are managed as a cohort.

Definitive Care - Facilities and specialists for the management of neurosurgical trauma	D15/S/a - 19-014B	The MTC should have the following neurosurgical provision: i) on-site neuroradiology; ii) on site neuro critical care; iii) a neurosurgical consultant available for advice to the trauma network 24/7; iv) a senior neurosurgical trainee of ST4 or above; v) all neurosurgical patient referrals should be discussed with a consultant; vi) all decisions to perform emergency neurosurgery for trauma are discussed with a consultant; vii) facilities available to allow neurosurgical intervention within 1 hour of arrival at the MTC. Notes - Referral to neurosurgery can be by telephone consultation or email
Definitive Care - Network protocol for management of spinal injuries	D15/S/a- 19- 015B	The MTC should agree the network protocol for protecting and assessing the whole spine in adults and children with major trauma.
Definitive Care - Orthoplastic surgery service	D15/S/a - 19-016B	The MTC has an orthoplastic service that meets the requirements of the NICE Complex Fracture Guidelines 2016 . The service should provide: - combined service of orthopaedic and plastic surgery consultants - consultant orthopaedic and consultant plastic surgeons must be available within 30 minutes for emergency joint orthoplastic care. - combined operating lists with consultants from both specialities to meet the standards for timely management of open fractures. - scheduled, combined review clinics for severe open fractures - specialist nursing teams able to care for both fractures and flaps In addition, an effective orthoplastic service will also: - submit data on each patient to the national trauma database (TARN) - hold regular clinical audit meetings with both orthopaedic and plastic surgeons present
Definitive Care - Network agreed pathways for specialist services	D15/S/a - 19-017B	The MTC has agreed and has in place the network agreed pathways

Definitive Care - Agreed clinical guidelines in place	D15/S/a - 19-018B	There are agreed clinical guidelines in place for the management of major trauma patients.
Definitive Care - Network patient transfer and repatriation policy	D15/S/a - 19-019B	The MTC should agree the network transfer and repatriation policy is in place
Definitive Care - Access to psychiatric advice	D15/S/a - 19-020B	There should be 24/7 access to liaison psychiatric assessment services.
Definitive Care - MTC trauma prevention programme	D15/S/a - 19-021B	The MTC must be involved in at least one local or regional trauma prevention programme
Definitive Care - Clinical trials	D15/S/a - 19-022B	The MTC should be recruiting patients to one or more NIHR injuries and emergency portfolio trials
Rehabilitation - Clinical lead for acute trauma rehabilitation services	D15/S/a - 19-023B	There should be a named lead clinician for acute trauma rehabilitation services who is a consultant in rehabilitation medicine, and have an agreed list of responsibilities and ta minimum of 1 PA specified for the role.
Rehabilitation - Specialist rehabilitation team	D15/S/a - 19-024B	There should be a multidisciplinary specialist rehabilitation team with injury specific experience which should include: - consultant in rehabilitation medicine - physiotherapist - occupational therapist - speech and language therapist - dietitian - clinical psychologist /neuropsychologist. There should be specified contacts for the following: pain management specialist pharmacist orthotic services prosthetic services wheelchair provision

Rehabilitation - Rehabilitation co- ordinator	D15/S/a - 19-025B	There should be a rehabilitation co-ordinator who is responsible for co-ordination and communication regarding the patient's current and future rehabilitation available during day time hours 7 days a week. This rehabilitation co-ordinator should be a nurse or allied health professional at AFC Band 7 or above with experience in rehabilitation, and have links to a specialist rehabilitation team Notes - This post can be shared with the major trauma co- ordinator. This can be a combined post for adults and children.
Rehabilitation - Referral guidelines and pathways for specialist rehabilitation	D15/S/a - 19-026B	There should be referral guidelines and pathway for patients requiring specialist rehabilitation.
Rehabilitation - Weekly MDT Meeting	D15/S/a - 19-027B	There should be a weekly MDT meeting for discussion and management of patients with potential complex rehabilitation needs. The meeting should include: consultant in rehabilitation rehabilitation/ trauma co-ordinator other relevant specialist areas as required.
Rehabilitation - Patients receive a rehabilitation assessment an prescription	D15/S/a - 19-028B	All patients should receive a rehabilitation assessments specified in the 2019 Rehabilitation Prescription standards Rehabilitation audit data should be submitted to TARN for all patients that require a Rehabilitation Prescription.

Rehabilitation - Clinical psychologist for trauma rehabilitation	D15/S/a - 19-029B	The trauma rehabilitation service should include a clinical psychologist for the assessment and treatment of major trauma patients. Inpatient and outpatient clinical psychology services should be available.
Rehabilitation - Categorisation Tool or Complex needs checklist completed	D15/S/a - 19-030B	For patients identified as having category A or B needs and so potentially requiring specialist (Level 1 or 2) rehabilitation, the Patient Categorisation Tool or Complex Need Checklist should be completed by a Consultant in Rehabilitation Medicine or their designated deputy.