NHS
University Hospitals
Coventry and Warwickshire
NHS Trust

Major Trauma Rehabilitation Pathway

Major Trauma Service Inpatient Rehabilitation Team:

- Specialist Rehabilitation Medicine Consultant. There is identified major trauma assessment and review time Monday to Friday.
- 1 WTE Major Trauma Therapy Lead.
- 3.5 WTE Major Trauma Rehabilitation Coordinators.

Pathway

Major trauma admissions are initially reviewed and key worked. Their management needs are coordinated by the Acute Trauma Coordinators. This information is recorded on the UHCW Major Trauma Database, which holds details on the mechanism of injury, injuries, current management plans, and relevant medical history. It also tracks the patient's day-to-day progress. The Prescription for Rehabilitation is generated by the database for patients being transferred or discharged with ongoing rehabilitation needs.

Once the patient is medically stable, the Acute Trauma Coordinators hand the case over to the Rehabilitation Coordinators. The Rehabilitation Coordinators assign a named key worker and oversee the patient's rehabilitation and discharge planning. Patients with traumatic Spinal Cord Injury (SCI) are key-worked and managed from admission by the Major Trauma SCI Coordinator, with support from the Acute and Rehabilitation Coordinators as required.

A Complex Cases Multidisciplinary Team meeting takes place every Thursday from 11:00 to 12:00, attended by the MDT. Any trauma patient requiring MDT advice can be discussed in this forum. Actions and outcomes are recorded in the action list and the individual patient's notes. Patients remain under review in these meetings until all actions are completed and follow-up is no longer required.

Rehabilitation needs evaluations are initiated by the ward therapy teams (Occupational Therapy and Physiotherapy) and overseen by the Rehabilitation Coordinators. In core major trauma specialty areas, this evaluation is integrated into therapy assessment documents. The completion of the evaluation is recorded in the Major Trauma Database by the Coordinators.

All patients with traumatic brain injury undergo a cognitive screening process conducted by the Psychology and Occupational Therapy teams. Post-Traumatic Amnesia screening is performed for all patients exhibiting signs of post-traumatic confusion, with outcomes documented in the medical notes. For patients with a known history of cognitive deficit, such as dementia, formal testing is considered on a case-by-case basis. A limited amount of trauma counselling is available, and referrals are facilitated by Psychology.

The Mental Health Liaison Team (MHLT) is available to assess patients presenting with new psychiatric conditions or neuro-behavioural sequelae. They also assist in managing pre-existing mental health conditions that impact a patient's care.

Patients are referred via the Electronic Patient Record system for assessment and review by a Rehabilitation Medicine Consultant or Geriatrician where indicated. Rehabilitation Coordinators oversee this process and attend reviews as needed to facilitate clear communication between clinicians, patients, and families.

The Rehabilitation Consultant clinically assesses and advises on early rehabilitation requirements and follow-up needs. They complete the Patient Categorisation Tool (PCAT) where applicable and help identify suitable rehabilitation pathways and inpatient rehabilitation units. Additionally, the Rehabilitation Medicine Consultant runs an outpatient traumatic brain injury follow-up clinic, monitoring the recovery of Coventry and Warwickshire patients who do not require inpatient specialist rehabilitation.

The Geriatrician will complete frailty reviews and comprehensive frailty assessments in older trauma patients where indicated, supporting decision making for prognostication and further management including rehabilitation.

For referrals to specialist rehabilitation services, the Rehabilitation Coordinators send a copy of the Prescription for Rehabilitation via the Major Trauma UHCW.nhs.uk secure email address. An up-to-date copy is also sent to the accepting unit at the point of transfer, along with the transfer documentation.

Patients with SCI are referred according to national guidelines. The SCI Coordinators facilitate this process with support from the Acute Trauma Coordinators. While undergoing acute management at UHCW, care for these patients is directed and documented using the UHCW Traumatic SCI Pathway. UHCW NHS Trust is linked to Oswestry Spinal Cord Injury Unit (for Coventry and Warwickshire patients) and Stoke Mandeville Spinal Cord Injuries Unit (for Northamptonshire patients).

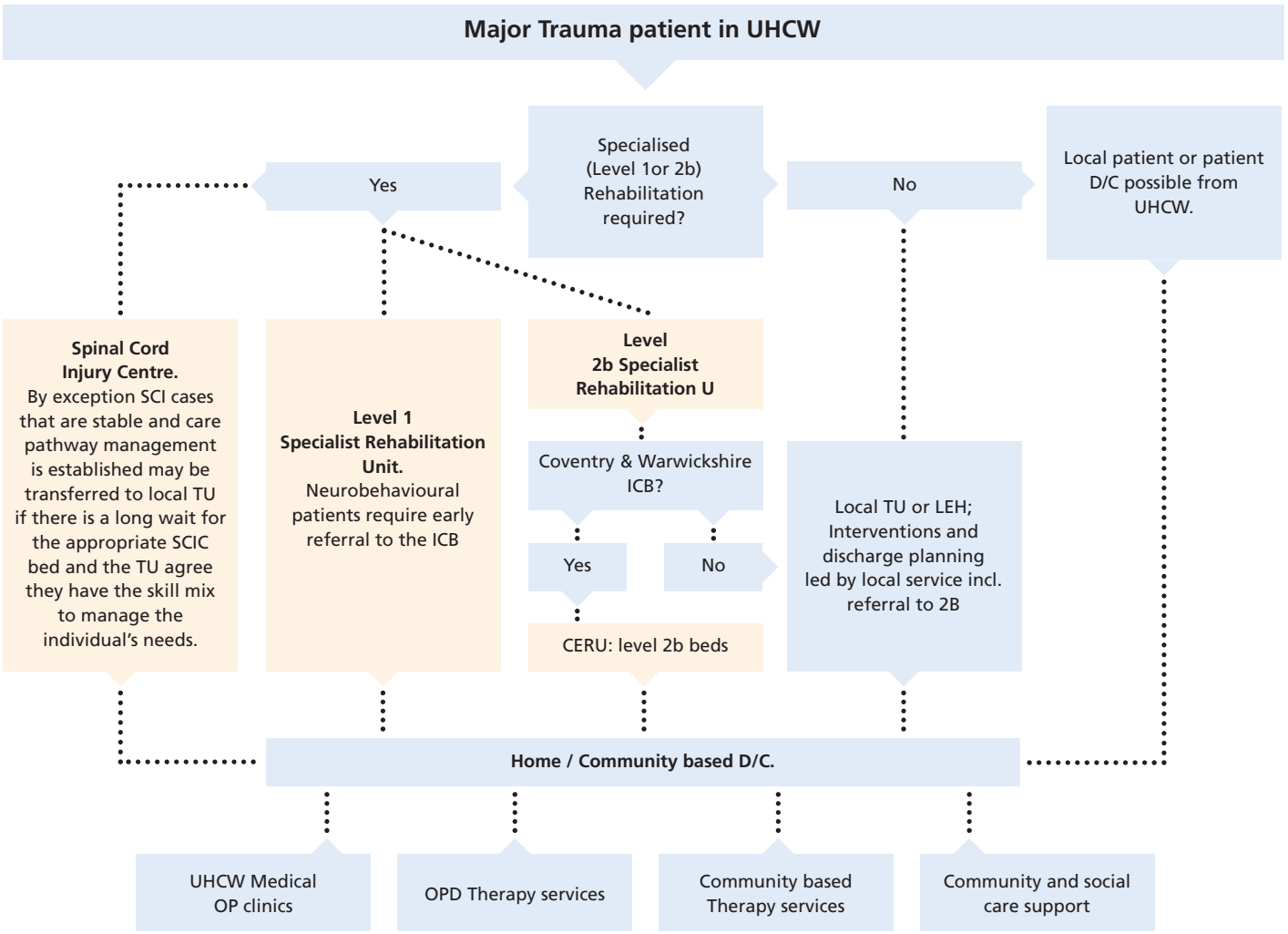
For patients with Category A rehabilitation needs, the Central England Rehabilitation Unit (CERU) is the designated Level 1 rehabilitation unit for Coventry, Warwickshire, and Northamptonshire patients. CERU has 30 beds. Other regional units include Leicester Brain Injury Unit and Neuro Rehabilitation Unit (for Leicestershire patients) and the Inpatient Neurological Rehabilitation Unit (for Birmingham & Solihull, Hereford, and Worcestershire patients). Patients within the Central England Trauma Network who require Category A rehabilitation remain at UHCW and are not considered for repatriation. For Category B patients requiring Level 2b rehabilitation, Coventry and Warwickshire patients are referred to the 12 commissioned beds at CERU. All other cases are repatriated for care closer to home at their local Trauma Unit (TU) or Local Emergency Hospital (LEH), with the recommendation that they access an appropriate, locally commissioned 2b rehabilitation service.

A small number of high-risk patients, such as those with severe physically or verbally aggressive behaviours, may require placement in a Level 1C/neuro-behavioural unit. These units are commissioned on a case-by-case basis by the patient's local Integrated Care Board (ICB) (Coventry & Warwickshire ICB and Northamptonshire ICB). Early referral to these units is advised.

For patients with limb loss, the UHCW Amputee Pathway should be followed for lower limb amputations. For upper limb loss, referrals should be made to the specialist amputee centre, specifying upper limb loss.

As close to the point of discharge as possible, the Prescription for Rehabilitation is finalised and discussed with the patient or family. This applies to patients discharged to another inpatient medical facility, a specialist rehabilitation unit, or the community with ongoing rehabilitation needs. The patient receives a copy for their records, with an additional copy provided for community discharges to facilitate continuity of care. A copy is also placed in the medical notes and sent to the patient's GP.

UHCW MTC: Acute to specialised rehabilitation pathway



UHCW Lower Limb Amputee pathway

Aligning to BACPAR (2016), RCOT (2011) and Trauma NICE guidelines (2022)

*Mini-Addenbrookes Congnitive Examination **Frenchay Activities Index

Pre-operative review

- Social history
- A structured exercise regime
- Consider wheelchair mobility
- Order wheelchair + accessories
- Provide relevant booklets
- Provide home heights form
- 4AT / BLART / MACE*
- Transfer practice
- Complete FAI **

- Discuss pathway and any concerns with patient and relevant carers
- Patients/carers should be made aware that the level of amputation affects the expected level of function and mobility
- Goal setting: short and long-term SMART goals
- Prosthetic discussion – advise it is not guaranteed and needs assessment. Use BLART score to guide discussion
- Written evidence of a full physical examination and assessment of previous and present function

Hopping should be avoided throughout pathway as per BACPAR guidance unless discussed with B7 or above ensure patient educated on this.

Trauma + Orthopaedics

- Review tertiary survey + consider other injuries
- Consider orthotics and WB statuses
- Diabetic patients - educate in reducing risks to remaining foot

Vascular

- Review contralateral limb (consider orthotics)
- Diabetic patients - educate in reducing risks to remaining foot

Day 1 post op: (including any pre-op tasks not completed)

PT:
- Respiratory Review
- Review completion of exercises
- Complete BAMS

OT:
- Cognitive Ax
- Advice and information should be given regarding bed mobility, to avoid complications such as contractures and pressure sores

All therapy team:
- Establish safe Tx method
- Desensitisation massage
- Repeat 4AT

- Consider pain management
- Consider psychological and emotional status

Day 2 - 7:

PT:
- Review AROM + strength
- Wound management
- Stairs Ax on bottom

EWAs (PPAM aid/femuretts) could be considered as part of the rehabilitation programme (must be trained and follow BACPAR guidance for use)

OT:
- Delirium management
- Review equipment needs
- Functional Ax
- Consider CAPE (Clifton Assessment Procedures for the Elderly)
- Review participation in recreational activities and return to work

All therapy team:
- Practice and progress transfers
- Wheelchair mobility
- Scar/contracture management
- Management of post-operative residuum oedema
- Management of phantom limb pain and sensation
- Falls review and advice
- Further discharge planning discussions with patient and families
- Repeat MACE

Referral considerations:
Send relevant updates to amputee rehabilitation centres regarding cognition/discharge destination changes etc
LT wheelchair, major adaptations, equipment, compression sock

Discharge plan?

Inpatient elderly rehab (St Cross, SWFT)

Home / community-based discharge

Specialist rehabilitation (link with MT co-ordinator)