SCHEDULE 2 – THE SERVICES

A. Service Specifications

1. Service name	Complex Spinal Surgery Services (All ages)
2. Service specification number	240801S
3. Date published	August 2024
4. Accountable Commissioner	NHS England NHS commissioning » Trauma (england.nhs.uk)

5.	**Population and/or geography to be served**
5.1	**Population Covered** This service specification covers the provision of complex spinal surgery services (adults and children). The surgical procedures included in this specification should only be performed in a commissioned Specialist Spinal Surgery Centre, this may be either a neurosurgical centre or specialised orthopaedic centre. **Evidence Base** This specification has been developed taking into account the GIRFT national report on spinal surgery: Spinal Services - Getting It Right First Time - GIRFT and its recommendations, published January 2019.
5.2	**Minimum population size** It is expected that the planning population for these services will be between one and three million.
6.	**Service aims and outcomes**
6.1	**Service aims** The aims of spinal services are to improve the quality of life of patients with complex spinal conditions by: • Improving access to spinal surgical departments in a timely manner. • Reduce inappropriate spinal referrals through the implementation of appropriate triage pathways. • Improving governance and reducing variation in complex spinal surgical practice via the Spinal Networks and interface with Neurosurgery Networks and implementation of best practice pathways in keeping with GIRFT.

- Improving timely emergency access across the country with agreed pathways through the Spinal Networks and implementation of the National cauda Equina Pathway: National Suspected Cauda Equina Pathway October 2023 version 3.
- Collaborating with other specialties including neurosurgery, neurology, pain management, diagnostic imaging, cancer services, major trauma and rehabilitation.
- Ensure compliance with national standards including, but not exclusively the following: best practice tariff in relation to submission of data to The British Spine Registry (BSR) to collect diagnosis, surgical procedure, complications and Patient Reported Outcome and Experience Measures (PROMS & PREMS).

6.2 Outcomes

NHS Outcomes Framework Domains and Indicators

Domain 1 - Preventing people from dying prematurely
Domain 2 - Enhancing quality of life for people with long-term conditions
Domain 3 - Helping people to recover from episodes of ill-health or following injury
Domain 4 - Ensuring people have a positive experience of care
Domain 5 - Treating and caring for people in safe environment and protecting them from avoidable harm

Service defined outcomes/outputs

Quality Metrics: The service will complete / upload data for all listed quality metrics to the national Specialised Services Quality Dashboard (SSQD). The full version of the quality metrics and their descriptions including the numerators and denominators can be accessed at: NHS commissioning » Specialised services quality dashboards

Commissioned providers are required to participate in annual quality assurance and collect and submit data to support the assessment of compliance with the service specification as set out in Schedule 4A-C.

Elective Surgery			
Proportion of patients who die within 30 days of spinal surgery	Provider submitted	Domain 1	Preventing people from dying prematurely
Proportion of patients re-admitted within 30 days of discharge after spinal surgery	Provider submitted	Domain 3	Helping people to recover from episodes of ill-health or following injury

	Proportion of cases returned to theatre due to infection relating to their spinal surgery (SSI) with a year	Provider submitted	Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm
	Proportion of cases returned to theatre for revision surgery within a year	Provider submitted	Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm
	Non-Elective Surgery			
	Proportion of patients who die within 30 days of spinal surgery	Provider submitted	Domain 1	Preventing people from dying prematurely
	Proportion of patients re-admitted within 30 days of discharge after spinal surgery	Provider submitted	Domain 3	Helping people to recover from episodes of ill-health or following injury
	Proportion of cases returned to theatre due to infection relating to their spinal surgery (SSI) within a year	Provider submitted	Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm
	Proportion of cases returned to theatre for revision surgery within a year	Provider submitted	Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm

7.	**Service description**
7.1	**Service model** This service encompasses elements of care provided by spinal surgeons from both orthopaedic and neurosurgery disciplines. The service specification focuses on procedures that can be performed in neurosurgical and orthopaedic centres. Procedures that are only performed in a neurosurgical unit will be covered by the Neurosurgery (adults) specification. All procedures covered by this specification, whether they are performed at neurosurgical or specialised orthopaedic centres will be coded under Treatment Function Code 108, Spinal Surgery Service.

	For adults: Complex spinal surgery services include a number of specialised procedures that should only be performed in a commissioned Specialist Spinal Surgery Centre as detailed in the specification. **For children and young people:** Complex spinal surgery services such as paediatric deformity and other congenital spinal deformities must only be performed in Specialist Spinal Surgery Centres with appropriate paediatric support as specified in section 7.2. This **Specification** covers the following groups of procedures: • Emergency Spinal Surgery • All spinal deformity surgery (adults and children). • All spinal reconstruction surgery including tumour, trauma & infection (adults and children). • All extradural spinal tumour surgery • Palliative or curative spinal oncology surgery (adults and children). • All anterior, lateral and posterior thoracic instrumented surgery. • All anterior lumbar surgery. • All anterior & posterior cervical surgery greater than two levels. • All thoracic and lumbar corpectomy surgery. • All upper cervical surgery (C0 – C2) and all lower posterior instrumented cervical surgery greater than 2 levels. • Posterior lumbar instrumented surgery greater than two levels.
7.2	**Pathways** **The Elective Care Pathway** The three main pathways for referral to elective care are listed below: • All primary care referrals should be referred through a locally agreed triage service based on the “National Low Back & Radicular Pain Pathway,” published November 2016 and endorsed by NICE as a care pathway that supports the implementation of recommendations in the NICE guideline on low back pain and sciatica. • Patients may be referred from other specialties such as neurology, oncology, pain management services, rheumatology and orthopaedics. • Patients can also be referred from non-specialised spinal centres for more specialist input at the hub centres. • All units should follow national guidance from GIRFT on pathways and efficiency including virtual triage MDTs. **Emergency Care** The majority of spinal surgical emergency patients are admitted from the local emergency department or from non-specialised units as defined in the Spinal

	Network model. An electronic referral system is mandatory to ensure clear documentation is in place between units. Patients may also be referred from within the local hospital or surrounding hospitals from other specialties such as oncology and acute medicine. All hospitals involved in spinal surgery must fully engage with their relevant Spinal Network to agree emergency spinal pathways including protocols for safe transfer, trauma care, referral guidelines, emergency imaging, repatriation, the care of cauda equina and spinal cord injury patients. All hospitals should follow national guidance on emergency pathways such as the National Cauda Equina Pathway. Each specialised unit should work within their network and region and with the major trauma networks to define an appropriate repatriation policy. Each specialised centre needs to work closely with Spinal Cord Rehabilitation centre and comply with national standards of care: Setting the standards for SCI rehab and psychological care. **General requirements** All specialised spinal surgical procedures are performed by neurosurgical and orthopaedic 'hub' centres, of which there are between 1 and 5 in each Spinal Network. Access to treatment will be guided by any applicable NHS England national clinical commissioning policies. All activity falling under the remit of this service specification should be coded to Treatment Function Code (TFC) 108 Spinal Surgery Services. All procedures within the Neurosurgery (adults) specification will be coded Treatment Function Code 150 Neurosurgical Service. Activity is determined by the OPCS4 procedure codes set out in Appendix 1. **Paediatric Spinal Deformity** A centre can provide this service if it meets the following specific requirements: • There must be 3 consultant spinal surgeons trained in paediatric spinal deformity surgery to provide case discussion and joint operating where necessary. • Each surgeon must regularly perform spinal deformity scoliosis surgery. • Each patient must have a consultant paediatric spinal deformity surgeon input at a minimum of alternate visits or on a 6 monthly basis. • Each patient and carers should have appropriate support from nursing staff, psychology and other paediatric specialist input for holistic care. **Adult & Degenerative Spinal Deformity** Adult deformity surgery covers the correction of scoliosis, kyphosis and grade 3 or more spondylolisthesis in patients over the age of 18 years. Patients over the age of 55 years of age would be defined as having degenerative spinal deformity. This service should be provided by a limited number of centres as agreed within each Spinal Network, and must fulfil the following specific requirements:

	• There must be access to at least two spinal surgeons with an interest in adult deformity in every unit and at least one must be available when inpatients are present within the hospital. • All cases should be discussed and agreed at a regionally agreed and documented regional MDT. **Shared care arrangements** Appropriate shared care arrangements should be in place with relevant specialties including pain specialists, neurology, respiratory, as well as pathways in and of primary care to support timely admission and discharge in and out of acute services. **Transition** All healthcare services are required to deliver developmentally appropriate healthcare to patients and families. Children and young people with ongoing healthcare needs may present direct to adult services or may be required to transition into adult services from children's services. Transition is defined as a 'purposeful and planned process of supporting young people to move from children's to adults' services. Poor planning of transition and transfer can result in a loss in continuity of treatment, patients being lost to follow up, patient disengagement, poor self-management and inequitable health outcomes for young people. It is therefore crucial that adult and children's NHS services, in line with what they are responsible for, plan, organise and implement transition support and care (for example, holding joint annual review meetings with the child/young person, their family/carers, the children's and adult service). This should ensure that young people are equal partners in planning and decision making and that their preferences and wishes are central throughout transition and transfer. NICE guidelines recommend that planning for transition into adult services should start by age 13-14 at the latest, or as developmentally appropriate and continue until the young person is embedded in adult services.
7.3	**Clinical Networks** There is a requirement for providers of this service to comply with the provisions of Schedule 2F (Clinical Networks) of the NHS Standard Contract. This includes meeting the requirements of the Spinal Services Clinical Network Specifications: NHS England » Specialised services clinical network specifications. Spinal surgery is coordinated through 14 Spinal Networks that coordinate all levels of care from referring centres into a Specialist Spinal Surgery Centre (hub). All specialised spinal surgical procedures are provided by neurosurgical and orthopaedic 'hub' centres, of which there are between one and three in each Spinal Network. The overarching aim of each network is to help define standards, pathways and standard operating procedures (SOPs) aimed at improving access and care for

	patients presenting with spinal conditions via an elective or emergency care pathway. All Providers will be required to participate in a networked model of care to enable services to be delivered as part of a co-ordinated, combined whole system approach.
7.4	**Essential Staff Groups** As a minimum, a spinal surgery service multidisciplinary team (MDT) meeting, (weekly), must comprise at least four spinal consultants and a consultant radiologist. Other members of the MDT will vary, but will include representation from Advanced Practice Physiotherapists, Anaesthetics, Microbiology, Infectious Diseases, Pathology, Oncology, Pain Management and other specialities depending on the specifics of the condition being treated. Attendance is mandatory for all spinal consultants, unless they are on leave. The MDT must be recorded on an agreed MDT proforma and submitted as part of Quality Assurance. Paediatric deformity units should have access to counselling &/or psychology services. All specialised units must have nursing skills and staffing numbers to maintain the standard of care required for spinal patients, including those with spinal cord injury. The department should have staff skilled in caring for spinal cord injury patients in the acute setting in line with national standards of care to reduce complications. All units must have allied health staff who are trained in looking after patients with a spinal cord injury and work closely with their designated SCI centre. A regular MDT meeting should take place with the link SCI centre. Clinical nurse specialist and/or physiotherapist input is required to support communication with patients and their families, provide information, co-ordinate pre-operative assessment and help reduce avoidable surgical cancellations and facilitate outcome data collection. These roles should be a key part of the Multidisciplinary Team (MDT). A mentoring system must be in place for newly appointed consultants, including joint operating and case monitoring until it is agreed by both sides that this is no longer required. Regular joint operating should be job planned for deformity and complex cases within specialised units. All units must have: • Designated, competent, Advanced Clinical Practitioners (ACPs) and physiotherapist who engage in the spinal network. • A registered nursing team on the ward who can facilitate safe, effective practice in spinal care.

	• Consultant anaesthetists experienced with the problems associated with specialised spinal surgery.
7.5	**Essential equipment and/or facilities** All necessary resources must be available to allow for the assessment, pre-operative assessment, admission, investigation, treatment, on-going care and acute / early rehabilitation of spinal surgical patients in line with agreed and commissioned national standards and within timescales appropriate to the clinical needs of patients. Access to emergency assessment, consultation and treatment by a consultant spinal surgeon will be available at all times at a hub centre. Other staff contributing to the delivery of such as medical staff, nurses and allied health professionals (AHPs) are essential to support spinal surgical services. The vast majority of specialised centres must be able to offer all aspects of specialised spinal surgery, taking into account the general requirements set out in section 7.6 and the additional specific points relating to the provision of deformity surgery as detailed in section 7.2. **Key Requirements** For Adult and Paediatric services, all specialised units must have: • 24/7 MRI and CT imaging. • Pre-operative assessment facilities, including respiratory function, echocardiography, bone mineral density measurement, physiotherapy and occupational therapy support. • 24/7 spinal surgical on call rota with surgeons trained in spinal reconstruction. • 24/7 access to a spinal surgical theatre with appropriate staffing. • 24/7 access to specialist consultant anaesthetists (for paediatrics/adults) with experience of the complications associated with this surgery; and onsite 24/7 anaesthetic teams (any grade) able to support a deteriorating patient and facilitate a return to theatre. • Sterile spinal implants, including removal instruments for all implants. • 24/7 Emergency Consultant Spinal Surgeon on call rota (Category A). • Spinal cord monitoring services: • Access to orthotic services: • Immediate access to blood products including cell salvage during and after surgical procedures. • Weekly multidisciplinary team (MDT) meetings to discuss all specialised procedures with at least 4 surgeons and a radiologist present. • Access to picture archiving and communication system (PACS) for pre-operative planning. Measurement tools must be integrated into the PACS. All imaging must be stored long-term for these patients, as further surgery may be required. • Evidence of demonstrable active and ongoing engagement / attendance at Spinal Network meetings and MDTs.

	• An online or web-based referral system to ensure efficient and safe management of new emergency referrals and to provide a robust, auditable record of advice and care and to allow monitoring of delays in admission. • Immediate and direct web-based access to critical diagnostic imaging in all referring units. • A consultant spinal surgeon trained in complex spinal reconstruction for tumour, trauma and / or infection will be available in every unit 24 hours a day for advice. The consultant will be provided with remote virtual private networks (VPN) access to all necessary imaging. The following services must be available to support the management of complex spinal surgery patients: **Co- located services (available on the same site)** • Level 3 Critical Care for all adult spinal deformity and children under 10 years of age, or non-idiopathic deformity surgery, OR • Level 2 Critical Care with the following additions: • Consultant anaesthetist review of all patients to assess suitability for surgery in that hospital. This may involve MDT review if the exact details of surgery are considered important. Risk stratification scores must be considered, at the very least, to guide shared decision making. • Early mechanical ventilatory support after surgery must be available if required. • There must be a documented escalation policy in place for patient transfer to a level 3 critical care facility if prolonged ventilation or other organ support is required. Any transfers must be documented for the purposes of mandatory Trust audit. • Acute pain management services. • Physiotherapy / Rehabilitation Services. • On site vascular services for all anterior lumbar spinal. • All units must have a vascular escalation policy to manage any vascular incident that may occur during spinal surgery. • On site paediatric services with staff competent in paediatric advanced life support and a named paediatric consultant* available on call 24/7 for attendance within 20-30 minutes. (*or equivalent individual deemed to be competent for a consultant on call rota). • Interventional radiology.
7.6	**Interdependent Service Components – Links with other NHS services** **Interdependence with other Services** A spinal service is delivered by a multi-disciplinary team which includes spinal surgeons, nurses, physiotherapists, occupational therapists, orthotists, pharmacists, radiologists, radiographers, anaesthetists and others as required. **Interdependent Services**

	• Haematology • Pain Management • Paediatrics (If providing paediatric spinal surgery) • Rheumatology • Respiratory • Anaesthetics / Intensive Care • ENT • Urology • Microbiology • Oncology • Neurology • Neurosurgery • Spinal Cord Injury Centre • A local wheelchair service in the geographical catchment area for those patients requiring seating adjustments or post-operative assessments.
7.7	**Additional requirements** **Communication** There will be effective communication between all those responsible for patient care, the patient and where appropriate their family and other carers. This is particularly important in discharge planning. The principles of shared decision making will be employed. **Patients will be provided with:** • A full range of condition-specific information in appropriate formats suited to the communication needs of the spinal surgery service user. British Association of Spine Surgeons - Booklets. • All patients will be offered appropriate time, information and defined time to be appropriately consented and offered all options to make an informed decision on surgery. **Continuing Care and Rehabilitation** Robust mechanisms for the repatriation of patients to their local secondary and primary care setting must be agreed as part of a regional framework to achieve the efficient and responsive working of the spinal unit. Early liaison with social care services should take place to ensure care packages, where needed, are in place at the time of discharge. Ideally repatriation to referring hospitals should take place within 48 hours when appropriate. Spinal patients should have timely access to a full range of inpatient and outpatient specialist rehabilitation services. **Quality Improvement** Every spinal surgery unit will have a nominated lead for clinical governance, audit and quality improvement. Spinal units will be provided with the necessary administrative and informatics support to take part in all local and national audits and quality improvement initiatives. All consultants should have access to Model Hospital, NCIP and BSR for regular review of data. It will be expected

	that this data will be shared within and discussed in regular governance meetings. The performance of units, including measures of effectiveness of care, compliance with guidelines and prevention of avoidable morbidity and mortality will be audited, benchmarked against national norms and the results used to promote service development and improvements. All consultants will take responsibility, but will be provided with administrative support, to ensure all patients undergoing a surgical procedure will have data placed on the British Spine Registry. **Education and Training** There will be a programme of continuing education for all personnel within the spinal unit and across the network to achieve a full understanding of, and compliance with local protocols, patient care pathways and national guidelines, to ensure competence and to maintain a uniformly high standard of care. • There will be a parallel programme of education in relevant aspects of spinal care for primary care and emergency services that will support effective referral pathways. • Training programmes will support the necessary level of competence to all medical, nursing and AHP staff in training grades. • The service will engage in spinal research and development.
7.8	**Commissioned providers** N/A
7.9	**Links to other key documents** Please refer to the Prescribed specialised services manual for information on how the services covered by this specification are commissioned and contracted for. Please refer to the Identification Rules tool for information on how the activity associated with the service is identified and paid for. NHS England Directly commissioned services service codes can be found NHS England service codes by year 2024/25. Please refer to the relevant Clinical Reference Group National Programmes of Care and Clinical Reference Groups for NHS England Commissioning Policies which define access to a service for a particular group of service users. The following service specifications are relevant to complex spinal surgery (adults and children) and should be read in conjunction with this document: • NHS England » Spinal cord injury services (all ages) • NHS England » Adult critical care services

- NHS England » Adult Highly Specialist Pain Management Services
- NHS England » Major Trauma (all ages)
- NHS England » Neurosurgery (adults)
- NHS England » Neurosciences Specialised Neurology (Adult)
- NHS England » Paediatric Intensive Care
- NHS England » Paediatric Neurosciences Neurology
- NHS England » Paediatric Neurosciences Neurosurgery
- NHS England » Specialised Rheumatology Services (Adult)

Applicable obligatory national standards

- NICE NG59: Low back pain and sciatica in over 16s: assessment and management
- NICE CG234: Spinal metastases and metastatic spinal cord compression
- NICE TA279: Percutaneous vertebroplasty and percutaneous balloon kyphoplasty for treating osteoporotic vertebral compression fractures

Other applicable national standards to be met by commissioned providers

All providers must comply with the spinal surgery best practice tariff.

All providers must comply with the standards of care for referral of patients with a diagnosed spinal cord injury (SCI) as per the SCI service specification.

Compliance with the following NICE Interventional Procedures Guidance:

- NICE IPG146: Direct C1 Lateral Mass screw for cervical stabilisation
- NICE IPG306: Prosthetic intervertebral disc replacement in the lumbar spine
- NICE IPG574: Lateral Interbody Fusion in the lumbar spine for low backpain
- NICE IPG620: Transaxial interbody lumbrosacral fusion for severe chronic low back pain

	• NICE IPG366: Non-rigid stabilisation techniques for the treatment of low back pain • NICE IPG543: Percutaneous coblation of the intervertebral disc for low back pain and sciatica • NICE IPG544: Percutaneous electrothermal treatment of the intervertebral disc annulus for low back pain and sciatica • National Spine Network - National Back Pain and Radicular Pain Pathway Compliance with the following NICE Quality Standards: • NICE QS155: Low back pain and sciatica in over 16s • NICE QS56: Metastatic Spinal Cord Compression in adults **Other Applicable Local Standards** All centres providing complex spinal surgery services must engage with the Spinal Networks. This must include mandatory attendance at all Network clinical and business meetings; including at consultant level. **Patient Experience** The service undertakes a patient experience exercise at least annually e.g. Friends and Family Test. This will be used to inform service improvement and delivery.
8.	**Abbreviation and Acronyms Explained**
	The following abbreviations and acronyms have been used in this document: AHP - Allied Health Professional BSR - British Spinal Registry CT - Computed Tomography EQ-5D - EuroQuol Five Dimension – a generic measurement of quality of life HES - Hospital Episode Statistics MDT - Multidisciplinary Team Meeting MRI - Magnetic Resonance Imaging MSSC - Metastatic Spinal Cord Compression PACS - Picture and Archiving and Communication Systems SN - Spinal Network

OPCS Procedure Codes: Complex Spinal Procedures

Part 1

Any code from this list in any position in the patient record:

V225 Primary decompression of posterior fossa and upper cervical spinal cord and instrumentation
V226 Primary decompression of posterior fossa and upper cervical spinal cord NEC
V234 Revisional anterior corpectomy of cervical spine with reconstruction HFQ
V235 Revisional decompression of posterior fossa and upper cervical spinal cord and instrumentation
V236 Revisional decompression of posterior fossa and upper cervical spinal cord NEC
V237 Revisional laminoplasty of cervical spine
V241 Primary decompression of thoracic spinal cord and fusion of joint of thoracic spine
V242 Primary decompression of thoracic spinal cord NEC
V243 Revisional decompression of thoracic spinal cord NEC
V244 Primary anterior corpectomy of thoracic spine and reconstruction HFQ
V245 Revisional anterior corpectomy of thoracic spine and reconstruction HFQ
V246 Primary posterior laminectomy decompression of thoracic spine
V247 Revisional posterior laminectomy decompression of thoracic spine
V248 Other specified decompression operations on thoracic spine
V249 Unspecified decompression operations on thoracic spine
V257 Primary anterior corpectomy of lumbar spine and reconstruction HFQ
V267 Revisional anterior corpectomy of lumbar spine and reconstruction HFQ
V271 Primary decompression of spinal cord and fusion of joint of spine NEC
V272 Primary decompression of spinal cord NEC
V273 Revisional decompression of spinal cord NEC
V278 Other specified decompression operations on unspecified spine
V279 Unspecified decompression operations on unspecified spine
V311 Primary anterolateral excision of thoracic intervertebral disc and graft HFQ
V312 Primary anterolateral excision of thoracic intervertebral disc NEC
V313 Primary costotransversectomy of thoracic intervertebral disc
V314 Primary percutaneous endoscopic excision of thoracic intervertebral disc
V318 Other specified primary excision of thoracic intervertebral disc
V319 Unspecified primary excision of thoracic intervertebral disc
V321 Revisional anterolateral excision of thoracic intervertebral disc and graft HFQ
V322 Revisional anterolateral excision of thoracic intervertebral disc NEC
V323 Revisional costotransversectomy of thoracic intervertebral disc
V324 Revisional percutaneous endoscopic excision of thoracic intervertebral disc
V328 Other specified revisional excision of thoracic intervertebral disc
V329 Unspecified revisional excision of thoracic intervertebral disc
V333 Primary anterior excision of lumbar intervertebral disc and interbody fusion of joint of lumbar spine
V334 Primary anterior excision of lumbar intervertebral disc NEC
V335 Primary anterior excision of lumbar intervertebral disc and posterior graft fusion of joint of lumbar spine
V336 Primary anterior excision of lumbar intervertebral disc and posterior instrumentation of lumbar spine
V343 Revisional anterior excision of lumbar intervertebral disc and interbody fusion of joint of lumbar spine
V344 Revisional anterior excision of lumbar intervertebral disc NEC
V345 Revisional anterior excision of lumbar intervertebral disc and posterior graft fusion of joint of lumbar spine
V346 Revisional anterior excision of lumbar intervertebral disc and posterior instrumentation of lumbar spine
V362 Prosthetic replacement of thoracic intervertebral disc 11
V363 Prosthetic replacement of lumbar intervertebral disc
V368 Other specified prosthetic replacement of intervertebral disc

V369 Unspecified prosthetic replacement of intervertebral disc
V371 Posterior fusion of atlantoaxial joint NEC
V373 Transoral fusion of atlantoaxial joint
V374 Fusion of atlanto-occipital joint
V375 Posterior fusion of atlantoaxial joint using transarticular screw
V376 Posterior fusion of atlantoaxial joint using pedicle screw

V377 Fusion of occipitocervical junction NEC
V381 Primary fusion of joint of thoracic spine
V388 Other specified primary fusion of other joint of spine
V389 Unspecified primary fusion of other joint of spine
V391 Revisional fusion of joint of cervical spine NEC
V392 Revisional fusion of joint of thoracic spine
V398 Other specified revisional fusion of joint of spine
V399 Unspecified revisional fusion of joint of spine
V403 Posterior instrumented fusion of thoracic spine NEC
V408 Other specified stabilisation of spine
V409 Unspecified stabilisation of spine
V411 Posterior attachment of correctional instrument to spine
V412 Anterior attachment of correctional instrument to spine
V413 Removal of correctional instrument from spine
V414 Anterior and posterior attachment of correctional instrument to spine
V415 Posterior attachment of spinal growing system
V416 Attention to spinal growing system (added to original list)
V417 Surgical distraction of spinal growing system (added to original list)
V418 Other specified instrumental correction of deformity of spine
V419 Unspecified instrumental correction of deformity of spine
V421 Excision of rib hump
V422 Epiphysiodesis of spinal apophyseal joint for correction of deformity
V423 Anterolateral release of spine for correction of deformity and graft HFQ
V424 Anterior and posterior epiphysiodesis of spine for correction of deformity
V425 Anterior epiphysiodesis of spine for correction of deformity NEC
V426 Posterior epiphysiodesis of spine for correction of deformity NEC
V428 Other specified other correction of deformity of spine
V429 Unspecified other correction of deformity of spine
V431 Excision of lesion of cervical vertebra
V432 Excision of lesion of thoracic vertebra
V433 Excision of lesion of lumbar vertebra
V438 Other specified extirpation of lesion of spine
V439 Unspecified extirpation of lesion of spine 12
V441 Complex decompression of fracture of spine
V442 Anterior decompression of fracture of spine
V443 Posterior decompression of fracture of spine NEC
V448 Other specified decompression of fracture of spine
V449 Unspecified decompression of fracture of spine
V451 Open reduction of fracture of spine and excision of facet of spine
V452 Open reduction of fracture of spine NEC
V458 Other specified other reduction of fracture of spine
V459 Unspecified other reduction of fracture of spine
V461 Fixation of fracture of spine using plate
V462 Fixation of fracture of spine using Harrington rod
V463 Fixation of fracture of spine using wire
V464 Fixation of fracture of spine and skull traction HFQ
V468 Other specified fixation of fracture of spine V469 Unspecified fixation of fracture of spine
V492 Exploratory thoracic laminectomy V494 Exploratory laminectomy NEC
V495 Transthoracic exploration of spine V496 Transperitoneal exploration of spine
V498 Other specified exploration of spine V499 Unspecified exploration of spine
V511 Primary direct lateral excision of lumbar intervertebral disc and interbody fusion of joint of lumbar spine (added to original list)
V518 Other specified other primary excision of lumbar intervertebral disc (added to original list)
V519 Unspecified other primary excision of lumbar intervertebral disc (added to original list)
V541 Transoral excision of odontoid process of axis
V542 Graft of bone to spine NEC

V543 Osteotomy of spine NEC
V548 Other specified other operations on spine
V549 Unspecified other operations on spine
V561 Primary laser foraminoplasty of cervical spine
V562 Primary laser foraminoplasty of thoracic spine
V564 Primary laser foraminoplasty of spine NEC
V568 Other specified primary foraminoplasty of spine
V569 Unspecified primary foraminoplasty of spine
V571 Revisional laser foraminoplasty of cervical spine
V572 Revisional laser foraminoplasty of thoracic spine
V574 Revisional laser foraminoplasty of spine NEC
V578 Other specified revisional foraminoplasty of spine
V579 Unspecified revisional foraminoplasty of spine
V581 Primary automated percutaneous mechanical excision of cervical intervertebral disc
V582 Primary automated percutaneous mechanical excision of thoracic intervertebral disc (added to original list)
V588 Other specified primary automated percutaneous mechanical excision of intervertebral disc
V589 Unspecified primary automated percutaneous mechanical excision of intervertebral disc
V591 Revisional automated percutaneous mechanical excision of cervical intervertebral disc
V592 Revisional automated percutaneous mechanical excision of thoracic intervertebral disc
V598 Other specified revisional automated percutaneous mechanical excision of intervertebral disc
V599 Unspecified revisional automated percutaneous mechanical excision of intervertebral disc
V601 Primary percutaneous decompression using coblation to cervical intervertebral disc
V602 Primary percutaneous decompression using coblation to thoracic intervertebral disc
V608 Other specified primary percutaneous decompression using coblation to intervertebral disc
V609 Unspecified primary percutaneous decompression using coblation to intervertebral disc
V611 Revisional percutaneous decompression using coblation to cervical intervertebral disc
V612 Revisional percutaneous decompression using coblation to thoracic intervertebral disc
V618 Other specified revisional percutaneous decompression using coblation to intervertebral disc
V619 Unspecified revisional percutaneous decompression using coblation to intervertebral disc
V621 Primary percutaneous intradiscal radiofrequency thermocoagulation to cervical intervertebral disc
V622 Primary percutaneous intradiscal radiofrequency thermocoagulation to thoracic intervertebral disc
V628 Other specified primary percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc
V629 Unspecified primary percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc
V631 Revisional percutaneous intradiscal radiofrequency thermocoagulation to cervical intervertebral disc
V632 Revisional percutaneous intradiscal radiofrequency thermocoagulation to thoracic intervertebral disc
V638 Other specified revisional percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc
V639 Unspecified revisional percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc
V661 Revisional fusion of occipitocervical junction
V662 Revisional posterior fusion of atlantoaxial joint using transarticular screw
V663 Revisional posterior fusion of atlantoaxial joint using pedicle screw
V664 Revisional posterior fusion of atlantoaxial joint NEC
V668 Other specified other revisional fusion of joint of spine
V669 Unspecified other revisional fusion of joint of spine

Part 2

Any code from this list when the OPCS code V553: Greater than two levels of spine is also included in the patient record.

V385 Primary posterior interbody fusion of joint of lumbar spine
V386 Primary transforaminal interbody fusion of joint of lumbar spine
V396 Revisional posterior interbody fusion of joint of lumbar spine
V397 Revisional transforaminal interbody fusion of joint of lumbar spine
V401 Non-rigid stabilisation of spine
V404 Posterior instrumented fusion of lumbar spine NEC
*V224 Primary Anterior Corpectomy of Cervical Spine
*V372 Posterior Fusion of Joint of Cervical Spine NEC
*V402 Posterior Instrumented Fusion of Cervical Spine NEC

*These procedures are only specialised if attached to a 553 code. If attached to a V551 or V552 code, then will be non-specialised.

Change form for published Specifications and Products developed by Clinical Reference Group (CRGs)

Product name: Service Specification – Complex Spinal Surgery Services (All ages)

Publication number: 240801S

CRG Lead: National Clinical Director, Neurosurgery and Spinal Surgery / National Programme of Care Senior Manager, Trauma

Description of changes required

Describe what was stated in original document	Describe new text in the document	Section/Paragraph to which changes apply	Describe why document change required	Changes made by	Date change made
The format of the service specification has changed due to the content of the previous specification being transferred into the current NHS England Specialised Service Specification Template			The format of the service specification has changed due to the content of the previous specification being transferred into the current NHS England Specialised Service Specification Template.	Specification Working Group	April 2023
This service specification covers adults and children falling under the direct commissioning responsibilities of NHS England in relation to the provision of complex spinal surgery. This service encompasses elements of care provided	This service specification covers the provision of complex spinal surgery services (adults and children). Evidence Base This specification has been developed taking into account the GIRFT national	Section 5	The revised section reflects the current commissioning landscape and meets the requirements of the new service specification template	Specification Working Group	April 2023

by spinal surgeons from both orthopaedic and neurosurgery. 3.2 Population Needs The majority of the population will experience back pain at some point in their lifetime. Most people will, however, not require the input of a consultant spinal surgeon and can be managed appropriately through an appropriate triage service (National Back & Radicular Pain Pathway). The number of patients requiring a surgical procedure represents a small proportion of the total number of procedures performed in spinal surgery. 3.3 Expected Significant Future Demographic Changes It is expected that the number of patients with spinal problems will continue to rise in years to come. The volume of specialised spinal surgical procedures is likely to rise with patient demand for surgical intervention for complex	report on spinal surgery (https://gettingitrightfirsttime.co.uk/wp-content/uploads/2019/01/Spinal-Services-Report-Mar19-L1.pdf) and its recommendations, published January 2019. Minimum population size It is expected that the planning population for these services will be between one and three million.				

issues such as deformity, as well as increasing numbers of metastatic disease, trauma, tumour and infection. This increase is likely as a result of advances in medical care, particularly in the elderly and in oncology. 3.4 Evidence Base This specification has been developed taking into account the GIRFT national report on spinal surgery (https://gettingitrightfirsttime.co.uk/wp-content/uploads/2019/01/Spinal-Services-Report-Mar19-L1.pdf) and its recommendations, published January 2019.					
How the Service is Differentiated from Services Falling within the Responsibilities of Other Commissioners NHS England commissions complex spinal surgery services for adults from Specialist Spinal Surgery Centres, including services delivered on an outreach basis as part of a		Scope	This is no longer required in the new template	Specification Working Group	July 23

formalised provider network. NHS England commissions complex spinal surgery services for children from Specialist Paediatric Spinal Surgery Centres.					
NHS England commissions: • All spinal deformity surgery (adults and children). • All spinal reconstruction surgery including tumour, trauma & infection (adults and children). • Palliative or curative spinal oncology surgery (adults and children). • All anterior, lateral and posterior thoracic surgery. • All anterior lumbar surgery. • All anterior cervical surgery greater than two levels. • All corpectomy surgery at any level of the spine. • Posterior cervical decompression surgery using instrumentation. • Posterior lumbar instrumented surgery greater than two levels. CCGs commission:	Removed	Scope	Removed as does not reflect current commissioning arrangements	Specification Working Group	July 23

• Posterior cervical decompression surgery without instrumentation. 2 • Anterior cervical decompression surgery two levels or less. • Primary lumbar decompression/discectomy. • Posterior lumbar fusion surgery two levels or less • Spinal injections • Cement augmentation procedures					
The aims of spinal services are to improve the quality of life of patients with complex spinal conditions by: • improving access to spinal surgical departments in a timely manner by reducing inappropriate referrals with the implementation of the "National Back & Radicular Pain Pathway;" • improving governance and reducing variation in surgical practice via the Regional Spinal Networks; • improving timely emergency access across the country with agreed	The aims of spinal services are to improve the quality of life of patients with complex spinal conditions by: • improving access to spinal surgical departments in a timely manner • Reduce inappropriate spinal referrals through the implementation of appropriate triage pathways • improving governance and reducing variation in complex spinal surgical practice via the Spinal Networks and interface with Neurosurgery Networks and implementation of best practice pathways in keeping with GIRFT • Improving timely emergency access across	Service aims and outcomes Section 6.1	Updated to reflect current nomenclature, guidance and interface between spinal and neurosurgery specialties	Specification Working Group	May 2023

pathways through the Regional Spinal Networks; • improving outcome data for all surgical procedures by using the British Spine Registry; • collaborating with other specialties including specialised neurosciences and pain management service to improve the overall care of patients; • complying with the requirements of the best practice tariff in relation to submission of data to the British Spine Registry (BSR) to collect diagnosis, surgical procedure, complications and Patient Reported Outcome and Experience Measures (PROMS & PREMS	the country with agreed pathways through the Spinal Networks and implementation of the National cauda Equina Pathway: Link • Collaborating with other specialties including neurosurgery, neurology, pain management, diagnostic imaging, cancer services, major trauma and rehabilitation. • Ensure compliance with national standards including, but not exclusively the following: Best practice tariff in relation to submission of data to the British Spine Registry (BSR) The British Spine Registry: Home to collect diagnosis, surgical procedure, complications and Patient Reported Outcome and Experience Measures (PROMS & PREMS)				
Old quality indicators	New draft quality outcomes	Outcomes Section 6.2	To reflect new approach to assessing the quality of services. Quality indicators are removed from specifications as they are updated and only the quality outcomes	Specification Working Group and Metrics Review Group	December 2023

			relating to the service will be included within the specification.		
	New section added: This service encompasses elements of care provided by spinal surgeons from both orthopaedic and neurosurgery disciplines. The service specification focuses on procedures that can be performed in neurosurgical and orthopaedic centres. Procedures that are only performed in a neurosurgical unit will be covered by the neurosurgery specification. All procedures covered by this specification will be coded under 108.	Service Description – Service model Section 7.1	To be clearer regarding the scope of the specification	Specification working group	July 2023
For children and young people: Complex spinal surgery services include a number of specified procedures that should only be performed in Specialist Spinal Surgery Centres.	For children and young people: Complex spinal surgery services such as paediatric deformity and other congenital spinal deformities must only be performed in Specialist Spinal Surgery Centres with appropriate paediatric support as specified below.	Service Description Section 7.1	To illustrate specific examples of complex spinal surgery and reinforce the importance of where procedures are undertaken	Specification Working Group	July 2023
NHS England commissions:	This Specification covers the following groups of procedures:	New section added. Service Description Section 7.1	List of procedures reviewed and		

• All spinal deformity surgery (adults and children). • All spinal reconstruction surgery including tumour, trauma & infection (adults and children). • Palliative or curative spinal oncology surgery (adults and children). • All anterior, lateral and posterior thoracic surgery. • All anterior lumbar surgery. • All anterior cervical surgery greater than two levels. • All corpectomy surgery at any level of the spine. • Posterior cervical decompression surgery using instrumentation. • Posterior lumbar instrumented surgery greater than two levels.	• Emergency Spinal Surgery • All spinal deformity surgery (adults and children). • All spinal reconstruction surgery including tumour, trauma & infection (adults and children). • All extradural spinal tumour surgery • Palliative or curative spinal oncology surgery (adults and children). • All anterior, lateral and posterior thoracic instrumented surgery. • All anterior lumbar surgery. • All anterior & posterior cervical surgery greater than two levels. • All thoracic and lumbar corpectomy surgery. • All upper cervical surgery (C0 – C2) and all lower posterior instrumented cervical surgery greater than 2 levels. • Posterior lumbar instrumented surgery greater than two levels.		updated to reflect current practice.		
Patients may be referred from other specialties such as oncology, pain management services,	Patients may be referred from other specialties such as neurology, oncology, pain management services,	The Elective Care Pathway Section 7.2	Neurology added as a referrer	Specification Working Group	July 2023

rheumatology and orthopaedics. Patients can also be referred from the Regional Spinal Network centres for more specialist input within the specialised centres.	rheumatology and orthopaedics. • Patients can also be referred from non-specialised spinal centres for more specialist input at the hub centres • All units should follow the GIRFT High Volume Low Complexity (HVLC) pathways.		Articulates more clearly pathway referrals description. New GIRFT guidance issued since 2019 version.		
An electronic referral system is 'essential' to ensure clear documentation is in place between units.	An electronic referral system is 'mandatory' to ensure clear documentation is in place between units.	Emergency Care Section 7.2	Revised wording to emphasise importance of clear documentation.	Specification Working Group	July 23
All hospitals involved in spinal surgery must fully engage with their relevant Regional Spinal Network to agree emergency spinal pathways including protocols for referral guidelines, emergency imaging, repatriation, the care of cauda equina and spinal cord injury.	All hospitals involved in spinal surgery must fully engage with their relevant Spinal Network to agree emergency spinal pathways including protocols for safe transfer, trauma care, referral guidelines, emergency imaging, repatriation, the care of cauda equina and spinal cord injury patients. All hospitals should follow national guidance on emergency pathways such as the National Cauda Equina Pathway.	Emergency Care Section 7.2	Includes requirement to follow the Cauda Equina Pathway and comply with the *Standards for Specialist Rehabilitation of Spinal Cord Injury*, 2022	Specification Working Group	July 23

	Each specialised unit should work within their network and region and with the major trauma networks to define an appropriate repatriation policy. Each specialised centre needs to work closely with Spinal Cord Rehabilitation centre and comply with national standards of care: Standards-for-Specialist-Rehabilitation-of-SCI-Final-Sept-2022.pdf (spinal.co.uk)				
All activity falling under the remit of this service specification should be coded to Treatment Function Code 108 Spinal Surgery Services. Activity is determined by the OPCS4 procedure codes set out in Appendix 1.	All activity falling under the remit of this service specification should be coded to Treatment Function Code (TFC) 108 Spinal Surgery Services. All procedures within the neurosurgery specification will be coded under 150. Activity is determined by the OPCS4 procedure codes set out in Appendix 1.	General Requirements Section 7.2	To provide clarity regarding TFCs for Spinal Surgery	Specification Working Group	December 2023
A centre can provide this service if it meets the following specific requirements: • Each surgeon must regularly perform scoliosis surgery	A centre can provide this service if it meets the following specific requirements: • Each surgeon must regularly perform spinal	Paediatric Spinal Deformity Section 7.2	To reflect more accurately the procedure undertaken	Specification Working Group	November 2023

• To maintain high quality decision making, each patient must be reviewed by the consultant paediatric spinal deformity surgeon at a minimum of alternate clinic visits, or on a 6-monthly basis.	deformity scoliosis surgery • Each patient must have a consultant paediatric spinal deformity surgeon input at a minimum of alternate visits or on a 6 monthly basis. • Each patient and relatives should have appropriate support from nursing staff, psychology and other paediatric specialist input for holistic care.		Revised wording to be more patient focused. Important to include wider MDT staff to support holistic care.		
All cases should be discussed and agreed at the regional MDT.	All cases should be discussed and agreed at a regionally agreed and documented regional MDT.	Adult & Degenerative Spinal Deformity Section 7.2	Additional text emphasises the importance of documenting case discussion and agreement.	Specification Working Group	November 2023
	Shared Care Arrangements added to 2024 version.	Pathways Section 7.2	Important to insert to highlight importance of joint / MDT working for optimal patient pathway.	Specification Working Group	November 2023
	A new paragraph has been included setting out the requirements for transition from children to adult services.	Pathways Section 7.2	To highlight importance and standards for transition.	Specification Working Group	May 2023
Referred to Regional Spinal Networks and stated:	Refers to Spinal Networks and states:	Throughout the document and new section added Clinical Networks Section 7.3	To avoid confusion with NHSE Specialised	Specification Working Group	May 2023

Spinal surgery is coordinated through 14 Regional Spinal Networks (RSNs) that coordinate all levels of care from referring centres into a Specialist Spinal Surgery Centre (hub). The overarching aim of each network is to help define standards, pathways and standard operating procedures (SOPs) aimed at improving access and care for patients presenting with spinal conditions via an elective or emergency care pathway.	There is a requirement for providers of this service to comply with the provisions of Schedule 2F (Clinical Networks) of the NHS Standard Contract. This includes meeting the requirements of the Spinal Surgery Specialised Services Clinical Network Specifications. Spinal surgery is coordinated through 14 Spinal Networks (SNs) that coordinate all levels of care from referring centres into a Specialist Spinal Surgery Centre (hub). All specialised spinal surgical procedures are provided by neurosurgical and orthopaedic 'hub' centres, of which there are between one and three in each SN. The overarching aim of each network is to help define standards, pathways and standard operating procedures (SOPs) aimed at improving access and care for patients presenting with spinal conditions via an elective or emergency care pathway.		Commissioning regions. The Spinal Services Clinical Network Specification was updated in 2023 therefore this section reflects the changes outlined in the Spinal Services Clinical Network specification		

	All Providers will be required to participate in a networked model of care to enable services to be delivered as part of a co-ordinated, combined whole system approach.				
As a minimum, a spinal surgery service multidisciplinary team (MDT) meeting, held weekly, must comprise at least four spinal consultants and a consultant radiologist. Other members of the MDT will vary, but will include representation from Anaesthetics, Microbiology, Infectious Diseases, Pathology, Oncology, Pain Management and other specialities depending on the specifics of the condition being treated. Attendance is mandatory for all spinal consultants, unless they are on leave. The MDT must be recorded and submitted as part of Quality Assurance.	As a minimum, a spinal surgery service multidisciplinary team (MDT) meeting, (weekly), must comprise at least four spinal consultants and a consultant radiologist. Other members of the MDT will vary, but will include representation from Advanced Practice Physiotherapists, Anaesthetics, Microbiology, Infectious Diseases, Pathology, Oncology, Pain Management and other specialities depending on the specifics of the condition being treated. Attendance is mandatory for all spinal consultants, unless they are on leave. The MDT must be recorded on an agreed MDT proforma and submitted as part of Quality Assurance.	Essential Staff Groups Section 7.4	This section has been re-written to reflect current practice in relation to staffing requirements	Specification Working group	July 2023

All specialised units must have nursing skills and staffing numbers to maintain the standard of care required for spinal patients, including those with spinal cord injury (maintaining in line immobilisation as required, 2 to 4 hourly turns, bladder and bowel care, skin care, managing orthotics etc). Clinical nurse specialist and/or physiotherapist input is required to support communication with patients and their families, provide information, co-ordinate pre-operative assessment and help reduce avoidable surgical cancellations and facilitate outcome data collection. These roles should be a key part of the Multidisciplinary Team (MDT). A mentoring system must be in place for newly appointed consultants, including joint operating and case monitoring until it is agreed by both sides that this is no longer required.	Paediatric deformity units should have access to counselling &/or psychology services. All specialised units must have nursing skills and staffing numbers to maintain the standard of care required for spinal patients, including those with spinal cord injury. The department should have staff skilled in caring for spinal cord injury patients in the acute setting in line with national standards of care to reduce complications. All units must have allied health staff who are trained in looking after patients with a spinal cord injury and work closely with their designated SCI centre. A regular MDT meeting should take place with the link SCI centre. Clinical nurse specialist and/or physiotherapist input is required to support communication with patients and their families, provide information, co-ordinate pre-operative assessment and help				

When surgery necessitates the presence of 2 spinal consultants, then they should be available together on rota. All units must have: • A designated, competent, experienced senior nurse lead in possession of a completed portfolio of specialist competencies actively engaged in their local regional spinal network; • A registered nursing team on the ward who can facilitate safe, effective practice in spinal care which is underpinned by the National Major Trauma Nursing Group Adult Ward Nursing Competencies (spinal section; V1.1. April 2018; http://www.nmtng.co.uk/adult-trauma-wards.html) • At least 50% of the nursing team should be in possession of the relevant competency set, with the remainder working towards completion;	reduce avoidable surgical cancellations and facilitate outcome data collection. These roles should be a key part of the Multidisciplinary Team (MDT). A mentoring system must be in place for newly appointed consultants, including joint operating and case monitoring until it is agreed by both sides that this is no longer required. Regular joint operating should be job planned for deformity and complex cases within specialised units. All units must have: • Designated, competent, Advanced Clinical Practitioners (ACPs) and physiotherapist who engage in the spinal network. • A registered nursing team on the ward who can facilitate safe, effective practice in spinal care. • Consultant anaesthetists experienced with the				

• Consultant anaesthetists experienced with the problems associated with specialised spinal surgery.	problems associated with specialised spinal surgery.				
All necessary resources must be available to allow for the assessment, pre-operative assessment, admission, investigation, treatment, on-going care and rehabilitation of spinal surgical patients in line with agreed and commissioned national standards and within timescales appropriate to the clinical needs of patients. Access to emergency consultation and treatment will be available at all times at a hub centre as defined by the Regional Spinal Networks. Spinal surgical services will be consultant-led. Other staff contributing to the delivery of services including non-consultant-grade clinical staff, such as medical staff, nurses and allied health professionals (AHPs)	All necessary resources must be available to allow for the assessment, pre-operative assessment, admission, investigation, treatment, on-going care and acute / early rehabilitation of spinal surgical patients in line with agreed and commissioned national standards and within timescales appropriate to the clinical needs of patients. Access to emergency assessment, consultation and treatment by a consultant spinal surgeon will be available at all times at a hub centre. Other staff contributing to the delivery of such as medical staff, nurses and allied health professionals (AHPs) are essential to support spinal surgical services.	Essential equipment and/or facilities Section 7.5	Moved to more appropriate section in the document and reference to acute / early rehabilitation, noting the importance of this in the patient pathway	Specification working group	July 2023

are essential to support spinal surgical services. The vast majority of specialised centres must be able to offer all aspects of specialised spinal surgery, taking into account the general requirements set out in section 2.2 and the additional specific points relating to the provision of deformity surgery as detailed below.	The vast majority of specialised centres must be able to offer all aspects of specialised spinal surgery, taking into account the general requirements set out in section 7.6 and the additional specific points relating to the provision of deformity surgery as detailed in section 7.2.				
24/7 on-site access to specialist consultant anaesthetists (for paediatrics/adults) with experience of the complications associated with this surgery.	24/7 access to specialist consultant anaesthetists (for paediatrics/adults) with experience of the complications associated with this surgery; and onsite 24/7 anaesthetic teams (any grade) able to support a deteriorating patient and facilitate a return to theatre.	Key requirements Section 7.5	Important to ensure safety of patients	Specification Working Group	November 2023
Sterile spinal implants, including removal instruments for all implants (this is particularly important if sterilisation takes place off-site).	Sterile spinal implants, including removal instruments for all implants.		Sterilisation important irrespective of location of sterilisation	Specification Working Group	May 2023
• An online or web-based referral system to ensure efficient and safe management of new emergency referrals and	Text moved from Additional requirements to Key requirements:		Text is more appropriate to Key requirements section	Specification Working Group	July 2023

to provide a robust, auditable record of advice and care and to allow monitoring of delays in admission. • Immediate and direct web-based access to critical diagnostic imaging in all referring units. • A consultant spinal surgeon trained in complex spinal reconstruction for tumour, trauma and / or infection will be available in every unit 24 hours a day for advice. The consultant will be provided with remote virtual private networks (VPN) access to all necessary imaging.	• An online or web-based referral system to ensure efficient and safe management of new emergency referrals and to provide a robust, auditable record of advice and care and to allow monitoring of delays in admission. • Immediate and direct web-based access to critical diagnostic imaging in all referring units. • A consultant spinal surgeon trained in complex spinal reconstruction for tumour, trauma and / or infection will be available in every unit 24 hours a day for advice. The consultant will be provided with remote virtual private networks (VPN) access to all necessary imaging.				
On site vascular services for revision anterior lumbar spinal surgery and documented vascular policy to access on-call vascular services if required for all other anterior lumbar surgery.	• On site vascular services for all anterior lumbar spinal. • All units must have a vascular escalation policy to manage any vascular incident that may occur during spinal surgery		Text revised to include all anterior lumbar spinal surgery and requirement to have a vascular escalation policy	Specification Working Group	November 2023
Interdependent Services • Haematology • Neurology • Microbiology	Interdependent Services • Haematology • Pain Management	Interdependent Services Section 7.6	Additional services added to reflect broader disciplines involved in pathways.	Specification Working Group	November 2023

• Oncology • Neurosurgery • Spinal Cord Injury Centre • A local wheelchair service in the geographical catchment area for those patients requiring seating adjustments or post-operative assessments	• Paediatrics (If providing paediatric spinal surgery) • Rheumatology • Respiratory • Anaesthetics / Intensive Care • ENT • Urology • Microbiology • Oncology • Neurology • Neurosurgery • Spinal Cord Injury Centre • A local wheelchair service in the geographical catchment area for those patients requiring seating adjustments or post-operative assessments.				
	New section added at 7.7 Additional requirements Communication There will be effective communication between all those responsible for patient care, the patient and where appropriate their family and other carers. The principles of shared decision making will be employed. Patients will be provided with:	New section at Section 7.7 Additional Requirements	Additional text to highlight importance of communication, continuing care and rehabilitation, quality improvement and education and training.	Specification working Group	July 2023

	• A full range of condition-specific information in appropriate formats suited to the communication needs of the spinal surgery service user. British Association of Spine Surgeons - Booklets. • All patients will be offered appropriate time, information and defined time to be appropriately consented and offered all options to make an informed decision on surgery. Continuing Care and Rehabilitation Robust mechanisms for the repatriation of patients to their local secondary and primary care setting must be agreed as part of a regional framework to achieve the efficient and responsive working of the spinal unit. Early liaison with social care services should take place to ensure care packages, where needed, are in place at the time of discharge. Ideally repatriation to referring hospitals should take place				

	within 48 hours when appropriate. Spinal patients should have timely access to a full range of inpatient and outpatient specialist rehabilitation services. Quality Improvement Every spinal surgery unit will have a nominated lead for clinical governance, audit and quality improvement. Spinal units will be provided with the necessary administrative and informatics support to take part in all local and national audits and quality improvement initiatives. All consultants should have access to Model Hospital, NCIP and BSR for regular review of data. It will be expected that this data will be shared within and discussed in regular governance meetings. The performance of units, including measures of effectiveness of care, compliance with guidelines and prevention of avoidable morbidity and mortality will				

	be audited, benchmarked against national norms and the results used to promote service development and improvements. All consultants will take responsibility, but will be provided with administrative support, to ensure all patients undergoing a surgical procedure will have data placed on the British Spine Registry. Education and Training There will be a programme of continuing education for all personnel within the spinal unit and across the network to achieve a full understanding of, and compliance with local protocols, patient care pathways and national guidelines, to ensure competence and to maintain a uniformly high standard of care. • There will be a parallel programme of education in relevant aspects of spinal care for primary care and emergency services that				

	will support effective referral pathways • Training programmes will support the necessary level of competence to all medical, nursing and AHP staff in training grades • The service will engage in spinal research and development				
All centres providing complex spinal surgery services must engage with the Spinal Networks. This must include mandatory attendance at all Network clinical and business meetings.	All centres providing complex spinal surgery services must engage with the Spinal Networks. This must include mandatory attendance at all Network clinical and business meetings; including at consultant level.	Link to other key documents; Other Applicable local standards Section 7.9	Additional text emphasises the importance of multi-disciplinary representation at Network clinical and business meetings	Specification Working Group	September 2023
	Patient Experience section added in 2024 version: The service undertakes a patient experience exercise at least annually e.g. Friends and Family Test. This will be used to inform service improvement and delivery.	Link to other key documents; Other Applicable local standards Section 7.9		Specification Working Group	November 2023
OPCS codes • V224 - Primary Anterior Corpectomy of Cervical Spine	Appendix 1 is now split into Part 1 and Part 2. The following codes have moved into Part 2:	Appendix 1 Complex Spinal Procedures	The SWG felt that the additional text was necessary to distinguish between specialised and non-	Specification Working Group	September 2023

• V372 Posterior Fusion of Joint of Cervical Spine NEC • V402 Posterior Instrumented Fusion of Cervical Spine NEC V227 - Primary laminoplasty of cervical spine V378 - Other specified primary fusion of joint of cervical spine V379 - Unspecified primary fusion of joint of cervical spine	OPCS codes • V224 - Primary Anterior Corpectomy of Cervical Spine • V372 Posterior Fusion of Joint of Cervical Spine NEC • V402 Posterior Instrumented Fusion of Cervical Spine NEC These procedures are only specialised if attached to a 553 code. If attached to a V551 or V552 code, then will be non-specialised. These have now been removed from the list of OPCS Codes.		specialised procedures		
Improving timely emergency access across the country with agreed pathways through the	Improving timely emergency access across the country with agreed pathways through the	Section 6: Service Aims and Outcomes	Important to emphasise the interdependencies and interface	Via Informal Stakeholder Testing	May 2024

Spinal Networks and implementation of the National cauda Equina Pathway	Spinal Networks and interface with Neurosurgery Networks and implementation of the National cauda Equina Pathway		between Spinal and Neurosurgery Networks		