National Major Trauma Nursing Group

Adult Ward Nursing Competencies for the

Major Trauma Patient

May 2022 – V1.1

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# Acknowledgements:

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**All Members of the NMTNG Adult Ward Sub Group: A wide group of nurses from across Trauma Units, Major Trauma Centres and Trauma Networks were involved in the original competency document creation in 2018. Please see appendix 1 for acknowledgements.**

**Organisations which kindly provided their trauma competencies in preparation of these competencies:**

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# Introduction:

The adult ward-based nursing competencies for the major trauma patient provide a national template of competence in the care of the adult major trauma patient being cared for in an acute bed base within both major trauma centres and trauma units. The NMTNG brought together representation from the 21 major trauma networks in England and representation from Scotland, Northern Ireland, Wales, and the UK Armed Forces. The group aims to represent and develop national standards for trauma nursing from the point of injury through to rehabilitation. The competencies draw upon work already undertaken by individual Trusts, professional organisations, and groups to whom we thank for sharing their work. It was recognised that care of major trauma patients varied not just between Major Trauma Centres (MTC) and Trauma Units (TU) but also between the MTCs/TUs themselves. The group felt that these local competencies should be pulled together to create a single, national, set of competencies thereby creating and establishing a shared standard of competence in practice and service provision for the care of the adult major trauma patient within the acute bed base. With the wealth of knowledge and experience in the group, the NMTNG have developed competencies for the care of adult major trauma patient.

# The Quality Indicator:

The *Quality Surveillance Team Major Trauma Services Quality Indicators* (2020) include the following standard:

**On wards that care for trauma patients there should be a nurse and/or AHP available 24/7 who has successfully attained or is working toward the**

**Adult Competency & Educational Standard of level 1 as described in the National Major Trauma Nursing Group Guidance**

# Overview of educational standard:

The NMTNG recognise that there is currently no widely taught NMTNG peer reviewed major trauma ward skills course, though courses do exist that cover much of the theoretical components of the competencies, such as Trauma Care After Resus (TCAR) and Paediatric Care After Resus (PCAR). The NMTNG is also currently investigating options for a national e-learning educational programme. The competencies aim to provide assurance that there is a baseline of one nurse per shift, who is an appropriately skilled, trained, and competent individual relevant to the major trauma patient groups cared for in your ward environment. The responsibility for completion of this competency book is for Networks, MTC’s and TU’s to decide locally which sections are to be completed per ward area as per local policies and procedures.

# Educational and competency standard structure

Trusts should aim to help staff achieve competence within 12 months of commencing work in a clinical area that cares for major trauma patients. This is in addition to and should run alongside any preceptorship / supernumerary period offered to staff. They would be expected to be able to provide evidence based and holistic care for the major trauma patient as part of a trauma focused multi-disciplinary team. In addition, they will have insight into the long-term benefits / goals of multiple treatment options / care pathways. This should enable staff to independently evaluate and plan care and pathways for major trauma patients. It is advised that assessors identified within the organisation, will utilise supporting documentation to ensure a common approach to competency assessment in practice.

# The competencies in practice:

* **We already have task orientated competencies in our department, why do I need these?**

These competencies are intended to support and develop practice specifically in the care of the major trauma patients. There is real value in creating a single, national, set of competencies and establishing a shared standard of competence in practice which are intended to build on generic transferable skills and knowledge. This will help ensure that all major trauma patients will receive consistently high, evidence based standardised care.

* **Which competencies do I use?**

This will be dependent on where you work. The competencies are divided up into smaller section which can be lifted from the full document to create a set of competencies that are relevant to your specific clinical area / patient group.

The following table is intended to guide the nurse/AHP to focus on the competency booklets applicable to them:

|  |  |
| --- | --- |
| **What Kind of area do I work in?**  | **Do I need these competencies**  |
| A designated major trauma ward within a major trauma centre.  | Yes  |
| A speciality ward within a major trauma centre that takes patients traumatic injuries  | Yes  |
| A speciality ward within a major trauma unit that takes patients traumatic injuries  | Yes  |

**There are some resources available via the North East London and Essex Trauma Network on their website https://www.neletn.nhs.uk, which includes a training log, ward admitting schedule and training video for anyone who wishes to adapt and use.**

**NB: Competencies should be completed according to the admitting ward schedule. For example, if a ward does not admit Traumatic Brain Injured patients, then the staff in that area would NOT be expected to complete that set of competencies.**

# How to use the Competencies:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Organisational Aspects 1**  |  |  |
| **Organisational Aspects 2**  | **Level 1 – nurse who participates in the care of the** **trauma patient 3**  | **In-house Delivery 4**  | **Work Placed Based** **Assessment** **(WPBA) 5**  | **CPD / online Tools 6**  | **Self-assessment 7**  | **Assessor: Achieved competency. Print name date and sign 8**  |
| Local Trauma Network system and the centralisation of trauma services.  | Able to describe the local Trauma Networks.  Demonstrates understanding of the trauma care system. Is able to identify the key contacts involved in the major trauma patients’ pathway, within your organisation.  |   |   |   |   |   |

1. Title banner - This describes the theme of the competence. The headings aim to make it easier for each individual area to pick out the sections relevant to their clinical area. They are structured:- • A-E assessment
	* Specific areas of trauma i.e. spinal set out from head to toe
	* Individual groups of patients such as older trauma patients
	* Focused issues i.e. pain management

1. Organisational aspect - an overview of contents of that competency standard

1. Level 1 – nurse who participates in the care of the trauma patient - description of the standard expected

1. In-house delivery - description and acknowledgement of educational standard achieved

 5 & 6. Acknowledgment and certification of the assessment process. The abbreviations TCAR, PCAR and RCUK (Resus Council United Kingdom) have been added to the individual competencies where the theory has been covered to a sufficient level. It is important to note that simply attending the courses does not assume competency, and that the individual must have retained and be able to describe the indicator in detail to be considered competent.

1. Self-assessment - Individuals should use this to section to reflect their practice with relation to the specific competency utilising recognised reflective cycles / tools

1. Assessor: Achieved competency - to be completed when the competency has been achieved as a formal record. No grading scheme is applied and a simple achieved or not achieved should be used.

1. There are multiple ways in which the competencies could be integrated into daily practice. One such available method created by the North East London & Essex Trauma Network can be found here.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Organisational Aspects**  |  |  |
| **Organisational Aspects**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Local Trauma Network system and the centralisation of trauma services.  | Able to describe the local Trauma Networks.  Demonstrates understanding of the trauma care system. Is able to identify the key contacts involved in the major trauma patients’ pathway, within your organisation.   | Local delivery  |   | TCAR  |   |   |
| Local guidelines and standard operating procedures (SOPs).  | Demonstrates Knowledge of the existence and location of guidelines/SOPs relating to early trauma care, for example: * Secondary Transfer
* Bypass criteria
* Isolated head injury
* Spinal injury
* Burns
* Repatriation criteria / Process

  | Local/Network delivery  |   |   |   |   |
| Ethical, legal and professional implications of trauma.  | Demonstrate basic knowledge of consent, the mental capacity act and DOLS  Demonstrate basic knowledge of: * Mental Health Act
* Safeguarding
* Confidentially (especially in relation to sharing information with other agencies such as the police)
* Advocacy
* Domestic Violence

   | Local/Network delivery  |   |   |   |   |

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| --- | --- | --- | --- | --- | --- | --- |
| Non-technical skills  Preparation and reception of the major trauma patient.  | Can identify essential equipment and prepare a bed space to receive a major trauma patient.  Can receive information and record it in a structured form e.g. SBAR or similar tool used in trust.   | Local/Network delivery  |   |   |   |   |

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| --- |
| **Airway and Breathing**  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of airway.  | Demonstrates how to assess the airway of a major trauma patient.  Demonstrates the knowledge of anatomy and physiology of the airways  Demonstrates knowledge of the causes of airway obstruction and can recognise impending, partial or complete obstruction.  Demonstrates chin lift and jaw thrust manoeuvres: * Understands the

indications for a head tilt chin lift and jaw thrust * Understands the use of

jaw thrust in patients with specific injury patterns i.e. facial injuries and spinal injuries.    |   |   | RCUK        RCUK      RCUK    RCUK  |   |   |
| Inserting oral and nasal airways and I-gel:  • Understands the indications and contraindications of inserting oral and nasal airways and I-gel in adults   |   |   |   RCUK  |   |   |
| Clinical assessment and management of breathing and ventilation. | Breathing Assessment:  Demonstrates knowledge of anatomy and physiology of the respiratory system.  Can recognise normal breathing patterns and recognise signs and symptoms of respiratory distress.  Can demonstrate knowledge of the causes of respiratory distress in trauma.   |   |   |   TCAR    TCAR    TCAR  |   |   |
| Oxygen Delivery:  Can describe/ demonstrate different modes and delivery systems of oxygen, and indications for applying oxygen.  Can demonstrate how to set up locally used humidified oxygen systems.  |   Local/Network delivery    Local/Network delivery  |   |   |   |   |
| Use of pulse oximetry:  Understands the indications for using pulse oximetry.  Understands the potential pitfalls of pulse oximetry  Can demonstrate knowledge of the correct positioning of different pulse oximetry probes.  Knows where appropriate pulse oximetry attachments are stored.   |             Local delivery  |   |   TCAR   TCAR   TCAR  |   |   |

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|  |  |  | **Non-invasive ventilation (NIV)**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Management of Noninvasive ventilation.   | Understand and demonstrate the indication for NIV and the different NIV options.  Understand the risks of NIV.  Understand the emotional effects of NIV on patients and demonstration the ability to offer support.  Demonstrate knowledge in the skills needed to use the relevant equipment.  Understand and demonstrate the appropriate observations which should be undertaken  Understand the different parameter and be able to set alarms specific for patients  Understand and demonstrate the use of humidification through the NIV circuit.   | Local/Network delivery   Local/Network delivery Local/Network delivery   Local/Network delivery   Local/Network delivery   Local/Network delivery   Local/Network delivery  |   |   |   |   |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Tracheostomy Care**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Tracheostomy management.   | Can describe the anatomy and physiology of a tracheostomy.  Understand the indications for a tracheostomy.  Can demonstrate the knowledge and understanding of the three types of tracheostomy.  Can demonstrate the ability to manage tracheostomies in line with local trust policies and procedures.  Understand the appropriate monitoring needs of a patient following decannulation.  Understand associated swallowing risks/ difficulties and the appropriate action that is required.   | Local/Network delivery  Local/Network delivery  Local/Network delivery  Local/Network delivery   Local/Network delivery   Local/Network delivery  |   |   |   |   |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Circulation Management**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of circulation  | Circulatory assessment:  Has a working knowledge of the anatomy and physiology of the circulatory system.  Can describe and explain the clinical signs of shock in the trauma patient.  Can list the different types of shock relevant to the trauma patient  Demonstrate the principles of circulatory assessment. * Capillary refill
* Manual pulse identification
* Application of monitoring to assist assessment and interpretation of the results in the context of trauma

 Has a basic understanding of the 5 sites of traumatic haemorrhage: * Chest
* Abdomen
* Pelvis
* Long bones
* External

  |   |   |   TCAR    TCAR   TCAR   RCUK         TCAR  |   |   |

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|  |  | **Major/Massive Haemorrhage Manag** | **ement**  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| The secondary management of major/massive haemorrhage           | Demonstrates knowledge of local major/massive haemorrhage protocol including activation guidelines.  Demonstrates an understanding of the use of anti-coagulant reversal agents in the trauma patients.  Demonstrates an understanding of the indications for administering tranexamic acid.   | Local/Network delivery  |   |      TCAR    TCAR  |   |   |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Disability**   |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of disability in the trauma patient     | Demonstrates the appropriate use of both AVPU and GCS and the relevance of abnormal findings of each component. Can describe the escalation process of patients in relation to a reduced conscious level. Can demonstrate the assessment of:* Pupil size and reactions
* Limb Movement

Demonstrates an understanding of the relevance of blood glucose monitoring in the trauma patient.   | Local/Network delivery    Local/Network delivery  Local/Network delivery  |   |            TCAR  |   |   |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Exposure and Temperature Contro** | **l**  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment of exposure and temperature control  | Have a knowledge and understanding of temperature control  Demonstrates an understanding of hypothermia and its potential effects of the trauma triad.   |   |   | TCAR    TCAR  |   |   |
| Management of exposure and temperature control  | Understands the principles and methods of warming techniques.   |   |   | TCAR  |   |   |
| Patient exposure assessment  | Demonstrates an understanding of a head-to-toe patient assessment.   |   |   | TCAR  |   |   |

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| **Management of Traumatic Brain Injury**  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Understands the basic functions and the anatomy and physiology of the brain and cranium.  | Has a working knowledge of neurological anatomy.  Describes the basic function and relevance of injury to the 4 lobes of the brain: * Frontal Lobe
* Parietal Lobe
* Temporal Lobe
* Occipital Lobe

 Demonstrates the ability recognise signs of raised intracranial pressure in a patient with a traumatic brain injury.   |   |   | TCAR            TCAR  |    |   |
| Understands the pathophysiology of traumatic brain and cranial injury.  | Demonstrates a knowledge and understanding of significant traumatic brain injuries  Demonstrates an understanding of craniofacial trauma, common assessment, findings and interventions.  |   |   | TCAR    TCAR  |   |   |
| Understands the classifications of traumatic brain injury.  | Demonstrates a knowledge and understanding of classifications of brain injury and its presentation: * Primary injury
* Secondary injury

 * Mild traumatic brain injury
* Moderate traumatic brain

injury * Severe brain injury

  |   |   | TCAR  |   |   |
| Care of the pre and post-operative neurosurgical patient   | Demonstrates the ability to care for the postoperative patient: * GCS monitoring
* Clinical observations
* Fluid balance
* Oxygen therapy
* Wound management
* Positioning of patient
* Pain management

  |  Local/Network delivery  |   |             |   |   |
|  | Demonstrates a knowledge and understanding of neurosurgical procedures including: * Burr hole surgery
* Craniotomy
* Decompressive

craniotomy  |  |  |  TCAR  |  |  |
| Demonstrates an ability to care for patients with a traumatic brain injury holistically and can plan, implement and evaluate care.  | Demonstrates a knowledge and understanding of potential complications following a traumatic brain injury and subsequent management: * Seizures
* PTA and cognitive impairment
* Mental capacity and

Deprivation of Liberty * Challenging Behaviour and behavioural management
* Psychological effect of traumatic brain injury of patients/families and carers

 Describes and understands the use of pharmacological and nonpharmacological interventions.  Understands and demonstrates the role of the MDT  Demonstrates and understanding of nutritional management of patients with a TBI  | Local/Network delivery                 Local/Network delivery   Local/Network delivery   Local/Network delivery  |   |                         |   |   |

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| **Management of maxillofacial, cranial and ocular trauma**  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Understands the anatomy and physiology of the facial bones.  | Describes the basic structure of the facial bones: * Orbital bones
* Maxillary sinuses
* Nasal bones
* Zygomatic bones
* Mandible

  |   |   | TCAR  |   |   |
| Understands the pathophysiology of maxillofacial trauma  | Demonstrates a knowledge and understanding of facial fractures, common assessments and findings and interventions: * Orbital fracture
* Orbital blow out fracture
* Zygomatic fracture
* Mandible fracture
* Tooth trauma

 Demonstrates a knowledge and understanding of the implications of facial trauma, assessment and management: * Management of soft tissue

injuries * Management of facial

lacerations * Able to provide

maxillofacial advice for patients * Pain management of facial

injuries * Dietary advice
* Psychological support

  | Local/Network delivery          Local/Network delivery  |   |   |   |   |
| Understands the anatomy and physiology of the eye.  | Demonstrates an understanding of the structures of the eye: * Eyelid
* Pupil
* Sclera
* Iris

  | Local/Network delivery  |   |   |   |   |
| Understands the pathophysiology of eye trauma.  | Demonstrates a knowledge and understanding of the management of eye trauma:  |   |   |   |   |   |
|  | * Prevention of eye infections and eye care
* Periorbital haematomas
* Physiological impact of eye trauma

 Can identify emergency eye trauma, and to escalate appropriately.   |  |  |  |  |  |

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| --- |
| **Thoracic injury and management**  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Understands the anatomy and physiology of thoracic injuries.  | Demonstrates an understanding of the pathophysiology of thoracic injuries, how each would present and the principle concepts of nursing management.  Can describe: * Airway obstruction
* Massive haemothorax
* Open chest wound
* Flail chest
* Tension pneumothorax

 Demonstrates understanding of the protocol / management for thoracic injuries in your local area and where to find it.  Demonstrates knowledge and understanding of possible complications and how to manage / escalate them.  Demonstrates a knowledge understanding of the management of rib fractures, including: * Surgical fixation
* Early mobilisation
* Underlying lung injury
* Requirement for level 2 care

  |            Local/Network delivery       Local/Network delivery  |   | TCAR       TCAR RCUK          TCAR      TCAR    |   |   |
| Management of chest drains   | Understands the indication for insertion of a chest drain.  Understands and demonstrates the ability to set up a chest drain for insertion.  Understands and demonstrates on going care of a chest drain: * Insertion site care
* Active mobilisation
* Monitoring and documentation
 |    Local/Network delivery  Local/Network delivery  |   | TCAR  |   |   |
|  | * Indication for when the bottle should be change and the procedure for this.
* Complications of a chest drain being insitu
* Application of low thoracic suction.
* Removal indications and procedure

  |  |  |  |  |  |
|   | Understands the importance of pain management and chest physiotherapy in relation to local policy   | Local/Network delivery  |   | TCAR  |   |   |
|   | Demonstrates an understanding of potential life-threatening internal injuries as a result of chest trauma, how each would present and the principle concepts of nursing management for example: * Cardiac tamponade
* Cardiac contusions

  |   |   | TCAR  |   |   |

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| --- |
| **Spinal column and Spinal Cord Injury**  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name - date and sign**  |
| Demonstrates safe spinal immobilisation and management.    | Understands the indications for cspine immobilisation and when to initiate it Can demonstrate how to perform manual c-spine immobilisation.  Can demonstrate c-spine immobilisation, sizing and using appropriate devices.  Can demonstrate being part of a team performing a log roll/tilt and describe each role.  Understand and demonstrate safe assessment and support of oral nutrition and hydration of the immobilised patient.  Understand and demonstrate safe assessment and assistance with elimination needs.  Understand and demonstrate safe assessment and support of pressure area care.   |    Local/Network delivery   Local/Network delivery   Local/Network delivery   Local/Network delivery   Local/Network delivery   Local/Network delivery  |   | TCAR   MASCIP guidelines  MASCIP guidelines   MASCIP guidelines         MASCIP guidelines   MASCIP guidelines   |   |   |
| Understands the anatomy and physiology of the spinal column and cord and its function  | Demonstrates a knowledge of normal anatomy and physiology of the spinal column and cord: * Spinal cord and column

division * Spinal nerves
* Motor and sensory

function of the spinal cord * Autonomic nervous system
* Anatomy of a vertebrae

 Demonstrates an understanding of MOI, including: * Hyperflexion Injury
* Extension Injury

  |   |   | TCAR          TCAR  |   |   |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Clinical assessment and management of patients with spinal cord injuries | Demonstrates a knowledge and understanding of the patient presentation of SCI and the potential complications and implications: * Cervical level
* Thoracic level
* Lumbar level

 Demonstrates an understanding of the effects of sympathetic and parasympathetic stimulation of a SCI patients  Demonstrates an understanding of the signs and symptoms of neurogenic and spinal shock and its management  Demonstrates a knowledge and understanding of the management of bladder and bowel management in a patient with SCI including; * spastic/reflexic bowel
* flaccid/areflexic bowel
* manual evacuation/
* Urethral catheter management.

 Demonstrates an understanding of temperature control and management in a patient with SCI.  Demonstrates a knowledge and understanding of the importance of positioning and pressure area care in SCI patients and demonstrates the ability to provide this to patients.  Demonstrates a knowledge and understanding of the potential respiratory compromise and complications following a SCI      |                Local/Network delivery  |   | TCAR         TCAR     TCAR     MASCIP guidelines         TCAR    TCAR      TCAR  |   |   |
|   | Demonstrates a knowledge and understanding of the pathophysiology of autonomic dysreflexia and its identification/ treatment  Demonstrates a knowledge and understanding of the psychological  | Local/Network delivery      |   | MASCIP guidelines        |   |   |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | effects of SCI and support services available  Understands the referral pathway for SCI patients including the importance of ASIA scoring.  Demonstrate knowledge and understanding of nutritional risks and how to assess and reduce these risks.   | Local/Network delivery       Local/Network delivery  |  |    TCAR  |  |  |
| Clinical assessment and management of patients with spinal column injuries  | Demonstrates a knowledge and understanding of vertebral column injuries: * Fractures (various types)
* Subluxations/dislocations
* Penetrating injuries
* Stable injuries
* Unstable injuries

 Demonstrates a knowledge and understanding of treatment options for vertebral injuries: * Conservative
* Surgical

  |   |   | TCAR          TCAR  |   |   |
| The management of cervical spine collars  | Understand and demonstrate knowledge of the rationale behind the use of C-spine collars.  Understand and demonstrate possible barriers / contraindication to the use of C-spine collars.       | Local/Network delivery   Local/Network delivery  |   |   |   |   |
|   |  Understand and demonstration the ability to assess and size patients for a c-spine collar in keeping with local guidance and training.  Understand and demonstrate the ability to care for a patient with a cspine collar:- * Pressure area / skin

integrity care * Appropriate pain relief
* Possible complications to be aware of.
 | Local/Network delivery     Local/Network delivery  |   | MASCIP guidelines    MASCIP guidelines   |   |   |
|  | * How to safely remove for hygiene purposes
* How to emotionally support patients.

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|  The management of spinal braces  |  Understand and demonstrate knowledge of the rationale behind the use of spinal braces.  Understand and demonstrate possible barriers / contraindication to the use of spinal braces  Understand and demonstrate the ability to care for a patient wear a spinal brace: * Pressure area / skin integrity care.
* Appropriate pain relief • Possible complications.
* How to safely remove for hygiene purposes.

 How to emotional support patients especially with body image issues.   |  Local/Network delivery   Local/Network delivery  Local/Network delivery        Local/Network delivery   |   |  TCAR         MASCIP guidelines   |   |   |

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|  |  |  | **Abdominal Trauma**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of blunt & penetrating abdominal injuries.       | Demonstrates a knowledge and understanding of the mechanisms involved in blunt and penetrating trauma.  Demonstrates knowledge and understanding of the potential for emergent abdominal injuries not apparent during initial assessment and treatment period.  Demonstrates a working knowledge of the anatomy of the abdomen. * Peritoneal cavity
* Retroperitoneal

cavity * Pelvis
 |   |   | TCAR     TCAR      TCAR  |   |   |
| Clinical assessment and management of the patient with abdominal trauma               | Is able to demonstrate the ability to carry out basic assessment of the abdomen and understands possible signs that would require escalation * Wounds
* Bruising (i.e. Grey-Turners sign, Cullen’s sign)
* Imprints
* Distension (how to measure with local guidance)
* Acknowledge need to

include back, genitals, perineum, wary of blood at meatus and rectum   | Local/Network delivery  |   | TCAR  |   |   |

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| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Medical interventions in the management of abdominal trauma  | Has an understanding of emergency and ongoing medical management of abdominal trauma: * Options for operative management
* Options of and rational behind damage control surgery
* Interventional Radiology
* Understands when Conservative management would be most appropriate
 | Local/Network delivery  |   | TCAR  |   |   |
| Secondary management of abdominal trauma  | Can anticipate potential complications and understand how to escalate in line with local policies.   Demonstrates knowledge of related nursing interventions regarding the following: * Understands indications for gastric decompression with nasogastric tube (aligned with local policy)
* Observe quality and frequency of bowel movements and importance of avoiding constipation
* Stoma care. Demonstrates an understanding of the educational needs and psychological impact on the patient.
 | Local/Network delivery      Local/Network delivery  Local/Network delivery   Local/Network delivery   |   | TCAR  |   |   |
|   | * Nutritional management of the patient.
* Pain assessment and pain

control * Urinary catheterisation
* Assessment of patient anxiety
* Patient education

 Knowledge and appreciation of the importance of the following ongoing nursing observations: * Wound healing and

surgical incisions * Number and quality of bowel movements
* Patency of drainage tubes
* Appreciation of deranged blood results
* Urinalysis
* Input into surgical drainage bottles, amount and consistency

  | Local/Network delivery Local/Network delivery Local/Network delivery Local/Network delivery   Local/Network delivery  |   | TCAR  TCAR         TCAR  |   |   |

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| **Musculoskeletal Injuries**  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Management and Care of limb injuries  | Identify different types of l limb injuries and mechanism for injury.  Demonstrate how to assess neurovascular status  Understand the use of splints/ slings and braces local to your area. Understand and demonstrate the ability to care for a patient with splints/slings and braces * Pressure area care
* Appropriate pain relief
* Potential complications

 Has an understanding of the management of open lower limb injuries in line with national guidance.   |    Local/Network delivery  Local/Network delivery  Local/Network delivery  |   | TCAR   TCAR             TCAR BOAST\*  |   |   |
| Management and care of Pelvic injuries  | Demonstrate the understanding of pelvic injuries and mechanism of injury  Identify their presentation and potential complications including potential for injury to internal organs  Discuss issues regarding moving and handling stable/unstable pelvic fractures Demonstrate how to assess neurovascular status Understand rationale for pelvic binders and when to remove  Understand and demonstrate the ability to care for a patient with different pelvic fixations   |        Local/Network delivery  Local/Network delivery  Local/Network delivery Local/Network delivery  |   | TCAR   TCAR    TCAR    TCAR   TCAR    TCAR  |   |   |
| Management of amputations  | Demonstrates knowledge of the level of amputations and their implications.  Demonstrates knowledge of the different types of amputation   | Local/Network delivery  Local/Network delivery   |   |   |   |   |

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|  | Demonstrates knowledge of pain management and wound care of amputations.  Demonstrates an understanding of psychological impact of amputation  Can demonstrate knowledge of the local pathway for rehabilitation and prosthesis fitting   | Local/Network delivery   Local/Network delivery  Local/Network delivery    |  |  |  |  |
| External Fixators  | Demonstrates knowledge of different external fixators and their implications for use  Demonstrate pin-site care as per local policy and national guidance Demonstrates how to identify and how to escalate any concerns re infection  Demonstrates knowledge of the psychological impact of external fixators  |     Local/Network delivery    Local/Network delivery  |   | TCAR    RCN  |   |   |
| Skin and Skeletal Traction  | Demonstrates knowledge of the rationale behind the use of skin and skeletal traction and injuries it may be used for.  Demonstrates knowledge of the possible barriers and/or contraindication to the use of traction.  Demonstrates what equipment is required for application and how to apply it / set up the bed frame.  Demonstrates the ability to care for a patient with traction   |           Local/Network delivery  |   | TCAR     TCAR     RCN     |   |   |
| Compartment Syndrome  | Demonstrates an understanding of the physiology of compartment syndrome.  Demonstrates an understanding of the implications of compartment syndrome  Demonstrates the ability to monitor for compartment syndrome  Demonstrates an understanding of how and when to escalate abnormal findings  Demonstrates a knowledge of the  |   |   | TCAR   TCAR   TCAR    TCAR   TCAR  |   |   |
|  | treatment of compartment syndrome   |  |  |  |  |  |
| Other MSKN Complications  | Demonstrates knowledge of and how to assess for the following: * Pulmonary embolism
* Fat Embolism
* Foot/wrist drop
* Rhabdomyolysis
* Pressure sores
* Fracture blisters
* Nutritional status
* Infection

  | Local/Network delivery  |   | TCAR (with exceptio n of foot/wrist drop)  |   |   |

\*British Orthopaedic Association Standards for Trauma

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| **Pain Assessment and Management**  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment of Pain | Demonstrates a knowledge and understanding of the anatomy and physiology of pain.  Demonstrates an understanding of the physiological, behavioural and psychological responses to pain: * Sympathetic
* Parasympathetic
* Inadequate pain management in the

trauma patient  Demonstrates an understanding of the different types of pain and their presentation: * Traumatic
* Neuropathic
* MSK
* Visceral
* Referred
* Acute
* Chronic

 Demonstration of knowledge and use of your local trust policy on the management of acute pain.  Demonstrates an understanding of the pain assessment tools available and when to apply them.   | Local/Network delivery   Local/Network delivery       Local/Network delivery         Local/Network delivery   Local/Network delivery  |   |   |   |   |
| Pain management  | Demonstrates an understanding of pharmacological and nonpharmacological interventions to pain:  Can demonstrate competence in the use of PCA/epidural management in accordance with local policies and training.  Understands the care and management of a patient following regional anaesthesia.  | Local/Network delivery    Local/Network delivery   Local/Network delivery  |   |   |   |   |

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|  |  |  | **The Older Trauma Patient**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and manage of older trauma patients | Demonstrates a knowledge and understanding of the various mechanisms of injury in older patients.  Demonstrates knowledge of the key considerations in the care of an older trauma patient.  Demonstrates knowledge and understanding of the principal physiological changes in the older and its impact in trauma including.  Has an awareness of the assessment and management process of dementia patients.  Demonstrates an understanding of the effects of delirium and prevention strategies.  Demonstrates an understanding of the potential implications and complications of prolonged bed rest in the older patient.   |                  Local/Network delivery  |   | TCAR     TCAR   TCAR     TCAR         TCAR     |   |   |

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|  |  | **The Pregnant Trauma Patient**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of the pregnant trauma patient  | Demonstrates knowledge of the key considerations in the care of pregnant trauma patients.  Demonstrates knowledge and understanding of the principal physiological changes in pregnancy  Demonstrate understanding and ability to provide emotional support for patient and family members.  Demonstrates an understanding the potential risks in pharmacological management.  Demonstrates knowledge of the importance of left lateral tilt and how to perform.  | Local/Network delivery   Local/Network delivery   Local/Network delivery Local/Network delivery   Local/Network delivery  |   |   |   |   |

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|  |  |  | **The Bariatric Trauma Patient**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of the bariatric trauma patient  | Demonstrates an understanding of the MOI associated with the bariatric patient.  Demonstrates knowledge and understanding of the principal physiological differences in the bariatric patients and can outline key considerations in their care.   |   |   | TCAR   TCAR  |   |   |

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|  |  | **Challenging behaviour in the trauma pa** | **tient**  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of the confused, agitated, and aggressive trauma patient | Demonstrates an understanding of the key considerations in the care of the confused, agitated and aggressive trauma patient.  Demonstrates knowledge of the causes of challenging behaviour  Demonstrates knowledge and understanding of both local, in hospital and community based services.  Demonstrate knowledge of the local policy on both physical and chemical restraint and have a working knowledge of when they should be used.  Demonstrates knowledge of the role the security and the police play in these policies.  Demonstrate knowledge of how to document and escalate such behaviours appropriately.  | Local/Network delivery    Local/Network delivery  Local/Network delivery   Local/Network delivery    Local/Network delivery   Local/Network delivery  |   | TCAR     TCAR  |   |   |

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|  |  |  | **Wound Care**  |  |  |
| **Clinical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
| Clinical assessment and management of traumatic wounds | Demonstrates an understanding and describes the anatomy and physiology of the integumentary system.  Demonstrates knowledge understanding and skills in the management of the different types of wounds in the major trauma patient  Demonstrate understanding and skills in wound assessment and be able to highlight possible complications and other considerations that should be taken into account when dealing with the above wounds.  Demonstrate knowledge of the local escalation policies to refer to speciality teams where appropriate.  Demonstrate knowledge and skill in keeping with local training and competencies of local commonly used wound care devices and approaches.  | Local/Network delivery   Local/Network delivery   Local/Network delivery      Local/Network delivery   Local/Network delivery  |   |   |   |   |

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|  |  |  | **Psychological impact of trauma**  |  |  |
| **Non-Technical Skills**  | **Level 1 – nurse who participates in the care of the** **trauma patient**  | **In-house Delivery**  | **Work Placed Based** **Assessment** **(WPBA)**  | **CPD / online** **tools**  | **Self-assessment**  | **Assessor:** **Achieved competency. Print name date and sign**  |
|   | Demonstrate awareness of the psychological impact of trauma  Demonstrates awareness of the role of clinical psychology in the care of the trauma patient.  Demonstrates understanding of psychological support mechanisms available in the care of the trauma patient   |    Local/Network delivery   |   | TCAR       TCAR  |   |   |

 Appendix 1: V1.0 (2018) acknowledgements

NMTNG Adult Ward Sub Group Chair - Stuart Wildman, Consultant Nurse in Major Trauma, Salford Royal NHS Trust

NMTNG Adult Ward Sub Group Vice Chair - Claire Marks, Major Trauma Centre Coordinator – MTCC Lead, Derriford Hospital NMTNG Chair - Robert Pinate, Consultant Nurse, ED, University College London Hospitals

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With thanks to all other members of the NMTNG.