HYWEL DDA UNIVERSITY HEALTH BOARD

GIG CYMRU NHS WALES | Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

Major Trauma Policy

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Summary of document:
This policy details the approach to the management of patients presenting in Hywel Dda with serious injury. It does not replace operating procedures and guidance produced through the South Wales Major Trauma Network, but rather outlines how Hywel Dda functions as part of that Network.

Scope:
This Policy applies to the management of all patients presenting with potential major trauma. It covers the broad spectrum of paramedical, medical, nursing and allied health professions who form the multidisciplinary team required to provide quality care for the seriously injured.

It covers the pathway from point of injury through to repatriation and the commencement of rehabilitation.

To be read in conjunction with:
900- RTF and Prehospital Procedure (Major Trauma) – opens in a new tab
SWTN P01-P10- Reference to South Wales Trauma Network (SWTN) Policies/Procedures - opens in a new tab
SWTN P03 – Reference to Trauma Network Trauma Triage Tool - opens in a new tab

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Glossary of terms

Term	Definition
Emergency Medical Retrieval and Transfer Service (EMRTS)	A helicopter and land based advanced medical team able to respond to patients in the pre-hospital phase or in order to facilitate time critical inter-hospital transfers.
Injury Severity Score (ISS)	The sum of the squares of the 3 highest Abbreviated Injury Scores for different body regions. Used to retrospectively define injury as Major trauma (ISS>15), an ISS of 9-15 is described as moderately severe.
Level 1 Rehabilitation	Highly specialised rehabilitation services caring for patients with the highest level of needs – Rehabilitation Medicine consultant led – tertiary service.
Level 2a Rehabilitation	Local specialised rehabilitation service. Rehabilitation Consultant Led.
Level 2b Rehabilitation	Local specialised rehabilitation service. Rehabilitation Consultant Supported.
Level 3 Rehabilitation	Locally led service. Individual treating specialty or non-medically led.
Local Emergency Hospital (LEH)	Hospital not normally expected to receive or admit major trauma patients. No hospitals in Hywel Dda are designated as an LEH.
Major Trauma	Injury or injuries that are life threatening or life changing with potential for significant morbidity and prolonged recovery phase,

	including long term disability. Formally defined retrospectively using the ISS (ISS>15).
Major Trauma Centre (MTC)	Tertiary hospital with the capacity to treat all types of injury.
Major Trauma Desk	Co-ordinating desk located within an ambulance control centre commissioned through the Trauma Network. Staffed by senior staff with experience in the management of patients with major trauma. Available to co-ordinate and advise on the pre-hospital response to major trauma and the transfer of patients with major trauma between hospitals.
Medical specialty input	Refers to input from a Consultant led team of any specialty (Surgical or Medical).
Moderate Trauma	Any patient with an ISS of 9-15.
Rural Trauma Facility (RTF)	Term unique to Hywel Dda within the Welsh Trauma Network in recognition of those hospitals not designated a Trauma Unit but geographically isolated and needing to maintain a trauma response.
STUMBL (Study of the Management of blunt chest wall trauma)	Rib fracture scoring tool using fiver predictors – age at attendance, number of rib fractures, chronic lung disease, use of pre injury anticoagulants and oxygen saturation.
Trauma Team Leader (TTL)	Doctor leading the trauma team response. Usually a senior doctor working in the Emergency Department.
Trauma Unit (TU)	Hospital recognised as meeting specific standards for the management of moderate to severe trauma.
The Trauma Audit and Research Network (TARN)	A research foundation hosted by the University of Manchester holding a registry for moderately-severely injured adults and children across England and Wales. Provides accurate and relevant trauma-related performance data and information, to support service and quality improvement.

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Introduction

There is clear evidence to suggest a significant improvement in survival (19%) for seriously injured patients treated within an established Major Trauma Network[1].A key aspect of a trauma network is concentrating trauma services in a smaller number of facilities and ensuring appropriate pathways for the timely transfer of patients to where they can receive the best resourced care possible.

The definition of major trauma is a patient with an Injury Severity Score (ISS) of greater than 15. Patients with an ISS of 9-15 are considered to have moderate trauma or to be “candidate major trauma patients”. Patients with moderate to severe trauma should receive their inpatient care in a Major Trauma Centre or Trauma Unit in most cases.

There is a particular challenge to providing our population with the highest standards of trauma care, particularly due to the significant distances between our hospitals and the long distances to the Major Trauma Centre (UHW Cardiff). In view of this it is recognised that some patients, will be too unstable to be taken directly to a Trauma Unit or Major Trauma Centre.

This policy has been produced to outline Hywel Dda University Health Board’s approach to the management of these patients. It is supported by the Rural Trauma Facility Major Trauma Procedure (HBUHB Procedure 900) – opens in a new tab. These align with the policies of the Wales Major Trauma Network and are intended to support not replace the same.

It has been developed to ensure that the Health Board meets the requirements for the safe and effective care of major trauma patients and supports all clinicians and facilities in the initial management and decision making for these patients, no matter where they present. Policy Statement -

> Hywel Dda University Health Board is committed to providing patients presenting to its clinicians as a result of major trauma with the best level of care possible. This involves the provision of a hospital meeting the National Major Trauma Quality Indicators standards for Trauma Units[2] and ensuring pathways are in place to ensure high quality resuscitation, stabilisation and timely transfer of patients to the most appropriate facility to manage their injuries.

The overriding motivation behind this policy is to provide equitable care for patients suffering major trauma, no matter where this occurs within our Health Board. The ultimate aim is to improve the chance of survival and minimise time to optimal recovery.

Scope

This policy covers all aspects of the management of major trauma for patients of all ages.
It is intended to support the following professional groups:

- Members of Hospital Adult and Paediatric Trauma Teams
  - Emergency Department Staff
  - Surgical staff
  - Orthopaedic staff
  - Anaesthetic staff, including ODPs/Anaesthetic Nurses
  - Critical care staff
  - Radiology staff
- Members of the Major Trauma Clinical Support team
  - Clinical Lead for Major Trauma

  - Major trauma practitioner(s)
  - Rehabilitation co-ordinator(s)
  - TARN co-ordinator
- Members of the Rehabilitation team and treating inpatient medical teams
  - Therapy staff
  - Consultant in Rehabilitation Medicine
  - (Other treating clinicians – Acute physicians, Orthogeriatricians, Care of the Elderly Consultants)
- Welsh Ambulance Services Trust (WAST) personnel attending patients within the Hywel Dda area (Policy provided for information to WAST)

It does not replace policies determined by the Wales Trauma Network, rather outlines the provision of co-ordinated care of the patients with major trauma within Hywel Dda. This includes specific support for more isolated hospitals not designated as primary receiving units for major trauma but which, due to their location need to maintain a trauma team response – the Rural Trauma Facilities.

The graphic overleaf illustrates the hospitals supporting the Wales Trauma Network across South Wales.

Hospitals supporting the Wales Trauma Network across South Wales

- Adult & Paediatric Major Trauma Centre
- Trauma Unit with Specialist Services
- Trauma Unit
- Rural Trauma Facility
- Local Emergency Hospital

Bronglais General Hospital, Aberystwyth

Glangwili General Hospital, Camarthen

Withybush General Hospital, Haverfordwest

Morriston Hospital, Swansea

Royal Glamorgan Hospital, Llantrisant

Princess of Wales Hospital, Bridgend

Prince Charles Hospital, Merthyr Tydfil

University Hospital of Wales, Cardiff

The Grange University Hospital, Cwmbran (open from November 2020)

Aim

The policy aims to:

- Ensure seriously injured patients are admitted to an appropriate location for ongoing/definitive care in a timely manner
- Support the maintenance of a major trauma response in Rural Trauma Facilities
- Define pathways to facilitate timely repatriation of patients from the Major Trauma Centre back to the Health Board and from the Trauma Unit to other hospitals closer to the patient's home

Objectives

The aim of this policy will be achieved by the following objectives:

- Provide agreed pathways for triage and decisions regarding pre-hospital and inter-hospital transfer and ongoing care
- Ensure ongoing training for members of the trauma team
- Ensure organisational and technical support to Rural Trauma Facilities receiving major trauma patients

Whilst the principles underlying the Network mean that in general, patients with moderate to severe injury will not be admitted for inpatient care in a Rural Trauma Facility, it must be recognised that all cases are unique. Some patients will inevitably be admitted to a Rural Trauma Facility where they are found to have an ISS in the moderate to severe or severe trauma bracket. These cases must be reviewed, but the results of any such review will focus on the individual circumstances, the outcome and quality of care, rather than purely where the patient was cared for.

Pre-hospital management

The delivery of pre-hospital care remains the responsibility of WAST. This section outlines the role of the Health Board in supporting WAST staff working within its area.

Triage tool

There is an agreed trauma triage tool and "Silver" Trauma Triage tool (SWTN P03 and see Appendix 1 – both open in a new tab) which is designed to facilitate WAST staff in determining the most appropriate facility to take a patient to. This will include bypassing Rural Trauma Facilities or longer travel times where the Rural Trauma Facility is closer to the incident than other hospitals within the Major Trauma Network. Further decision making support for WAST staff is available from the Trauma Desk.

The Health Board will support WAST staff in making transportation decisions based on the trauma triage tool and Trauma Desk advice service, even where this means a longer travel time for patients.

Where a patient is felt to be too unstable to travel to a Trauma Unit/Major Trauma Centre then WAST staff may elect to transport to the closest Rural Trauma Facility (generally limited to patients with major airway compromise, major respiratory compromise or severe circulatory shock). This is expected to be a rare occurrence, but when it does happen the Rural Trauma Facility will:

- Facilitate stabilisation in the Emergency Department with the Trauma Team
- Make a call to the Major Trauma Centre, via the trauma desk in line with the Network Automatic Acceptance Policy

- This will automatically result in the Trauma/Air Desk looking to activate EMRTS to facilitate the transfer if deemed Immediate or Emergency.

Destination choice within Hywel Dda
Pre-hospital decision making for destination hospital is clearly set out in the Rural Trauma Facility Major Trauma Procedure (HBUHB Procedure 900) – opens in a new tab.

In summary:

- Patients presenting to crews with a high likelihood of major trauma, as determined by the Trauma Triage Tool/following advice from the Trauma Desk should usually go to the Trauma Unit where direct transfer to the Major Trauma Centre is not feasible.
- Patients in whom diagnosis of “major trauma” is equivocal should be taken to the closest unit, including Rural Trauma Facilities
- Unstable patients, if EMRTS are not available in a timely fashion, should be taken to the Trauma Unit preferentially.
  - If the Rural Trauma Facility is significantly closer (i.e. it would take significantly more than an extra 15 minutes to get to the Trauma Unit) then the patient should be taken to the Rural Trauma Facility.

This is approach is taken in order that patients with injuries that have potential to require the services of a Major Trauma Centre are in effect travelling towards the Centre and ultimate onward transfer should be quicker.

The Trauma Unit’s serving patients suffering an incident within Hywel Dda and bordering areas of Powys are likely to be:

- Glangwili General Hospital
- Royal Shrewsbury Hospital
- Hereford County Hospital
- Morriston Hospital
- Ysbyty Gwynedd, Bangor
- Ysbyty Glan Clwyd, Rhyl

Note: Whilst some of these hospitals are not within the South Wales Trauma Network, taking a patient who is trauma triage tool positive to them (where travel times allow as described above) remains the correct pathway for seriously injured patients in the Hywel Dda/Powys area.

Emergency Medical Retrieval and Transfer Service (EMRTS)
Ideally, any patient meeting the above criteria will be attended by an EMRTS team and transported directly to the most appropriate facility. This will not always be possible and transport of the patient to the Trauma Unit (or Rural Trauma Facility) may be quicker than WAST staff awaiting an EMRTS response.

Where this is the case, upon receiving a Trauma pre-alert containing information suggesting a need the Rural Trauma Facility staff should confirm whether EMRTS are aware of the case. Where it seems likely that urgent onward transfer will be needed the local staff should contact the Trauma Desk to discuss an early response and expedited transfer. They should prepare for arrival of the EMRTS team and facilitate their integration into the local trauma team.

When the EMRTS arrival time is within 20 minutes it is advisable for WAST crews to await their arrival at scene. This is more clearly delineated in the Rural Trauma Facility Major Trauma

Procedure (HBUHB Procedure 900). 900 Pre-Hospital & Rural Trauma Facility Major Trauma Procedure – opens in a new tab

Facilitating transfer
Where a WAST crew has taken an unstable patient (or patient in need of hyperacute transfer (SWTN P01 - MTC Acceptance policy – opens in a new tab)) into a Rural Trauma Facility they should remain within the Emergency Department for a reasonable time period (approximately 30 minutes) barring exceptional service pressures, (outstanding Red/High priority Amber calls in community with no other resource available within reasonable timescale). This is in order to facilitate transport of the EMRTS crew from a landing site distant to the hospital and/or rapid onward transfer to the most appropriate facility following adequate stabilisation.

If this is not possible, a call for onward transfer should be made through the trauma desk, which will ensure appropriate prioritisation of such a call.

Trauma Teams Response

Trauma teams will be activated based on pre-alert or findings in the ED in line with the South Wales Trauma Network Adult and Paediatric trauma team activation criteria. (SWTN P04 – opens in a new tab).

Trauma Unit (Glangwili Hospital)

Trauma Team

Attending ED within 5 minutes;

- Trauma Team Lead
  - In hours – Emergency Medicine Consultant
  - Out of hours
    - Up until 01:00 usually Emergency Medicine ST3 or equivalent
    - When no ST3 or equivalent in the department, Surgical Middle Grade – The duty Surgical Middle Grade on call will be notified through the daily Hospital @ Night meeting when they are taking over TTL duty.
    - The on-call EM consultant **will be informed of any trauma call**, and unless clearly not needed attend within 30 minutes

- Airway Team
  - Anaesthetic/ICU
    - Bleep holders 011 and 013 will attend
    - In hours Duty consultant (bleep 004) will arrange consultant attendance
    - Out of hours Consultant anaesthetist within 30 minutes.
  - ODP

- Doctor 1
  - Surgical Middle Grade or SHO
- Doctor 2
  - Emergency Medicine Doctor
- Nurse 1 & 2
  - ED Nursing staff
- Scribe
  - ED HCSW or Nurse

T&O registrar is available within 30minutes and will attend if deemed necessary by the TTL

(Appendix 3 – opens in a new tab -provides detailed description of the major trauma service in the Trauma Unit)

Radiology
There is a resident CT radiographer within the TU 24/7 who receives notification of Trauma team activation by switchboard in order to anticipate imaging requests and ensure scan availability.

It is the responsibility of the CT radiographer to arrange image transfer to the MTC where need is indicated by imaging findings/at the request of the local trauma team leader. Health Board Radiologists provide the full report within 60 minutes. Out of Hours the service is supported by ELR, who offer a provisional report within 15 minutes, followed by a full report within 60 minutes.

Image Transfer

Please see link for Image Sharing guide, staff should be encouraged to follow this guide. (Clinical Image Sharing).

Rural Trauma Facilities Trauma Team Response
As a minimum, the following staff must be immediately available at any trauma call within the Emergency Department of a Health Board Rural Trauma Facility:

- Emergency Medicine Doctor
- Emergency Department Nurse
- Anaesthetist/Intensivist
- ODP/Anaesthetic Nurse
- Health Care Assistant

In the event of a Paediatric Trauma call, when available at an RTF (24hr in BGH, daytime only WGH) the following team members will also attend;

- Senior paediatric doctor (Registrar/equivalent or above)
- Paediatric nurse

Further support will be available from the non-resident on-call surgical, orthopaedic teams and non-resident anaesthetist, all of whom should be notified of the trauma call activation.

Training
The Health Board will support the training of staff at sites designated as Rural Trauma Facilities in order to maintain a response for the resuscitation and stabilisation of patients who are too critically unwell to be transferred directly to a Trauma Unit/Major Trauma Centre or who are not attended by an advanced pre-hospital team capable of undertaking sufficient stabilisation.

In order to achieve this the Health Board will:

- Ensure access for Rural Trauma Facility staff to the Major Trauma Network education and training programme. The Health Board encourages a representative from the Rural Trauma Facilities to engage with the Major Trauma Network education and training group.

- The Health Board expects maintenance of trauma resuscitation skills for its staff who may encounter major trauma as part of their work, even if rarely. To this end the Health Board will support attendance for initial training and maintenance of competency/certification currency in the following courses. This will necessitate the attendance at courses run out-with Hywel Dda.
    - Advanced Trauma Life Support Course (ATLS)
    - The European Trauma Course (ETC)
    - Trauma Resuscitation Education and Training Sessions (TREATS)
    - Wales Trauma Team Training (Tim Trawma Wales)
    - Advanced Trauma Nursing Course (ATNC)
    - Trauma Nursing Core Course (TNCC)

Whilst the Health Board commits to support staff in allowing attendance at these courses for development and skill maintenance, it is the responsibility of individual staff members to book and attend such courses.

It is strongly advised that, once basic trauma skills have been attained, ongoing training includes a multidisciplinary team approach (as offered in the ETC, Tim Trawma Wales and TREATS courses).

- Nurse competencies
    - There are specific standards for competencies of Emergency Department Nursing Staff in relation to trauma, as described in the National Major Trauma Nursing Group (NMTNG) document "Nursing and Allied Professionals Competencies in the Emergency Department"(3) – opens in a new tab. Many of these competencies can be gained from the trauma courses described above, but there are components that can be achieved through local or individual learning. The document provides a matrix to evidence competence attainment. The TU would, at all times, have Level 2 qualified member of the nursing team on duty.
    - Rural Trauma Facility departments are expected to and will be supported in:
        - Ensuring all nursing staff within the department are working towards Level 1 competencies.
        - Ensuring all nursing staff working within the department for > 3 years are working towards Level 2 competencies.
    - Departmental clinical/educational leads must ensure a record of competencies is maintained using the NMTNG document.
    - Health Board Nursing Development leads will support departments with this work.

Organisational support

In order to maintain the ability to respond to a patient requiring resuscitation and stabilisation as a result of major trauma, the following will be maintained at Rural Trauma Facilities:

- 24 hour medical staffing of Emergency Departments
- 24 hour surgical and orthopaedic cover
- 24 hour anaesthetic and critical care cover
- 24 hour access to radiology, including CT scanner
- 24 hour access to an emergency theatre and theatre team.

Whilst these stipulations to some extent mirror the Trauma Unit standards, strict adherence to the details of the standards are not mandated (e.g. specific timescales for response of staff groups).

Major Trauma Team:

Clinical Lead for Major Trauma - 1 session per week will be allocated within the job plan of Dr Stuart Gill to undertake the role of Clinical Lead across the Health Board. This will be supported by nominated Lead's at each of the RTFs.

Major Trauma Co-ordinator(s) and Rehab Co-ordinators

- The 1.8 WTE Hywel Dda Trauma Co-ordinator(s) & 2.0 WTE Rehab Co-ordinators will maintain an overview of all trauma patients from/within the Health Board including all sites, not limited to the Trauma Unit
- It is their role to facilitate discussions and logistics regarding patient transfer where required
- They will identify delayed diagnosis of moderate/severe injury patterns and actively seek opinions from clinicians regarding ongoing management plans, as well as flagging these cases for review.

Major Trauma Team Structure.docx

Clinical support

A Consultant Emergency Medicine post will be maintained at the Rural Trauma Facilities.

Not all Rural Trauma Facilities have 24/7 Emergency Medicine Consultant provision. An Emergency Consultant is best placed to provide trauma team leadership and critical decision making. As such the Health Board will provide 24/7 access to an Emergency Medicine Consultant and Consultant with special interest in trauma (through the Network).

This will be achieved through:

- 24/7 access to the Health Board Trauma Unit Emergency Medicine Consultant on call in the designated Trauma Unit
- 24/7 access to a Major Trauma Network supported consultant with expertise in the management of major trauma – the Trauma Team Leader at the Major Trauma Centre.

EMRTS

The Health Board expects assistance from EMRTS in the stabilisation and timely transfer of patients to definitive care. To this end EMRTS team members attending patients within the Health Board's facilities will be integrated into the trauma team. Their practitioners have significant experience and expertise in the transfer of unstable patients. The benefit of this resource is to be maximised by Health Board Staff.

A trauma call pre-alert containing information suggesting an unstable patient is on route should automatically trigger emergency department staff to alert EMRTS. Decision to attend will ultimately rest with EMRTS, but early notification will facilitate a prompt response when indicated. The trauma desk is the point of contact for such requests.

Triage decisions and pathways

Decision making and pathways are more completely described in the Hywel Dda Rural Trauma Facility Major Trauma Procedure document.

In outline:

- Patients meeting criteria for transfer to a Trauma Unit or Major Trauma Centre as per Trauma Network agreed policy (SWTN P01 - MTC Acceptance policy – opens in a new tab) and guided by the principles of the Trauma Network Pre-Hospital Trauma Triage Tool and Trauma Team Activation Criteria (SWTN P03 & P04 – opens in a new tab) will be transferred from a Rural Trauma Facility Emergency Department to Trauma Unit/Major Trauma Centre Emergency Department as appropriate.

- The first point of contact is the Major Trauma Desk, who will facilitate discussion with the Trauma Team Leader at the Major Trauma Centre.

- It is accepted that some patients who have suffered an injury meeting the definition of moderate/major trauma may not be recognised as such immediately, and may be admitted to an inpatient bed at a Rural Trauma Facility. When the full extent of injuries are elucidated, and the patient is considered as having suffered injuries in keeping with the definition of major trauma a consultation with the Trauma Team Leader at the Major Trauma Centre should be undertaken. If the patient is not for admission to the Major Trauma Centre but requires the services provided in the Trauma Unit a referral to the appropriate specialty should be made, facilitated by the Major Trauma Co-ordinator.

Elderly patients

Trauma in the older population is recognised as a significant health issue. Relatively low energy mechanisms of injury can result in significant and life threatening injury. However, the ISS as a tool for identifying moderate and major trauma is relatively blunt, and a subset of older patients with an injury pattern generating an ISS of 9 or more do not have significantly life threatening injuries requiring specialist intervention. Further, the older population may be served better by being cared for closer to home.

The Silver Trauma Triage Tool (SWTN P0 3 – opens in a new tab) will be used in the pre-hospital environment, and the Trauma Team Activation criteria (SWTN P04 – opens in a new tab), augmented by the additional resources and diagnostics available.

Commonly seen injuries in this subset include combinations of the following injuries:

- Stable pelvic injuries
- Frailty fractures of the vertebral column
- Simple limb fractures
- Neck of Femur fractures where combined with another skeletal injury

The ability to care for such patients will be maintained at Rural Trauma Facilities, supported by Orthopaedic teams and Consultants in Orthogeriatric Medicine. Advice on any additional complexity or uncertainty about eligibility for Major Trauma Centre care should be sought from the Trauma Team Leader at the Major Trauma Centre, in line with referral pathways set out in the MTC Acceptance Policy (SWTN P01 – opens in a new tab).

Elderly patients who should be transferred where this is not immediately apparent on initial presentation often include but are not limited to:

- Multiple rib fractures
- Delayed presentation of intracranial injury
- Unstable vertebral injuries without neurological signs

These patients should be discussed with the Major Trauma Centre Trauma Team Leader to facilitate decision making regarding ongoing care and transfer.

Local Policy links can be found here:
Rib Fracture Decision Making Tool HDUHB, Rib Fracture Management Guideline HDUHB – opens in a new tab

Repatriation and Rehabilitation

Rehabilitation Co-ordinator
The Clinical Director for Therapies is the Health Board Lead for Major Trauma Rehabilitation. The TU has a rehabilitation coordinator service Monday to Friday, for patients repatriated to the TU, other hospital sites and community. Where possible, repatriated patients will have dedicated therapy input from therapists who will be responsible for coordination and communication regarding the patient's current and future rehabilitation needs.

Rehabilitation Consultant
The TU has access to four sessions of a rehabilitation consultant per week to undertake an outpatient clinic, MDT meetings and ward reviews.

If significant or complex rehabilitation is required locally, the patient will return to Glangwili Hospital, where there will be regular input from the Rehabilitation Consultant into the management of repatriated patients.

Rehabilitation Prescriptions
All trauma patients receive an initial rehabilitation needs assessment and review within 24 to 72 hours of admission to the hospital. For patients who are repatriated from the MTC, the Rehabilitation Coordinators will lead on monitoring, reviewing and updating the rehabilitation prescription, in liaison with the nominated therapy team.

The delivery of specialist care in a Major Trauma Centre, where expertise in the management of major trauma is highest, is of clear benefit to patients. However, once the need for intensive specialist input is no longer required it is important for patients and families that care is provided closer to home.

There is also limited capacity in the Major Trauma Centre, and in order to maintain availability of services and bed spaces for patients acutely requiring these services, pathways are required to ensure the prompt repatriation of patients to their own Health Board.

The Health Board is signed up to the Automatic repatriation policy (SWTN P02 – opens in a new tab). As there is an automatic acceptance policy for patients going into the Major Trauma Centre, patients will be automatically accepted back to the referring Health Board once deemed ready for discharge from the Major Trauma Centre in line with the South Wales Trauma Network Automatic Repatriation Policy (SWTN P02 – opens in a new tab).

There will be a requirement of ongoing rehabilitation for these patients and some will require ongoing medical treatment in an acute hospital.

In order to streamline initial repatriation and to ensure best access to visiting Rehabilitation Consultants, those patients requiring significant ongoing inpatient care will be repatriated to the Trauma Unit in the first instance. Where the requirement is predominantly reablement and/or patients are awaiting packages of care prior to discharge to the community (i.e. Level 3 rehabilitation services) repatriation to the hospital closest to their home is more appropriate.

General patient groups being re-patriated:

1. Requirement for ongoing medical specialty input and Level 2b rehabilitation needs. Despite patients with Level 2b rehabilitation needs being repatriated, there is no Level 2b service in place in terms of environment/facilities and staffing.

2. Awaiting bed space at a specialist Rehabilitation Unit (Level 1 or 2a) – Rookwood/Neath Port Talbot

3. Predominantly reablement/rehabilitation needs only and/or awaiting a package of care for discharge to the community (Level 3)

Repatriation will be co-ordinated by the Trauma Practitioners and Rehabilitation Co-ordinators, taking guidance from the principles below and referring to Rehabilitation Consultant/Clinical Lead for Trauma as required. See Appendix 2 (opens in new tab) - South Wales Trauma Network – Automatic Repatriation Process Map.

Principles for Repatriation
Trauma Practitioners and Rehabilitation Co-ordinators will be notified via email and the Major Trauma Centre major trauma database about admissions of patients from the Hywel Dda area, their expected discharge date and expected needs at discharge soon after admission to the Major Trauma Centre.

The Trauma Practitioners and Rehab Co-ordinators will use this information to liaise with bed management teams (referred to as Patient Access Teams (PAT) in SWTN Automatic repatriation policy (SWTN P02 – opens in a new tab) and highlight any future repatriations at the earliest opportunity in order to streamline the process and limit barriers to transfer when the patient is ready for discharge from the Major Trauma Centre.

Patients will return to Hywel Dda within 24 hours of final notification from the specialist centre that they are suitable for repatriation. This requires the Trauma Practitioner and Rehabilitation Co-ordinator to maintain close monitoring of the progress of patients from Hywel Dda being treated at the Major Trauma Centre through liaison with the Practitioners/Co-ordinators at the Major Trauma Centre. The Major Trauma Network trauma database will be the main portal for this monitoring and will include an estimated discharge date with likely ongoing care requirements. It will also require early communication and close working with local bed-management teams.

Patients falling under 1 and 2 above:

- Information will be reviewed by the Rehabilitation Co-ordinators. Where there is significant rehabilitation need whilst an inpatient in a Hywel Dda hospital, likely requiring rehabilitation consultant input, the patient will be re-patriated to Glangwili General Hospital in the first instance.
- Upon arrival assessment will be made by the local supervising consultant who will liaise with the Rehabilitation Consultant and Rehabilitation Team as required through the Rehabilitation Co-ordinator. Where the patient lives closer to another hospital in the Health Board and where deemed suitable (i.e. not requiring regular in-person input from the rehabilitation consultant or specialist rehabilitation team) and where an appropriate local specialty team exists to care for them, the patient should be transferred to the hospital closest to their home. This again should happen within 24 hours.

For patients falling under 3 above:

- Where possible patients should be transferred directly to the most appropriate facility closest to their home.
- This should include consideration of both acute hospital and community beds.
- In Carmarthenshire, especially for elderly patients, Prince Phillip Hospital should be considered for the repatriation of patients falling into this category, especially the older patient.

Accepting Specialty Team upon Repatriation

In order to streamline the timely repatriation of patients to the health board, patients falling into the broad categories of main injury requiring ongoing care will return under the care of specialties as outlined below:

Traumatic Brain Injury

Given the lack of a specific local specialty experienced in the management of patients with traumatic brain injury at any Hywel Dda hospital repatriating this group of patients is a particular challenge. There is a requirement for multi-disciplinary input to their rehabilitation including regular access to a Consultant in Rehabilitation Medicine. For this reason these patients will be repatriated to the Trauma Unit at Glangwili General Hospital and receive shared care with local clinicians and a visiting Consultant in Rehabilitation Medicine until assessed by the Rehabilitation Consultant as being ready for Level 3 rehabilitation. These patients will be transferred back under the care of the medical consultant on-call.

Musculoskeletal Injury, Including Spinal and Pelvic Injury

- Repatriated to the on-call Orthopaedic team at Glangwili General Hospital
- In-Health Board referral/transfer of care as deemed appropriate by the on-call receiving consultant in consultation with the Rehab Consultant as required.

Thoracic

- Repatriated to the on-call General Surgical Team at Glangwili General Hospital
- In-Health Board referral/transfer of care as deemed appropriate by the on-call receiving consultant in consultation with the Rehab Consultant as required.

Abdominal/Vascular Injury

- Repatriated to the on-call General Surgical Team at Glangwili General Hospital
- In-Health Board referral/transfer of care as deemed appropriate by the on-call receiving consultant in consultation with the Rehab Consultant as required.

Special Patient Groups

Patients with Tracheostomy

The majority of patients repatriated with a tracheostomy in-situ will have a well-established stoma tract. Where exceptionally a patient has been repatriated early (less than 10 days since stoma formation) they should be initially repatriated to the Intensive Care Unit in Glangwili General Hospital.

The remainder of patients (still a small group), will be repatriated as per their main injury under the appropriate inpatient team, but will need to be accommodated on a ward with nursing staffing trained in tracheostomy care. This will be facilitated by staff trained in tracheostomy care on Merlin ward – should the patient needs dictate that they require inpatient care on an alternative specialty ward then staff skilled in tracheostomy care will be deployed to support and train staff on those wards.

The Older Patient

Older patients are more likely to comprise the group of patients described in group 3 above who are repatriated not needing any specialty input as to the ongoing management of their original injury, but who need general rehabilitation/reablement input and/or are awaiting social care arrangements.

Patients in this category should be repatriated under a Care of the Elderly physician.

For patients in group 3, this will be to the hospital closest to their home.

Where appropriate, and co-ordinated by the Rehabilitation Co-ordinator/Trauma practitioners a nominated specialty consultant should be named as the first point of contact for advice on any issue that may occur relating to the original injury.

NOTE

Patients admitted to the Trauma Unit acutely (i.e. those not transferred) will be admitted under inpatient teams broadly on the same terms as outlined for repatriation.

The only exception being that brain injured patients not requiring transfer or critical care input will remain under the care of the Emergency Medicine Consultant, accommodated on CDU. Patients with ongoing requirements for inpatient care thereafter will be transferred under the care of the medical team on call. The Trauma Practitioner and Rehab Co-ordinators will ensure appropriate support and advice is available for the ongoing care and discharge planning for these patients.

Escalation

The Health Board is signed up to the All Wales Repatriation Policy – opens in a new tab, including the sub section specifically relating to Major Trauma Network patients (SWTN P02) – opens in a new tab.

This in-house escalation procedure is in line with the national policy and is designed to anticipate/prevent escalation via external organisations.

A major principle within the All Wales Policy is that major trauma repatriations will be prioritised over elective admissions, which the Health Board agrees to.

Notification of transfers is not expected on a Saturday or Sunday, but notifications received on a Friday will still be expected to occur over the weekend.

This section deals with in-house escalation both for patients returning from the Major Trauma Centre or for transfer within the Health Board.

1. Adequate bed capacity; to be escalated by the Trauma Practitioner to the site manager where it appears likely that a bed will not be available within 24 hours. If it is anticipated that there will be further delay up to or beyond 48 hours the Site Manager will escalate to the Chief Operating Officer (Executive officer on-call out of hours).

2. Resistance to acceptance by designated team; to be escalated initially by the Trauma Co-ordinator to the Clinical Lead for trauma. Thereafter through the Deputy Medical Director, Acute Hospital Services Assistant Medical Director for Acute Hospital Sites followed by Medical Director in the event of ongoing conflict.

3. Nursing competency; where there is difficulty allocating appropriate nursing cover (e.g. tracheostomy patient, spinal injury with bladder/bowel care needs) the Trauma practitioner will escalate to the Hospital Head of Nursing, who will in turn escalate to the Nursing Director in the event of not achieving resolution

(Out of hours for 2 and 3 this will be site manager and Executive officer on call respectively).

Responsibilities

The responsibility of the Health Board to contribute effectively to the Major Trauma Network, including the appropriate resourcing of its hospitals and support teams (including Trauma Practitioners, Rehabilitation Co-ordinators and TARN co-ordinator) rests with the Executive Team of the Health Board.

Chief Executive

- Ensure that the Health Board signs up to and is resourced to follow the pathways set out in this policy, in line with the South Wales Trauma Network Policies, Procedures and Guidelines

Director of Operations/Chief Operating Officer/On call Executive Director

- Ensure the contents of this policy are followed
- Take appropriate actions when constraints preventing adherence to the policy are highlighted. Particularly relating to hospital capacity in relation to the automatic repatriation of patients (Section 9 – Escalation – point 1). To include, but not limited to the prioritisation of repatriation of appropriate patients over elective admissions.

Medical Director/Deputy Medical Director, Acute Hospital Services

- Support the trauma lead in the application of this policy
- Resolution of clinical issues preventing the pathways outlined in this policy and those of the Major Trauma Network being followed where these cannot be resolved by Trauma Lead/Hospital Directors
    - Acceptance of appropriate patients into Major Trauma Centre/Trauma Unit with specialist services
    - Acceptance of repatriated patients to teams outlined in this policy

Hospital Directors

- Support the Trauma Clinical Lead in resolving issues of acceptance of clinical responsibility for trauma patients

Clinical Lead Nurse for Site/Site Manager

- Ensure adequate staffing and resource, including level of training for Emergency Department and wards caring for trauma patients
- Overall responsibility for patient flow and appropriate ward allocation for trauma patients in line with this policy
- Resolve issues of skill mix for the appropriate nursing care of trauma patients

Clinical Lead for Major Trauma

- Maintain links with the Major Trauma Network, ensuring the content of this policy and related documents align with those of the network
- Disseminate information from the Trauma Network within the Health Board
- Undertake initial problem solving relating to issues with adherence to this policy
- With the assistance of TARN co-ordinator, Major Trauma Practitioners and Rehabilitation co-ordinators, monitor the Trauma Unit and Health Board's performance in relation to the management of major trauma in line with the Major Trauma Group Terms of reference, in summary;
    - Manage major trauma related Morbidity & Mortality
    - Monitor TARN data
    - Co-ordinate major trauma quality improvement work

Committees/Groups established, and Major Trauma Network

- Major Trauma Network
    - Operational delivery network hosted by Swansea Bay UHB – overall responsibility for management of the network and co-ordination of Network performance monitoring, including quality improvement programmes, fed in to the Health Board through the HDUHB Trauma Quality Improvement Group

- Major Trauma Quality Improvement Committee
    - As outlined in the group terms of reference undertake monitoring of Trauma Unit and Health Board performance in relation to the management of major trauma
    - Respond to national guidance, co-ordinate the adoption of Network guidance, procedures, policies and quality improvement initiatives

Trauma Practitioners and Rehabilitation Co-ordinators

- Weekly monitoring of major trauma patients within the Health Board and those admitted to other hospitals for specialist major trauma care through contact with other practitioners and co-ordinators throughout the network and via the MTC dashboard.
- Support staff with training and day to day specialist management needs (medical, nursing and rehabilitation) for major trauma patients

General Manger Scheduled Care

- Ensure adequate resourcing of the major trauma team and support their delivery of care in line with this policy

Service Manager – Trauma & Orthopaedics

- Provide day to day line and business management of the major trauma team (Trauma Lead, Trauma Practitioners, Rehab co-ordinators, TARN co-ordinator)

Department Heads

- Departmental and Clinical leads of departments contributing to the management of major trauma patients, as listed in section 3 (Scope) will disseminate this policy to their staff and ensure adherence to its contents within their teams

Monitoring

The Clinical Lead for Major Trauma has overall responsibility for monitoring the adherence to this policy and escalation where pathways are not, or cannot be followed. Where pathways are not followed Trauma Practitioners and Rehabilitation Co-ordinators will undertake initial trouble shooting. Where this cannot achieve resolution the issue will be escalated to the Clinical Lead for Major Trauma. If an issue remains unresolved this will be escalated through the Deputy Medical Director, Acute Hospital Services and on to the Medical Director as required.

The clear aim of the policy is to improve outcomes for patients suffering major trauma. Patient outcomes will be monitored and reported on using the TARN dataset.

References

1. Moran CG et al. (2018). Changing the System- Major Trauma Patients and Their Outcomes in the NHS (England) 2008-17. EClinical Medicine. The Lancet.
2. Quality Surveillance Team (2013). Major Trauma Services Quality Indicators. NHS England.
3. National Major Trauma Nursing Group (2016). Levels 1-3 adults and Paediatric Emergency Trauma Nurse/AHP Educational and Competency Standards. Accessed on line at https://www.tarn.ac.uk/content/downloads/53/Nurse%20competency.pdf

4. British Society of Rehabilitation Medicine Working party. (November 2018). Specialist Rehabilitation in the Trauma Pathway: BSRM core standards. British Society of Rehabilitation Medicine. London. Accessed online at https://www.bsrm.org.uk/downloads/bsrm-core-standards-for-major-trauma-19.11.2018-clean-for-web.pdf October 2019.

Appendix 1 - South West Wales Major Trauma Tool

South Wales Major Trauma Triage Tool

Applies to South Wales, West Wales and South Powys (v2.8SM/GL)

Apply this triage tool to all patients suspected to have suffered major trauma

Yes to ANY of the below criteria - contact the trauma desk on 01633 293386

(talkgroup 442 if unable to contact the trauma desk by phone)

Any patient with airway compromise or catastrophic haemorrhage – Pre-alert to nearest Emergency Department

1.Measure vital signs.

(Use JRCALC abnormal values for children)

Respiratory rate.

- <10 or >29 breaths per minute.

Systolic Blood.

- Sustained Systolic Blood Pressure <90 mmHg or absent radial pulses.

Glasgow Coma Score.

- Motor score 4 (flexing to pain) or less.

NO

2. Assess Anatomy of Injury

Penetrating injuries if shocked or requiring haemorrhage control

Significant chest wall trauma.
(e.g. Deformity, flail Chest).

Two or more proximal long bone fractures (i.e femur, tibia and humeral shaft-**not neck of femur/humerus)**

Crushed/ De-gloved/ mangled/ pulseless limbs.

Amputation above wrist or ankle.

Suspected Major Pelvic fractures.
(If active bleeding is suspected from a pelvic fracture following blunt high-energy trauma)

Open or depressed skull fractures.

Base of Skull fractures.

Spinal trauma suggested by new, abnormal neurology.

NO

3. Assess Mechanism of Injury.

Falls.

- Adult > 20 feet (6 metres)
- Child >10 feet (or 2 x height of child).

High mechanism RTC.

- Significant cabin intrusion.
- Ejection (partial or complete) from motor vehicle.
- Death in same passenger compartment.
- Available information consistent with high risk of injury.
- Motor Vehicle vs Pedestrian or cyclist > 20mph.
- Motorcycle crash > 20 mph.

Non motor vehicle incident

- Large animal incident (collision/fall/trampled)

NO

4.Special considerations.

Older Adults.

- If over 65 complete the **Silver Trauma Triage Tool** (see reverse).

Children

- Higher potential for injury.

Any clinical concern

Anticoagulation and Bleeding Disorders

- Patients on anticoagulation medication (e.g. Warfarin, Apixaban Rivaroxaban) are at a higher risk and need discussion with trauma desk
- Head injuries are particularly at risk.

Major Burns

Pregnancy > 20 weeks

If trauma tool negative but you still have a clinical concern contact the trauma desk for advice.
If trauma tool negative and no ongoing clinical concern convey to **nearest** emergency department
Patients ≥65 and trauma tool negative must have a Silver Trauma Triage Tool assessment

HYWEL DDA UNIVERSITY HEALTH BOARD

A	T	M	I	S	T
Age and sex	Time of Incident	Mechanism	Injuries	Signs and Symptoms	Treatment Given

Silver Trauma Triage Tool

Criteria: 1. Patients suspected of suffering major trauma

2. Patients who have had the major trauma tool applied and are negative

3. Patients over 65 years of age

Yes to any of the below then contact the Trauma Desk Clinician on 01633 293386

Physiology

Sustained SBP <110mmHg in the presence of injury (excluding minor injuries)

Anticoagulant medication in the presence of injury

Anatomy

Injury to 2 or more body areas (excluding injuries distal wrist/ankles)

Suspected fracture to shaft of femur

Open fracture to wrist or ankle

Mechanism

Fall down 3 or more steps

Pedestrian vs car/cycle

Caution:Older adults with frailty: low level falls (ground level) might result in severe injury, especially alongside degenerative conditions

Tranexamic acid should be administered as **soon as possible** following trauma, **ideally within the first hour.** The indications for Tranexamic:

- For all patients aged ≥1 with **Time Critical** injury where significant internal/external haemorrhage is suspected.
- Traumatic cardiac arrest

Major Trauma Centre

University Hospital for Wales Cardiff CF 14 4XW

Trauma Units

Glangwili Hospital Carmarthen SA31 2 AF

Morriston Hospital Swansea-SA6 6NL

Princess of Wales Bridgend- CF311RQ

Prince Charles Hospital Merthyr-CF479DT

Grange University Hospital NP44 2XJ

Local Emergency Hospital

Royal Glamorgan Hospital Llantrisant CF72 8XR

Rural Trauma Facility

Bronglais Hospital Aberystwyth SY23 1ER

Withybush Hospital Haverfordwest SA61 2PZ

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Appendix 2 - South Wales Trauma Network – Automatic Repatriation Process Map

Identification of patients' ongoing needs

Patient declared medically fit for discharge

MTC MTP to notify MTC PAT

- MTC PAT to contact TU PAT
- MTC MTP to contact TU MTP

Receiving MTP to allocate speciality & consultant against pre-allocation list

MDT to MDT & clinical handover of patient

TU PAT informs MTC PAT bed available

Receiving ward notified

- Proceed with transfer ASAP
- Receive transfer confirmation from WAST

Patient Transferred

EDD entered onto Repat Database (Link C&V database)

Upload data & time onto Rept database

WAST transport to be ordered early

Speciality & consultant details uploaded onto repat database

Documentation prepared incl.
- Discharge Summary
- Rehab Prescription

(update patient centred tool)

Discussion between MTC & TU MDT's (incl. MTP & RC)

Agreement of rehabilitation needs (based on rehab prescription)

Decision signed off by consultant

Rehab consultant to counter sign off for patients with specialist requirements

MTC MTP discuss plans with patient/ carer/family as appropriate

Appendix 3 - Trauma Unit Service Operation

1. With the commencement of the South Wales Trauma Network (SWTN) Glangwili Hospital became a Trauma Unit (TU) (in the period prior to the anticipated build of a new Hospital in South Hywel Dda). This section of the policy provides a framework within which Glangwili Hospital will operate as a TU as part of the SWTN. This policy will be reviewed annually, as part of the SWTN Peer Review process.

2. **Philosophy of Care**

   Trauma Units will aim to achieve the minimum standards set out in national guidance. The objectives of these standards are to:

   - Ensure consistent standards of care in TU's;
   - Rapidly identify patient needs and transfer to a Major Trauma Centre (MTC) in a timely fashion when required;
   - Participate in the quality improvement and governance programme of the network;
   - Provide appropriate care and contribute to early rehabilitation of patients sent back from the MTC (the 'landing pad') with rehabilitation plans (incl. patients discharged home).

   A Major Trauma group exists in Glangwili with responsibility for meeting the service standards of a TU and supporting the function of the Rural Trauma Facilities (RTF) within the network.

3. **Trauma Group Membership**

Core Members
Hywel Dda UHB Major Trauma Clinical Lead (Chair)
Trauma Unit Lead Emergency Medicine Consultant (Vice Chair)
TARN Coordinator
Trauma Unit
Trauma Practitioner
Rehabilitation Co-ordinator
Resuscitation Officer
Rehabilitation Medicine Consultant
Emergency Medicine Lead Nurse for TU
Specialty Consultant Representatives for: • Trauma & Orthopaedics • General Surgery

• Anaesthetics & Critical Care • Paediatrics • Radiology • Transfusion/Haematology
Trauma Group Management Lead/Scheduled Care Management representation
Major Trauma SRO
Rural Trauma Facilities
Emergency Medicine Lead for each RTF/Hospital Director for each RTF
Emergency Department Lead Nurse/Hospital Head of Nursing

4. Function of the Service in the Trauma Unit

The Trauma Quality Improvement Committee (TQuIC) has responsibility for the discharge of the functioning of Hywel Dda as part of the trauma network. Details of the functioning of this group are contained within the TQuIC Terms of Reference, see Appendix A.

4.1 Trauma Team Leader

There is a Trauma Team Leader (TTL) of ST3 or above (Specialty Middle Grade Doctor) with an agreed list of responsibilities, available until 01:00am. After that time, there is a predefined plan for the oncall surgical middle grade to undertake the TTL role.

The TTL is available within 5 minutes of a trauma arrival, 24hrs a day 7 days a week. An Emergency Department (ED) Consultant or Associate Specialist is available within 30 minutes. The Specialty Middle Grade Doctor will lead the trauma until the ED Consultant arrives. The Consultant or Associate Specialist is called to discuss all trauma call activations by the TTL out of hours and weekends, if they are not present in the department.

The TTL will be trained in Advanced Trauma Life Support (ATLS) or equivalent and the Emergency Department is working towards having a nurse trained in ATNC for major trauma at all times. All ED Consultants and Associate Specialists who are on the on-call rota have an ATLS/ETC and APLS qualification (or equivalent).

There is a clinician and a senior sister trained in Advanced Paediatric Life Support available 24 hours a day 7 days a week for children's major trauma (Cilgerran Ward at Glangwili Hospital).

4.2 Trauma Team Activation Protocol

The network adult, paediatric and 'silver' trauma team activation protocol will be used for all major trauma calls.

4.3 Designated Specialty

All trauma patients, not transferred to the MTC, will be admitted under a designated lead specialty consultant who will be responsible for co-ordinating ongoing care. This is the same whether the patient is admitted directly to the TU or upon repatriation from the MTC (*refer to the HDUHB Trauma policy*

(899)). For patients transferred from a Rural Trauma Facility, the RTF procedure provides the process to be followed (*refer to the HDUHB RTF procedure (*HBUHB Procedure 900*)*).

4.4 Secondary Transfers of Care to the Major Trauma Centre

The Health Board is signed up to the SWTN MTC acceptance policy (SWTN P01). All major trauma patients will be assessed against this policy from TUs to the MTC.

4.5 Referral and Acceptance

The referring hospital (TU) TTL will contact the on-duty MTC TTL with details of the patient via the regional trauma desk. A rapid assessment of the patient at the TU and any critical interventions should have already taken place.

The patient will be categorised as requiring either a hyperacute or emergency transfer.

The transfer procedure must be carried out at TTL level. Full patient details including name of the referring TTL will be passed onto the MTC TTL.

The TU will be responsible for undertaking the transfer and will consider the availability of EMRTS through the regional trauma desk/air support desk.

Patients with isolated, non-time critical injury that may require further assessment and intervention at an MTC (e.g. isolated spinal fracture with spinal cord injury, haemodynamically stable isolated pelvic fractures, isolated chest wall injury requiring stabilisation i.e. rib fixation) should be referred via the Non-

Time Critical pathway direct to treating specialty. If there is a delay of >48hours then the referring team should escalate by calling the MTC TTL, as outlined in the MTC Acceptance policy (*refer to the Adult MTC acceptance policy, incl. automatic acceptance (SWTN P01)*).

5. TRANSFUSION

5.1 Transfusion Lead Clinician and Specialist Transfusion Advice

The Health Board has a Transfusion Clinical Lead and has access to the Consultant Haematologist who is available 24 hours a day 7 days a week (on-call) for transfusion advice.

5.2 Network Transfusion Protocol

The Health Board has a Major Haemorrhage Protocol for the management of massive transfusion in patients with significant haemorrhage. (503 - Major Haemorrhage Procedure – opens in a new tab)

5.3 Administration of Tranexamic acid

Patients should be administered Tranexamic acid within 3 hours of injury and receive a second dose according to network guidelines. This will be measured using TARN data and monitored through the Trauma Unit Group.

6. SURGERY

6.1 Specialty Surgical Team

The following will be available within 30 minutes of a trauma call:

- Consultant General Surgeon;
- Consultant Trauma and Orthopaedic Surgeon;
- Consultant Anaesthetist.

6.2 Trauma Theatre Capacity

The TU has access to emergency (CEOPD fully staffed) theatre 24/7, 7 days per week. Furthermore, patients requiring acute intervention for haemorrhage control, are prioritised by placing the emergency theatre on 'standby' and in order to ensure these patients are in an operating room within 60 minutes of arriving in hospital. (*Refer to Glangwili Hospital's CEPOD Standard Operating Procedure*).

There is a dedicated orthopaedic trauma list with appropriate staffing – 5.5 days per week. Outside of these hours, orthopaedic trauma is prioritised on the emergency theatre list. (*Refer to the Glangwili Hospital's Trauma List Standard Operating Procedure*).

7. NETWORK AND LOCAL TRAUMA MANAGEMENT POLICIES AND PROCEDURES GUIDELINES

The Health Board is signed up to the following SWTN clinical guidelines, available from the SWTN SharePoint Site and also on the Health Board Major Trauma Page:

- Emergency Anaesthesia (SWTN CG01)
- Emergency Surgical Airway (SWTN CG02)
- Resuscitative Thoracotomy (SWTN CG03)
- Penetrating Cardiac Injuries (SWTN CG04)
- Chest Drain Insertion (SWTN CG05)
- Analgesia for Rib Fracture (SWTN CG06)
- Damage Control Resuscitation (SWTN CG07)
- Abdominal Injuries (SWTN CG08)
- Pelvic Injury (SWTN CG09)
- Severe Traumatic Brain Injury (SWTN CG10)
- Open Fractures (SWTN CG11)
- Compartment Syndrome (SWTN CG12)
- Vascular Injuries (SWTN CG13)

- Spinal Injury (SWTN CG14)
- Burns (SWTN CG15)
- Radiology (SWTN CG16)
- Interventional Radiology (SWTN CG17)
- Paediatric Guidelines (CG18)
- Trauma in the Older Person (SWTN CG19)
- Traumatic Cardiac Arrest (SWTN CG20)
- Femoral Fractures (SWTN CG21)
- Rehabilitation (SWTN CG22)
- Covid 19 and Major Trauma (SWTN CG23)
- Trauma Triage Tool Patient Disposition and Primary/Secondary Transfer Support – EMRTS (SWTN CG24)
- Guidance for Disposition of Pre hospital Patients - Trauma Desk (SWTN CG25)
- Acetabular Fractures and Native Hip Dislocations (Adult Major Trauma Patients) (SWTN CG26)
- Emergency Tourniquet Use in Catastrophic Haemorrhage in Limb Trauma (Adult Major Trauma Patients) (SWTN CG27)

7.1 Management of Spinal Injuries

The Health Board is signed up to the SWTN clinical guideline for protecting and assessing the whole spine (Spinal Cord Injury Care Pathway - Spinal Injury CG14) in adults and children with major trauma.

The Health Board is linked to a Spinal Cord Injury Centre (SCIC) at the MTC.

All patients should have a joint management plan formulated with the SCIC Consultant, who will be contacted within 4 hours of admission. This plan should be written in the medical records. All patients with spinal cord injury should be entered onto the national SCI database.

7.2 Management of multiple rib fractures

The Health Board is signed up to the MTC guidelines for the management of patients with fractured ribs (Analgesia for Rib Fractures CG06), and has local guidelines in place for the management of rib fractures including;

- Pain management;
- Early access to epidural;
- Access to surgical advice

7.3 Management of Musculoskeletal Trauma

There are SWTN guidelines in place for the following;

- Isolated long bone fractures; (Femoral Fractures CG21);
- Early management of isolated pelvic acetabular fractures (Pelvic Injury CG09);
- Open fractures (Open Fractures CG11);
- Compartment syndrome (Compartment Syndrome CG12).

The guidelines include:

- Accessing specialist advice from the MTC;
- Imaging and image transfer;
- Indications for managing on site or transfer to the MTC

7.4 Specialist Burns Care

Burns care is managed through the specialist burns network. The Health Board is signed up to the SWTN clinical guideline for the treatment of burns (Burns CG15), which includes the referral pathway to the specialist burns centre.

7.5 Discharge Summary

Major trauma patients (and their GP) will be provided with a discharge summary which includes the following information:

- A list of all injuries.
- Details of operations (with dates).
- Instructions for next stage rehabilitation for each injury (including braces and casts).
- Follow-up clinic appointments.
- All medications on discharge (existing and new medications).

Furthermore, the Health Board is actively engaged in developing patient held records pertaining to major trauma (incl. discharge summary and rehabilitation prescription).

8. SERVICE EVALUATIONS

The TU Group meets quarterly to ensure that Hywel Dda University Health Board delivers quality clinical outcomes for patients who suffer major trauma.

The Health Board is signed up to the reporting structure into the Operational Delivery Network (ODN) including provision of information regarding quality standards and confirmation that incidents have been reported through to the Health Boards Quality and Safety Governance Committee.

The Health Board provides TU clinical and managerial representation on the ODN clinical and operational board. Regular audit of major trauma cases is carried out adopting the network M&M structure, with lessons shared locally and with the wider network through the ODN clinical governance structure. This includes an internal review of all trauma cases with an Injury Severity Score (ISS) >15, admitted in the TU.

8.1 Trauma Audit and Research Network (TARN)

The Health Board has one dedicated full time TARN Co-ordinator, responsible for the input of data regarding all TARN inclusion trauma patients. The results of quarterly TARN Dashboard KPI are

discussed at the TU Group meetings locally and also discussed within the network structure. TARN quarterly clinical reports are distributed to all constituent teams within the network, commissioners (WHSSC) and Welsh Government teams upon request.

9.0 PROMS/PREMS

SWTN and the Value in Health team are currently working together to undertake a number of projects to support the role out of PROMS and PREMS across the network and to evaluate the use of a patient held record.

Historically TARN have supported the use of PROMS in major trauma centres and will process the questionnaires that patients do prior to discharge, and also send out a 2nd questionnaire 6 months post discharge. Working in collaboration with TARN a 12 month pilot of using PROMS across trauma units as well as the MTC is in progress. ViH have supported this project by providing funding to appoint a project support officer for 12 months and for some mobile devices.

A decision will be made following the 12 month pilot as to how then embed both PROMS and PREMS across the whole network.

ViH are also supporting a pilot of a patient held record called Neuro ProActive.

Neuro ProActive is a digital platform (web and app based) which brings together AHPs, Patients and Families to help improve patient outcomes. Neuro ProActive has been entirely self-funded built to medical device standards, the platform is compliant with all NHS Digital requirements of the 55 unmet patient needs as defined by the NIHR, Neuro ProActive directly addresses 33 (60%).

SWTN has funded the purchase of 300 licences to run a pilot for patients suffering from major trauma to establish whether this service will support patients and families following a major trauma.

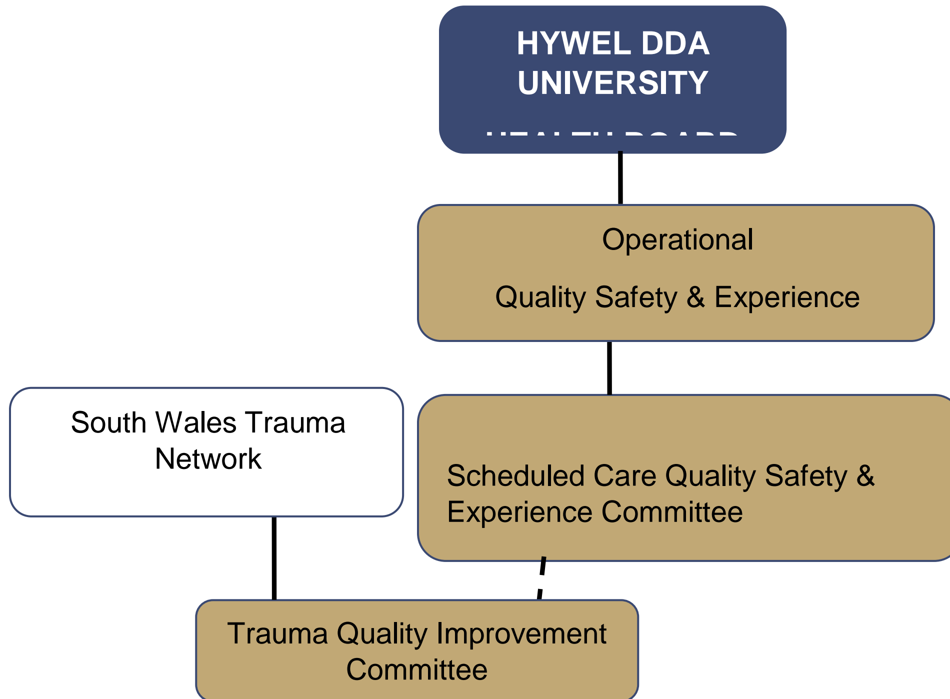
ViH has commissioned CEDAR to undertake an independent evaluation of the product to look at whether it gives tangible benefit to patients, families and staff.

Depending on the outcome of the independent evaluation, this service may be rolled out to all eligible patients within the network.

SWTN and ViH will continue to work closely together to ensure the network is providing value added care to its patients.

APPENDIX A

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Hywel Dda
University Health Board



TERMS OF REFERENCE

TRAUMA QUALITY IMPROVEMENT COMMITTEE			
Version	**Issued to:**	**Date**	**Comments**
V.01	**Trauma Quality Improvement Committee**		
V.02		12.01.2022	

1. Constitution

1.1 The Trauma Quality Improvement Committee (TQuIC) was constituted on 1st August 2020. This renamed and revised Committee takes over the responsibility for monitoring clinical governance matters and quality improvement from the previous Trauma Committee. It has responsibility for

overseeing trauma management throughout the Health Board, both in the Trauma Unit and in the Rural Trauma Facilities.

2. Membership

2.1

The membership of the Committee shall comprise:

3. Quorum and Attendance

3.1 A

Core Members
Trauma Unit Lead Emergency Medicine Consultant (Vice Chair)
TARN Coordinator (Secretariat)
Clinical Director for Therapies
Trauma Unit
Trauma Practitioner (lead for QI or deputy)
Rehabilitation Co-ordinator (lead for QI or deputy)
Resuscitation Officer
Rehabilitation Medicine Consultant
Emergency Medicine Lead for TU
Specialty Consultant Representatives for: • Trauma & Orthopaedics • General Surgery • Anaesthetics & Critical Care • Paediatrics • Radiology • Transfusion
Trauma Group Management Lead
Major Trauma SRO
Rural Trauma Facilities
Emergency Medicine Lead for each RTF/Hospital Director for each RTF
Emergency Department Lead Nurse/Hospital Head of Nursing

quorum shall consist of the Chair or Vice Chair and at least one third of the core membership, and must include:

3.1.1 One member from each professional group
3.1.2 One member representing each site (Trauma Unit and Rural Trauma Facility)
3.1.3 One member representing each speciality

3.2 For the Trauma Unit specific operational issues, mandated representation from Rural Trauma Facilities will be omitted.

3.3 Rural Trauma Facilities specific operational issues will generally be for noting/advice by the TQuIC, action will need to be through local site groups.

3.4 Appropriate representation from other specialties will be required for decisions on specific items, as specified by the Chair.

3.5 The Committee may also co-opt additional independent 'external' experts from outside the organisation to provide specialist skills or advice.

3.6 Any senior manager of the Health Board may be invited to attend by the Committee where it is felt appropriate to do so.

3.7 The Committee may ask any or all of those who normally attend but who are not members to withdraw to facilitate open and frank discussion of particular matters.

4. Purpose

4.1 The purpose of the TQuIC is to provide assurance that there are reliable mechanisms within the Health Board to respond and treat patients that present with serious injuries.

5. Operational Responsibilities

5.1 The Committee will ensure that:

5.1.1 Strategic direction is provided in achieving the National Quality Indicators for Trauma Units.

5.1.2 The Rural Trauma Facilities within the Health Board are supported in their role by ensuring the requirements stipulated in the Rural Trauma Facility Major Trauma Procedure (900) and the Major Trauma Policy (899) are met.

5.1.3 Communication is maintained with the South Wales Trauma Network, including the acceptance and enactment of the guidelines and policies agreed through the Network, and their communication to relevant clinical teams within the Health Board.

5.1.4 SWTN policies and documents (including Network guidelines) are reviewed and local adoption managed through the TQuIC. This will include assessment of ability to implement locally, escalation of changes required to local service provision and pathways, recording of mitigations where implementation is not entirely possible and maintenance of record on a risk register.

5.1.5 Trauma activity undertaken by the Health Board and standards of care provided is monitored through:

5.1.5.1 Review of the tri-annual TARN reports

5.1.5.2 Co-ordination of quality improvement activity based on this monitoring in line with the South Wales Trauma Network Trauma Unit M&M Process guidelines. Namely:

- Cases potentially requiring M&M discussion will be identified at the weekly Core Trauma Group meeting
- Hold monthly multidisciplinary open forum M&M meetings
- As a standing agenda item at quarterly meetings coordinate the response to actions identified at M&M meetings and through incident reporting – acting on "Opportunities for Care Improvement" (OCIs)

- Escalate/report issues through the Trauma Network at the Quarterly Operational Delivery Network (ODN) Clinical Quality Review meetings – a representative, usually the Trauma Lead, will attend the Network Quarterly CG/QI meetings (Time Table of meetings in Appendix)

5.1.6 An assurance report is provided to the Health Board's Operational Quality, Safety and Assurance Sub-Committee, at regular intervals, on the quality and safety elements of the Trauma Network.

5.1.7 Performance and/or assurance reports are provided to other Health Board Committees as required.

6. Standing Agenda Items

6.1 The standard agenda for the TQuIC will be: (as per Network TU M&M Guidelines):

- Apologies
- Declarations of interest
- Minutes of last meeting
- Table of Actions and Matters Arising
- New OCIs identified at recent M&M meetings
  - Recap OCI, latent and active failures
  - Discussion of proposed remedies
  - Approval of relevant risk register entry
- OCI's from other sources:
  - DATIX
  - RCAs
  - Corporate debriefs
- Review of trauma risk register (including entries relating to older OCIs)
- TARN dashboard
- Other reports and data, e.g. PROMS/PREMs, reports required for submission to ODN.
- Trauma QI projects
- RTF specific operational actions
- TU specific operational actions
- AOB

7. Reporting

7.1 The Committee will report dually to the South Wales Trauma Network Operational Delivery Network and through regular assurance reports to the Health Board's Operational Quality, Safety and Experience Sub-Committee.

7.2 Issues shall be escalated/reported through the Trauma Network at the Quarterly Operational Delivery Network (ODN) Clinical Quality Review meetings – a representative, usually the Trauma Lead, will attend the Network Quarterly CG/QI meetings.

7.3 Reporting to QSEAC/OQSEC will focus on patient quality and safety outcomes.

Performance and/or assurance reports will be provided to other Health Board Committees as required, with performance oversight included in the Health Board's performance management arrangements, including the IPAR report.

7.4 The Chair shall ensure appropriate escalation arrangements are in place to alert any relevant Groups, Sub-Committees or Committees of the Health Board of any urgent/critical matters that may compromise patient care and affect the operation and/or reputation of the Health Board.

8. Frequency of Meetings

8.1 The Committee will meet quarterly. A schedule of meetings aligned with TARN reports and Network Governance meetings is provided at Appendix 1.

8.2 The Chair of the TQuIC, in discussion with the Secretary, shall determine the exact time and the place of meetings and procedures of such meetings.

9. Accountability, Responsibility and Authority

9.1 The Committee is directly accountable to South Wales Trauma Network Operational Delivery Network for its performance in exercising the functions set out in these terms of reference, and provides an assurance on a regular basis through the Operational Quality, Safety and Experience Sub-Committee to the Quality, Safety and Experience Assurance Committee.

9.2 The TQuIC shall embed the Health Board's vision, standards, priorities and requirements, e.g., equality and human rights through the conduct of its business.

10. Secretarial Support

10.1 The TARN Co-ordinator will provide secretarial support to the TQuIC.

11. Review Date

11.1 These terms of reference and operating arrangements shall be reviewed on at least an annual basis by the TQuIC.

APPENDIX 1

Schedule of Meetings and TARN Data Release

Local TQuIC	**Network CG/QI**	**TARN Dashboard Reports**	**TARN Clinical Reports**
May	June	Q3 Early April	R1 Late March
August	September	Q4 Early July	R2 Late August
November	December	Q1 Early October	R3 Late November
January	March	Q2 Early January	