

### **Monitoring for quality and delivery:**

As set out in the National Service Specification for Major Trauma D15/S/a (NHS England, 2013), trauma networks will monitor courses for quality and delivery. It is recommended that as part of peer review, networks undertake detailed reviews of the proposed level 2 courses as part of the monitoring process. This paper provides detail and clarification of how the peer review process should be conducted.

Where courses are delivered nationally, the NMTNG will coordinate a review panel to undertake peer review on behalf of hospital organisations nationwide. Individual networks retain the right to conduct their own assessment. Please see Appendix 1 for the process map.

### **Curriculum:**

This outline curriculum has been adapted from the NHS England (2013) *National Service Specification for Major Trauma D15/S/a*. The following review of quality and delivery applies specifically to the educational standard required of level 2 nursing/AHP staff in fulfilment of the quality indicator. It is also acknowledged that trauma courses should be multidisciplinary as far as possible.

The content must include as a minimum:

- Adult and Paediatric trauma patients, including the care of the Adolescent/Young Adult patients (16-25) (though standalone adult or paediatric MTC's may opt to focus specifically on their target patient group)
- Crew resource management (human factors) in the trauma resuscitation room.
- The recognition of shock and catastrophic haemorrhage management including mass blood transfusion / rapid infusers, TXA and novel haemostatics.
- Airway management including the indications for rapid sequence induction anaesthesia and role of the skilled assistant.
- Recognition of, and key interventions in, life threatening chest injuries: blast injury, tension pneumothorax, open pneumothorax, massive haemothorax, flail chest, cardiac tamponade, management of chest drains and resuscitative thoracotomy.
- Intravenous access: central, peripheral, and intraosseous vascular access.
- Head injury management, including prevention of secondary insult.
- Pelvic and long bone injuries including pelvic binder and long bone traction devices and the management of open fractures.
- Pain management.
- The role of the skilled assistant in conscious sedation
- Packaging and transferring injured patients.
- The assessment, management and special considerations of the following groups must be included:
  - The confused, agitated & aggressive patient. They should receive education/training in behavioural management.
  - The spinal cord injured patient.
  - The spinal fracture patient.
  - The bariatric patient.
  - The burns patient.
  - The pregnant patient.
  - The older patient (applicable to combined or adult only courses)

## Assessments:

The assessment principals must demonstrate the ability to transfer theory into practice. As such:

- All candidates must have a summative assessment via an Objective Structured Clinical Examination (OSCE) based assessment. This must be a pass/fail assessment.
- Or, the candidates must have completed a WPBA Log demonstrating these key values:
  - evidence of critical thinking and analysis
  - self-awareness demonstrating openness and honesty about performance.
  - evidence of learning, appropriately describing what needs to be learned, why and how.
  - appropriate linkage to the curriculum as set out above.
- Either way, the assessment should include:
  - Demonstration of leadership skills in trauma management
  - Demonstration of the principals of the primary survey. This may be performed by the candidate themselves, if appropriately trained, or through directing a clinical colleague.
  - Demonstration of the identification of life and limb threatening injuries and knowledge of the treatments required.
  - Demonstration of the knowledge and skills required of the curriculum.
- It is acknowledged that some elements may be assessed during the course.
- A written paper, essay, exam, is not mandated. However, Higher Education Institutions and others may wish to include this as part of any assessment and in particular in relation to awarding academic credit.

## The Peer Review Process:

- The process of peer review is currently facilitated through The Major Trauma Networks, which are in turn subject to national peer review.
- Each trauma course is expected to meet the standards set out in the National Service Specification for Major Trauma D15/S/a. Trauma networks are required to monitor all trauma courses for quality and delivery measured against the agreed set of standards.
- The process is mapped out in appendix 2, page 4 followed by the 'Trauma Courses Quality and Delivery Review Template' (appendix 3) which provides detail of all the essential components the course must meet for successful peer review.
- Course leaders (the clinicians who have devised and/or who run the course) will need to provide suitable documentation to satisfy the reviewers (that the Trauma Network has convened) that all standards are met.
- The NMTNG recommends that the review panel be made up of no less than 3 clinicians who have **not** been directly involved in the creation of, or running of the course itself. These clinicians should include:
  - At least 1 clinician who has successfully completed and passed a level 2 ED nursing course
  - At least 1 clinician currently working in ED (band 7 or above)
  - We encourage panel members to be recruited from across and/or outside the network, including Major Trauma Centres, Trauma Units and neighbouring networks where possible.
- There must be a database held by the education provider of successful/unsuccessful candidates to facilitate confirmation of certification. This must be made available to the organisations operational delivery network to aide with peer review assessment.
- The course outline should be provided to the review team in advance: this may be the complete curriculum or module specification but detailed enough to show the following:

- Aims and objectives
- Indicative course content (sample timetables would be useful)
- Teaching and learning strategies
- Assessment process (detailed information and copies of the assessments included)
- Courses that pass the peer review process should be reported to the NMTNG so that a course repository can be maintained.

## Revalidation:

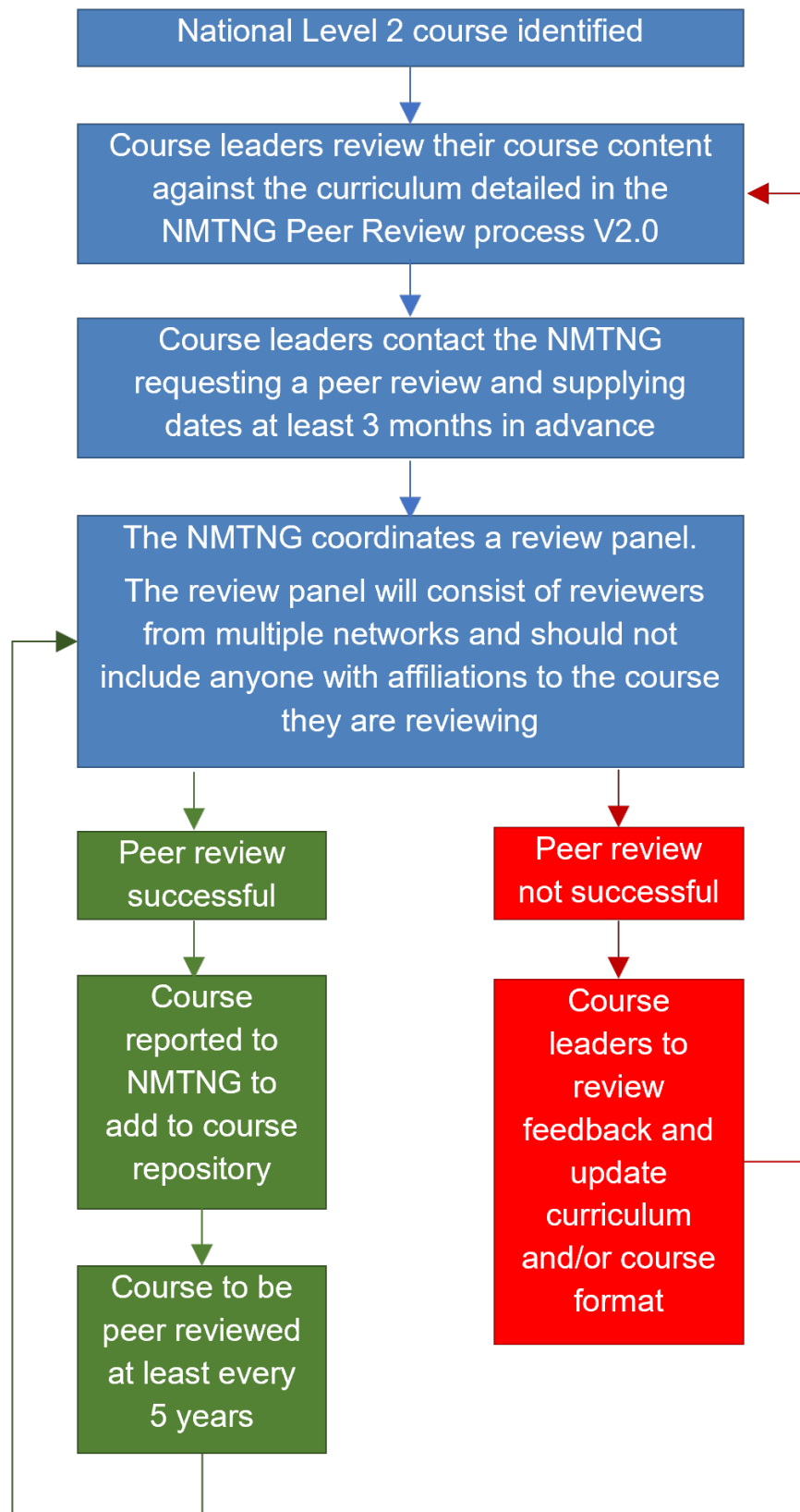
### Course revalidation

- Trauma education course leads must demonstrate they have robust processes in place to ensure that course content is kept accurate and up to date.
- Student feedback should be collected, and there should be evidence that this is utilised appropriately to improve the course where required.
- Courses should be peer reviewed in full **at least** every 5 years according to the above process, including any manuals, exam resources or other media that forms part of course materials.

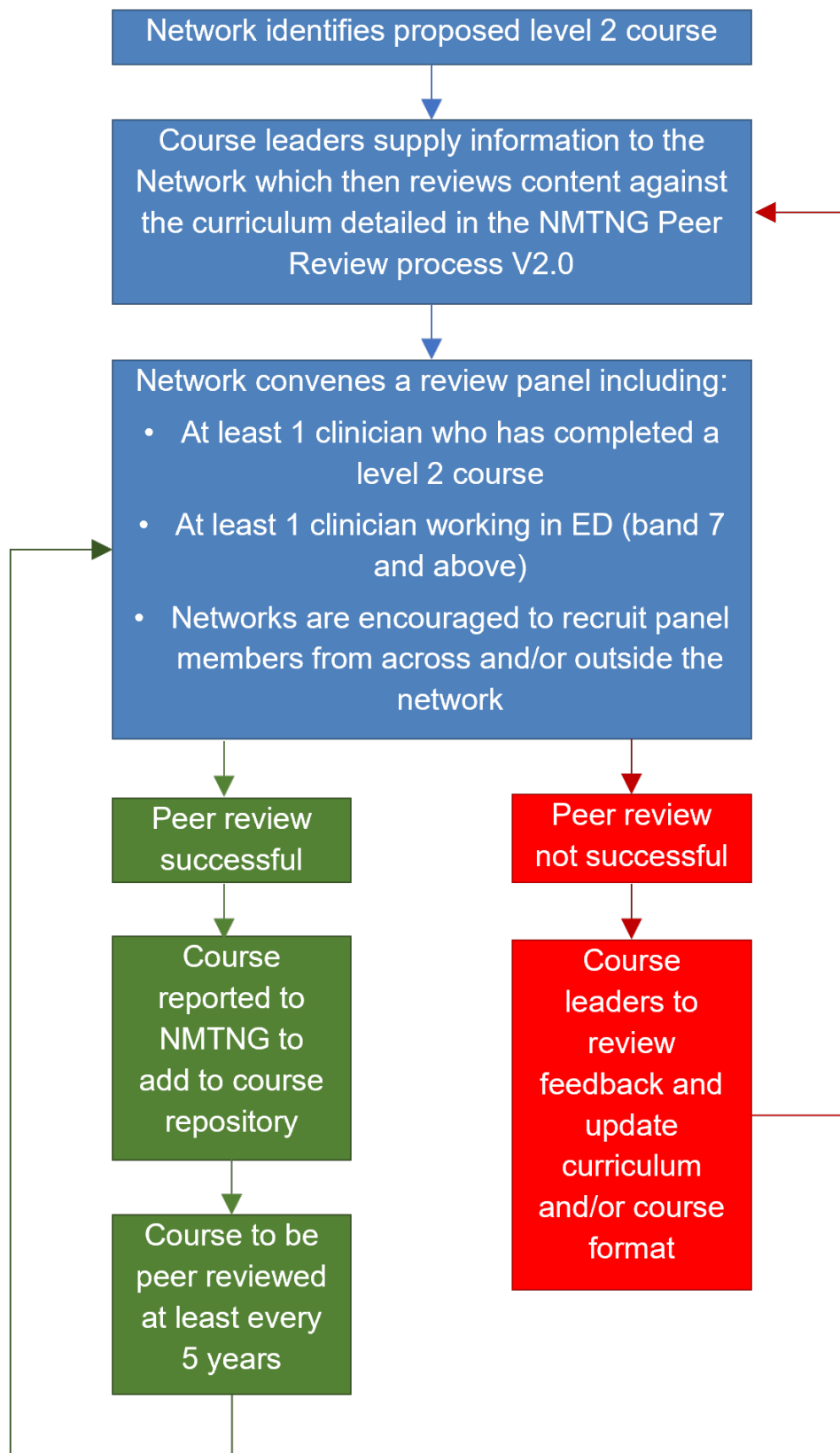
### Student revalidation

- Trauma education packages must demonstrate they have robust processes in place to comply with one of the following standards:
  - There must be a student revalidation requirement **at least** every 5 years. Some courses require revalidation within a shorter time period, and this should be considered at network level.
  - Or, there must be a requirement that the course is repeated in totality after a period of no more than 5 years.
  - Or, there must be log book/evidence of continuous learning and development after the initial course has been passed. This could include completion of the NMTNG Level 2 ED competencies.

## Appendix 1- Level 2 Course Peer Review Process (National Courses)



## Appendix 2- Level 2 Course Peer Review Process (Local Courses)



### Appendix 3 – Level 2 Trauma Courses Quality and Delivery Review Template

To be completed by the lead academic / trainer for the education institution or Network

**Course Name:** Trauma Nursing Core Course (9<sup>th</sup> Edition) (TNCC)

**Major Trauma Network (if applicable):** N/A

**Institution where course delivered:** UK wide

**Course type: Short Course / Academic Module / Other (please state)**

Combined course – written, electronic and face to face course elements

**Any academic credit offered? Level:**

**Credits:**

**Submitted by:** Jill Windle

**Date submitted for Peer Review:**

To be completed by designated lead peer reviewer for the network of NMTNG review panel

**Name of Lead Peer Reviewer:** Bryony Roberts

**Job title:** Senior Nurse, Major Trauma, University Hospital of Wales

**Major Trauma Network:** South Wales Trauma Network

**Details of peer reviewers on panel, AfC band (as appropriate) and affiliations:**

1. Angharad Griffiths, Senior Matron for South Wales Trauma Network
2. Vanessa Cooke, Trauma Lead for Oldham Hospital NCA, Greater Manchester Trauma Network
3. Karen Wheeler, Trauma Nurse Co-ordinator, North Middlesex University Hospital NHS Trust, London North East and Essex Network

**Date Peer Review completed:** January 28<sup>th</sup>/29<sup>th</sup> 2024

**Location Peer Review completed:** Sandwell Education Centre, Sandwell Hospital, West Bromwich, B71 4HJ

**Peer Review - Successful / Unsuccessful (delete as indicated)**

Successful

**Feedback/areas for improvement (please add on additional page as required)**

### Review report

A peer review of the Trauma Nursing Core Course (TNCC) was undertaken in January 2024. The review comprised of scrutiny of the entire course curriculum including the pre-course components, the 9<sup>th</sup> edition manual, attendance and observation of the 2-day face to face component and review of course administration processes.

The conclusion of the peer review panel is that the TNCC course meets the standards for level 2 as defined by the National Major Trauma Nursing Group (NMTNG).

### Course synopsis

TNCC is a well-established course within the UK. It was introduced in the UK over 30 years ago following collaboration with the course founders; the Emergency Nurses Association (ENA) in the United States and Trauma Nursing Limited who introduced and administrate TNCC in the UK.

TNCC is an internationally recognised trauma nursing course designed to provide registered nurses with up to date, evidence-based knowledge and skills in the emergency management of the injured patient.

TNCC applies a process called the 'trauma nursing process' or 'TNP' to provide a standardised approach for nurses to manage emergency trauma care for the injured patients. This method uses an alphabetical mnemonic to aid the registered nurse to use a systematic approach, which integrates key components of emergency trauma care, along with other important components, such as communication, teamwork, and human factors. The course is comprised of a comprehensive manual, online pre-course learning material, a 2-day instructed practical course with summative assessment and a post course multi – choice questionnaire assessment.

Successful completion of the course provides registered nurses with TNCC provider qualification and status which is valid for 4 years.

### 9<sup>th</sup> edition additions and amendments

- Increase of TNP scenarios from 6 to 8.
- Inclusion of a communication module in pre-course learning.
- Inclusion of new chapters in provider manual for 'Trauma around the World' and 'The LGBTQ+ Trauma Patient'.



The TNCC curriculum provides all of the minimum content of the level 2 standard as summarised:

- Adult and Paediatric trauma patients, including the care of the Adolescent/Young Adult patients (16-25)
- Crew resource management (human factors) in the trauma resuscitation room.
- The recognition of shock and catastrophic haemorrhage management including mass blood transfusion / rapid infusers, TXA and novel haemostatics.
- Airway management including the indications for rapid sequence induction anaesthesia and role of the skilled assistant.
- Recognition of, and key interventions in, life threatening chest injuries: blast injury, tension pneumothorax, open pneumothorax, massive haemothorax, flail chest, cardiac tamponade, management of chest drains and resuscitative thoracotomy.
- Intravenous access: central, peripheral, and intraosseous vascular access.
- Head injury management, including prevention of secondary insult.
- Pelvic and long bone injuries including pelvic binder and long bone traction devices and the management of open fractures.
- Pain management.
- The role of the skilled assistant in conscious sedation
- Packaging and transferring injured patients.
- The assessment, management and special considerations of the following groups:
  - The confused, agitated & aggressive patient.
  - The spinal cord injured patient.
  - The spinal fracture patient.
  - The bariatric patient.
  - The burns patient.
  - The pregnant patient.
  - The older patient

### Commendations

There is commendation from the peer review panel for a number of elements of the TNCC curriculum and course structure:

- Good use of blended learning of lecture based and simulation-based sessions, with the lecture sessions being interactive rather than through didactic pedagogy.
- Expert, supportive faculty mentorship and focus on team-based learning.
- A comprehensive manual which covers the curriculum in an engaging and straightforward format.
- Clear information of course expectations and the TNP as it proceeds beyond the typical (C) ABCDE process.
- Pre-course questionnaire regarding individual candidates place of work, trauma teams and hospital capabilities to facilitate scenario-based discussions and communication of issues that arise.
- Comprehensive lectures with good anatomy and physiology and interactive team sessions to support learning.

### Areas for consideration

There were topics and elements of the course that are covered within the wider curriculum which the peer review panel highlighted for consideration of increased focus. These areas are:

- TXA administration – not covered in the manual given the differences between UK and American strategies for massive haemorrhage control. TXA content is covered in the

'Shock' lecture, however consideration of greater emphasis on TXA administration should be incorporated into the scenario/simulation teaching.

In response to the peer review panels consideration, a picture prompt has been added to the presentation slide set and there is reassurance that consideration of TXA administration is covered in the TNP scenario for instructors to incorporate.

- There was consensus amongst the peer review panel that there was a greater focus on administration of intra-venous fluids rather than blood products during TNP, which is an area for consideration.  
There is comprehensive course content in the manual and online learning materials on administration of blood products in shock management and massive haemorrhage control but less of an emphasis observed in the scenario teaching.  
Similarly, the peer review panel have highlighted for consideration the opportunity to provide more focused skills teaching for rapid infuser operation and long bone and pelvic splinting with commonly used devices.
- The role of the skilled assistant in conscious sedation - this is a level 2 course requirement that did not feature within the course materials. As such it was addressed by the peer review panel during the course observation. Given that the teaching closely aligns with the role of the skilled assistant in the preparation of rapid sequence induction (RSI) under airway management skills, it was not specifically taught. The course providers acknowledge that this can be improved by focusing on this specific skill separately to that of RSI, during taught sessions/scenarios of pain management, fracture management and airway protection.
- There was opinion amongst the peer review panel for consideration of greater use of the pre-course material regarding local arrangements/pathways to enhance candidates clinical decision-making skills during the transfer and packaging part of the TNP.

### Assessments

- All candidates are assessed via summative assessment with an Objective Structured Clinical Examination (OSCE) based assessment, which has a pass/fail standard.
- In addition, there is an electronic 50 question multiple choice questionnaire, with a minimum pass standard of 80%. This assessment is required to be completed within a designated time frame following the 2-day taught course for full TNCC provider status to be awarded. The peer review panel highlight this as a beneficial feature of the course structure, as it allows more time for content to be delivered during the 'face to face' element and serves to provide a comprehensive summation of learning for the candidate.

### Revalidation

- Trauma Nursing Ltd have robust processes in place to ensure that course content is kept accurate and up to date. This includes a database held of qualified providers.
- Course information is easily accessible via the website – [www.traumanursing.uk](http://www.traumanursing.uk)
- There are robust processes for identifying candidates for instructor potential during course delivery and supporting the development of new and existing instructors.

## Course evaluation

- Candidate feedback is collected and processes in place to review the feedback with a view to improve the course as required.

<b>To meet the Quality and Delivery Standards all the following components must be met:</b>	<b>Yes</b>	<b>No</b>
<b>1. Details of the course content include:</b>	<b>Yes</b>	<b>No</b>
I) All minimum course content components are taught during the course:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Adult and Paediatric trauma patients (as appropriate to target patient group)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Crew resource management (human factors) in the trauma resuscitation room	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The recognition of shock and catastrophic haemorrhage management and including: mass blood transfusion / rapid infusers, TXA and novel haemostatics.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Airway management including the indications for rapid sequence induction anaesthesia and role of the skilled assistant.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recognition of and key interventions in, life threatening chest injuries: blast injury, tension pneumothorax, open pneumothorax, massive haemothorax, flail chest, cardiac tamponade, management of chest drains and resuscitative thoracotomy.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Intravenous access: central, peripheral & IO.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Head injury management, including prevention of secondary insult.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pelvic and long bone injuries including: pelvic binder and long bone traction devices and the management of open fractures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pain management.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The role of the skilled assistant in conscious sedation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Packaging and transferring injured patients.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II) The assessment, management and special considerations of the following groups must be included:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. The confused, agitated & aggressive patient. They should receive education/training in behavioural management.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The spinal cord injured patient.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The spinal fracture patient.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The bariatric patient.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The burns patient.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The pregnant patient.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The elderly patient (applicable to combined or adult only courses)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. Details of the assessment include:	Yes	No
a) All candidates must have a summative assessment via Objective Structured Clinical Examination (OSCE) based assessment. This must be a pass/fail assessment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <b>OR</b> the candidates must have completed a WPBA Log demonstrating these key values: <ul style="list-style-type: none"> <li>• evidence of critical thinking and analysis</li> <li>• self-awareness demonstrating openness and honesty about performance.</li> <li>• evidence of learning, appropriately describing what needs to be learned, why and how.</li> <li>• appropriate linkage to the curriculum as set out above.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Assessment should include:	<input type="checkbox"/>	<input type="checkbox"/>
I. Demonstration of leadership skills in trauma management	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II. Demonstration of the principals of the primary survey. This may be performed by the nurse themselves, if appropriately trained, or through directing a 'junior doctor'.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
III. Demonstration of the identification of life and limb threatening injuries and knowledge of the treatments required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IV. Demonstration of the knowledge and skills required of the curriculum.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>N.B. It is acknowledged that some elements may be assessed during the course.</b>		
3. Details of the revalidation include:	Yes	No
Trauma education course leads must demonstrate they have robust processes in place to ensure that course content is kept accurate and up to date.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Student feedback should be collected, and there should be evidence that this is utilised appropriately to improve the course where required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Evidence of revalidation at least every 5 years. HEI's, course providers and Trusts must therefore institute mechanisms for revalidation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Evidence that a database is held by the education provider of successful/unsuccessful candidates to facilitate confirmation of certification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
There must be a student revalidation requirement at least every 5 years OR a requirement that the course is repeated in full OR a log book/evidence of continuous learning and development	<input checked="" type="checkbox"/>	<input type="checkbox"/>