

Severn Regional Spinal Network

Regional Emergency Care Policy

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Distribution: Severn Spinal ODN including spinal and non-spinal partner hospitals' clinical leads and operational managers; regional emergency departments; regional CCGs.

Related Guidelines:

- *Severn Major Trauma Network policy*
- *Service Specification – URN - 1738 Complex Spinal Surgery Services (NHS England, 2021)*
- *TR3 Spinal surgery: networks, data, MDT oversight (NHS England, 2017)*
- *Spinal CQUIN 2019*

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Executive Summary

- 1) This document acts as a guide for the management of emergency spinal conditions between NHS hospitals in the Severn Regional Spinal Network.
- 2) All partner hospitals should make plans to provide MRI facilities for emergency spinal conditions at all times. If MRI is not available, this must be discussed with the spinal hub on call team.
- 3) NHS partner hospitals should arrange for emergency spinal patients to be admitted under the local on call orthopaedic consultant.
- 4) At spinal partner hospitals, during normal working hours, the on call team should then discuss with a local spinal consultant.
- 5) At non-spinal provider hospitals, the local on call team can discuss with their spinal hub on call contact.
- 6) Out-of-hours, partner hospitals should arrange for emergency spinal patients to be discussed with their spinal hub on call contact.
- 7) Major trauma patients should be managed as per the Severn Major Trauma Network policy. Transfer between emergency departments may be indicated.
- 8) If a patient is transferred for assessment, investigation, or treatment to the spinal hub, repatriation should take place at the earliest safe opportunity and no later than 24hrs after notification that transfer is appropriate.
- 9) Spinal referrals should be made to the on call neurosurgical registrar and spinal consultant at Southmead Hospital; the contact at Musgrove Park Hospital is the on call orthopaedic registrar and spinal consultant. Once the electronic referral pathway is in place, referrals should be made via the online pathway.
- 10) Urgent spinal clinic appointments will be required in spinal units to facilitate urgent review and management of certain patients.

- 11) All specialised surgery morbidity and mortality data should be presented and discussed at the regional MDT meeting. All operative cases should be recorded on the British Spine Registry.

Introduction

The Severn Regional Spinal Network involves Southmead Hospital and Musgrove Park Hospital as adult hub centres which have a spinal on call service 24/7, with the spinal partner NHS hospitals being Gloucester Royal Infirmary and Royal United Hospital Bath. Non-spinal partner NHS hospitals are Bristol Royal Infirmary, Cheltenham General Hospital, Weston General Hospital, and Yeovil District Hospital. The Bristol Royal Hospital for Children is the regional paediatric major trauma centre.

Independent providers undertaking elective NHS spinal work perform this at private hospitals including BMI Bath Clinic, BMI Ridgway Hospital, Bristol Spire Hospital, Circle Hospital Bath, Nuffield Hospital Bristol, Nuffield Hospital Cheltenham, Somerset Surgical Services, Winfield Hospital Gloucester, Nuffield Hospital Taunton and Shepton Mallett Treatment Centre.

Network sub-group details can be found in Appendix 1.

Purpose of Policy

This policy aims to detail the pathway for patients with emergency spinal conditions within NHS hospitals in the Severn Regional Spinal Network.

These details are described as follows:

1. Admission of Spinal Emergency Patients in Partner Hospitals

Patients with spinal emergencies will be admitted to their local hospitals following the local policies in place. This will usually involve referral to the on call orthopaedic or neurosurgical team from primary care, emergency department, or in-hospital referral.

1.1. Network sub-group Bristol:

- **Gloucester Royal Infirmary:** Patients will be admitted under the orthopaedic consultant on call. Between 0800-1900hrs, the case will be discussed with the spinal consultant on call at GRI. If the general orthopaedic consultant on call requires urgent spinal opinion outside these hours, they will contact the on call team at Southmead Hospital.
- **Royal United Hospital, Bath:** Patients will be admitted under the orthopaedic consultant on call. Patients can then be discussed with their spinal consultants during working hours. If the general orthopaedic consultant on call requires urgent spinal opinion outside these hours, they will contact the on call team at Southmead Hospital.
- **Southmead Hospital:** Non-complex patients will be admitted under the general neurosurgical consultant on call. Complex patients will be admitted under the complex spine consultant on call. Referrals are all made via www.referapatient.org and discussion with the neurosurgical registrar on call.
- **Bristol Royal Infirmary and Weston General Hospital:** Patients will be admitted under the orthopaedic consultant on call. If the general orthopaedic consultant on call requires a spinal opinion, they will contact the on call team at Southmead Hospital.
- **Bristol Royal Hospital for Children:** Patients will be admitted under the neurosurgical consultant on call via the neurosurgical registrar. Appropriate patients can then be discussed with the complex spine on call consultant.

1.2. Network sub-group Taunton:

- **Musgrove Park Hospital:** Patients will be admitted under the spinal consultant on call via the orthopaedic registrar.

- **Yeovil District Hospital:** Patients will be admitted under the orthopaedic consultant on call. If the general orthopaedic consultant on call requires a spinal opinion, they will contact the on call team at Musgrove Park Hospital.

1.3 Mutual Aid

Where a provider is not able to meet the requirements listed above due to exceptional and unforeseen circumstances, requests for mutual aid should be made through appropriate and agreed Trust to Trust processes (i.e. Chief Operating Officer to Chief Operating Officer or Medical Director to Medical Director).

2. Emergency MRI Scans

Magnetic resonance imaging (MRI) scanning should be available in each hospital at all times that it is receiving patients through their emergency department. This will allow prompt assessment of emergency conditions, in line with national guidance for certain conditions.

MRI scans can then be reviewed by the local team and discussed with their local spinal team in-hours, or the hub centre out-of-hours, as required. For non-spinal partner hospitals, discussion with the hub centre is expected in- and out-of-hours.

In the situation where the local consultant on call cannot obtain an MRI scan out-of-hours for a patient with an emergency spinal condition, the case can be discussed with the hub centre for that sub-group. If accepted, transfer can be made to the hub for MRI scan; if emergency condition is confirmed, this may be treated urgently in the hub centre. If an emergency condition is ruled out, the patient can be returned directly to the referring hospital under the referring consultant.

3. Emergency Referral Pathway

Each partner hospital will follow its own guidelines for local spinal opinion and admission. If referral to the hub unit is required, this will be made via the neurosurgical registrar at Southmead Hospital and the Bristol Royal Hospital for Children, and the orthopaedic registrar at Musgrove Park Hospital. Relevant imaging should be transferred to the hub centre's PACS system to facilitate early discussions.

At Southmead Hospital, an online emergency referral system is in use for all spinal emergency referrals, both internally and externally: www.referapatient.org.

Spinal units should have urgent out-patient clinic capacity to allow early review of certain referrals, which may reduce the demand for emergency admission.

4. Emergency Transfers and Repatriation

Once a referral has been made to the hub centre, emergency or urgent transfer will be made, as required. The referring consultant and patient location must be made available to the receiving unit.

Once a patient is deemed to be safe for repatriation, the original referring hospital must arrange for transfer within 24 hours under the care of the original referring consultant or other nominated consultant.

5. Major Trauma Patients

Major trauma patients with spinal injury will be managed in line with the Severn Major Trauma Network guidelines. It is expected that these patients meeting transfer specifications will be managed in the major trauma centres at Southmead Hospital and Bristol Royal Hospital for Children.

6. Emergency Management of Post-operative Spinal Conditions

It is expected that patients are re-admitted to the spinal unit where they underwent their surgery for further management. If patients present to a non-spinal partner hospital, they will be assessed by the local on call team and discussed with the spinal unit on call team for transfer back, as required.

7. Specialised Emergency Spinal Procedures

Emergency spinal conditions requiring specialised surgery can be performed by spinal consultants in all NHS spinal partner hospitals in order to facilitate urgent management, if local expertise and unit facilities allow (see Service Specification URN 1738 and Appendix 2). All operative cases should be added to the British Spine Registry. Morbidity and mortality data for specialised surgery should be kept and presented at the regional multidisciplinary team meeting every quarter.

Appendix 1: Severn Regional Spinal Network Clinical Sub-Groups

Network Sub-Group Bristol

Hub:

Southmead Hospital
Bristol Royal Hospital for Children

NHS Spinal Partners:

Gloucester Royal Infirmary
Royal United Hospital, Bath

NHS Non-spinal partners:

Bristol Royal Infirmary
Weston General Hospital

Independent spinal partners:

BMI Ridgway Hospital
Nuffield Hospital Bristol
Nuffield Hospital Cheltenham
Somerset Surgical Services
Winfield Hospital Gloucester
Circle Bath
BMI Bath Clinic
Spire Bristol

Network Sub-Group Taunton

Hub:

Musgrove Park Hospital

NHS Non-Spinal Partners:

Yeovil District Hospital
Jersey

Independent Spinal Partners

Nuffield Hospital Taunton
Shepton Mallet Treatment Centre

Appendix 2: Current Specialised and Non-specialised Procedures

NON-SPECIALISED:

- Lumbar** Posterior decompression (any number of levels)
 Posterior fusion (1 or 2 levels)
 Interspinous spacer
- Cervical** Posterior decompression (any number of levels)
 Anterior cervical decompression and fusion (1 or 2 levels)
- Other** Vertebroplasty or Kyphoplasty

SPECIALISED:

- Lumbar** Posterior fusion (3 or more levels)
 Lateral and Anterior fusion (any number of levels)
- Cervical** Anterior cervical decompression and fusion (3 or more levels)
 Posterior fusion (any number of levels)
- Thoracic** Any surgical procedure
- Other** Deformity procedure
 Fracture stabilisation
 Tumour procedure
 Spinal infection procedure
 Intra-dural procedure

NOTE:

These criteria include primary and revision procedures for each group, for elective and emergency conditions.

Appendix 3: Emergency Conditions Managed at each NHS Unit

This table covers the emergency surgical procedures currently performed at each NHS spine unit.

It does not include the initial assessment or non-operative management of these conditions, which may be performed in all partner hospitals.

	Degenerative with acute neurology			Any level of spine			
	Cervical	Thoracic	Lumbar	Trauma	MSCC	Infection	SCI
Southmead Hospital, Bristol	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bristol Royal Hospital for Children	Yes (paeds only)	Yes (paeds only)	Yes (paeds only)	Yes (paeds only)	Yes (paeds only)	Yes (paeds only)	Yes (paeds only)
Gloucester Royal Infirmary	Yes (Out of hours -> Bristol)	Yes (Out of hours -> Bristol)	Yes (Out of hours -> Bristol)	Yes (Major trauma and out of hours -> Bristol)	Yes (Out of hours -> Bristol)	Yes (Out of hours -> Bristol)	Yes (Major trauma and out of hours -> Bristol)
Royal United Hospital, Bath	No (All cases -> Bristol)	No (All cases -> Bristol)	Yes (Out of hours -> Bristol)	No (All cases -> Bristol)	No (All cases -> Bristol)	No (All cases -> Bristol)	No (All cases -> Bristol)
Musgrove Park Hospital, Taunton	Yes	Yes	Yes	Yes (Major trauma -> Bristol)	Yes	Yes	Yes (Major trauma -> Bristol)