

Specialty guides for patient management during the coronavirus pandemic

Clinical guide to surgical prioritisation during the coronavirus pandemic

8 June 2020 Version 2

This guidance has been updated from the original version published on 11 April 2020. The main changes are the inclusion of material related to spinal surgery and paediatric cardiac surgery.

This guidance describes levels of surgical priority, covering all surgical specialties with the exception of obstetrics and gynaecology and ophthalmology. Guidance for these disciplines is available separately, with links provided below.

Patients requiring surgery during the COVID-19 crisis have been classified in the following groups:

Priority level 1a Emergency - operation needed within 24 hours

Priority level 1b Urgent - operation needed with 72 hours

Priority level 2 Surgery that can be deferred for up to 4 weeks

Priority level 3 Surgery that can be delayed for up to 3 months

Priority level 4 Surgery that can be delayed for more than 3 months

These time intervals may vary from usual practice and may possibly result in greater risk of an adverse outcome due to progression or worsening of the condition, but we have to work within the resources available locally and nationally during the crisis.

For those involved in the planning and delivery of cancer services, specific guidance is available: www.england.nhs.uk/coronavirus/secondary-care/otherresources/specialty-guides/#cancer

For guidance on organ transplantation services please refer to www.england.nhs.uk/coronavirus/secondary-care/other-resources/specialty-guides/

For guidance on obstetric and gynaecological services please refer to <https://www.rcog.org.uk/en/guidelines-research-services/coronavirus-covid-19-pregnancy-and-womens-health/reset-recovery-and-restoration/>

For guidance on the prioritisation of ophthalmic procedures and restoration of ophthalmology services please refer to <https://www.rcophth.ac.uk/about/rcophth-covid-19-response/rcophth-guidance-on-restoring-ophthalmology-services/>

The current guidance is designed primarily to assist a variety of professionals involved in the care of surgical patients. This categorisation will help:

- managers to plan the allocation of surgical resources
- individual surgical specialties to appreciate the needs of other specialties when resources are stretched
- facilitate the development of regional surgical networks to sustain the delivery of surgery in a timely fashion.

It is imperative that patients do not get lost in the system. Clear records of patients whose care is deferred must be held and co-ordinated.

In time, understanding the extent of work that has been deferred will help with planning the measures that need to be taken to reduce the inevitable increase in waiting times and the size of waiting lists that will occur in all surgical specialties.

Please note: Any delay in treatment, especially of cancers, trauma and life threatening conditions, may lead to adverse outcomes

Priority 1a - Emergency procedures to be performed in <24 hours											
(n.b. This prioritisation is about 'when and not by whom' during the Covid-19 Crisis - see notes below).											
General surgery (including oesophago-gastric, HPB, coloproctology, breast, endocrine)	Emergency laparotomy - <i>Peritonitis</i> <i>Perforation</i> <i>Ischaemia</i> <i>Necrotising fasciitis</i> <i>Post-operative complications</i> (e.g. anastomotic leaks) <i>Bleeding</i> - not suitable for/ responding to endoscopic/control/ interventional radiology	Appendicectomy - complicated/ unresponsive to conservative Rx	Intra-abdominal trauma - unsuitable for/not responding to conservative Rx	Drainage of localised sepsis/necrosis - not responding to conservative Rx (antibiotics/ Interventional radiology)	Benign Perforated oesophagus/ stomach - with survivable mediastinitis/ peritonitis	Acute airway obstruction - thyroid					
OMFS	Haemorrhage from maxillary/mandibular trauma not responsive to conservative Rx (reduction + IR)	Dental Sepsis - not responding to conservative Rx and threat to life/airway/ sight/brain.	Orbital Compartment Syndrome/Muscle Entrapment - threat to sight	Jaw Dislocation - not responding to conservative Rx							
Reconstructive plastic surgery including burns and hands	Major burns - Airway management/ resuscitation/ escharotomies/ amputations/Toxic Shock	Chemical burns - especially Eye/ Hydrofluoric acid >2%	Necrotising Fasciitis - any site	Soft tissue infection - any site (especially closed compartments/ joints) not responding to conservative Rx	Revascularisation/ re-implantation/ failing free flap - any site	Washout open wound/fractures/ infected/grossly contaminated (human/animal/ contaminated) wounds - any site	Removal of prosthesis/expander for fulminant infection				
Urology	Renal obstruction with infection - not responding to conservative Rx	Renal/ureteric trauma requiring open surgery	Bladder trauma requiring open surgery	Genital trauma/ testicular torsion/ amputation/priapism (>24hrs)	Fournier's gangrene	Haematuria/ uncontrolled haemorrhage - causing haemodynamic instability and unresponsive to conservative Rx					
Trauma and orthopaedics (including spinal surgery)	Fractures - <i>Open</i> <i>Neurovascular +/- Skin compromise</i> <i>Hip/femoral shaft</i> <i>Long bone/Pelvic +/- Spinal fixation in polytrauma</i>	Infection - <i>Septic arthritis</i> - (natural or prosthetic joint) <i>Other metalware</i> (including spine)	Dislocated joints	Compartment syndrome	Spinal Trauma with instability and or neurological dysfunction	Acute spinal cord compression - with neurological dysfunction - including MSCC	Cauda Equina Syndrome - Clinically and radiologically confirmed.				
ENT	Airway obstruction - Cancer/Foreign body/Sepsis	Neck trauma with vascular/visceral/ airway injury	Nasal/ear button battery removal	Life threatening middle ear conditions	Orbital cellulitis						
Neurosurgery (including spinal surgery)	Traumatic Brain injury - unsuitable for conservative RX	Intra-cranial haemorrhage - not responding to conservative RX	Acute raised Intra cranial pressure/ Hydrocephalus (recoverable stroke/ tumour) - not suitable for conservative Rx	Cauda Equina Syndrome - Clinically and radiologically confirmed.	Myelomeningocele						
Cardiothoracic surgery	Ruptured bronchus	Myocardial infarction - imminent death	Empyema with sepsis	Aortic dissection	Acute presentation of ventricular septal defect	Acute mitral valve disease	Chest Trauma				
Vascular surgery	Vascular injury/ occlusion - Limb/ Gut/SVC	Uncontrolled external haemorrhage - any site/source	Ruptured AAA	Diabetic foot sepsis							
Paediatric general and urological surgery	Neonatal Malformations - <i>Oesophageal Atresia,</i> <i>Gastroschisis,</i> <i>Anorectal Malformations</i>	Emergency Laparotomy - (Neonatal) - <i>Necrotising Enterocolitis (NEC),</i> <i>Perforation,</i> <i>Malrotation</i>	Emergency laparotomy - (Infant/ child) <i>Peritonitis</i> <i>Perforation</i> <i>Intussusception</i> <i>Ischaemia</i> <i>Necrotising fasciitis</i> <i>Bleeding</i> (not responding to conservative Rx) <i>Post-operative complications</i> (e.g. anastomotic leaks/ bleeding)	Appendicectomy - Complicated or unresponsive to conservative Rx	Thoracotomy/Chest Drain Insertion/Video Assisted Thoroscopic Surgery (VATS) for Empyema	Strangulated inguinal hernia	Acute Scrotal Exploration (suspected Testicular Torsion)	Trauma Thoracotomy	Trauma Laparotomy	Removal of Infected Central Line	Renal Obstruction with infection - not responding to Conservative Rx
Paediatric orthopaedic surgery	Septic arthritis/ osteomyelitis	Fractures - <i>Open</i> <i>Neurovascular compromise +/- Skin compromise</i>	Dislocated joints	Compartment syndrome							
Paediatric cardiac surgery	Neonate - Left heart obstructive lesions - <i>HLHS</i> (restrictive/ intact atrial septum) <i>Critical aortic stenosis/coarctation</i> (unresponsive to medical Rx)	Neonate - Right heart obstructive lesions - <i>PA-IVS</i> <i>PA-VSD</i> <i>Tetralogy of Fallot</i> <i>Critical pulmonary stenosis</i> (not responding to medical Rx)	Neonate - Mixing lesions - <i>TGA</i> (hypoxaemia for BAS/Intact IVS for ASO) <i>TAPVD</i> (clinically obstructed) <i>Common arterial trunk</i> (excess pulmonary blood flow, truncal regurgitation not responding to medical Rx)	Neonate - Shunt/ stent - Profound hypoxaemia/ occlusion/ thrombosis)	Neonate - Arrhythmia CHB not responding to medical Rx.	Infant - Right heart obstructive lesions - <i>Tetralogy of Fallot</i> (cyanotic spells unresponsive to medical Rx) <i>Shunt/stent dependent pulmonary blood flow</i> (pre BCPC/pre biV repair with profound hypoxaemia/ thrombosis/ occlusion)	Infant - Regurgitant lesions - <i>Aortic</i> (haemodynamically unstable)	Child - Left heart obstructive lesions - <i>MV prosthesis</i> (Thrombosed)	Child - Regurgitant lesions - <i>Aortic</i> (haemodynamically unstable)		
PLEASE NOTE: More detailed specialty specific guidance can be found on the NHSE website https://www.england.nhs.uk/coronavirus/publication/specialty-guides/	a) THIS DOCUMENT WILL BE REVIEWED MONTHLY	b) This Prioritisation is about 'WHEN and not BY Whom'. Space does not allow every procedure to be listed under every specialty performing it and it DOES NOT indicate primacy of ANY specialty legitimately performing any procedure within their listed competencies.	c) Any delay in treatment, especially of cancers, trauma and life threatening conditions, may lead to adverse outcomes.	d) Other Specialist Surgery in Paediatric patients is included in the guidance above.	e) Safeguarding issues must be considered in all those attending with trauma and acute surgical problems (e.g. NAI/ domestic violence/ abuse of the vulnerable)						

Priority 1b - Procedures to be performed in <72 hours.

(n.b. This prioritisation is about 'when and not by whom' during the Covid19 Crisis - see notes below)

General surgery (including oesophago-gastric, HPB, coloproctology, breast, endocrine)	Laparotomy - <i>Small bowel obstruction</i> - not responding to conservative Rx. <i>Colectomy for acute severe ulcerative colitis</i> - not responding to conservative Rx <i>Bowel obstruction not suitable for stenting.</i>	Perianal abscess/ other infection - not responding to conservative Rx.	Urgent enteral nutrition access	Failed conservative management of localised intra-peritoneal infection	Breast sepsis - without necrosis unresponsive to conservative Rx	Upper GI endoscopy for foreign body removal				
OMFS	Facial fractures - not suitable for conservative Rx									
Reconstructive plastic surgery including burns and hands	Burns - requiring resuscitation.	Burns - full thickness/deep dermal requiring debridement and closure	Burns - mid/deep dermal with exposure of deep structures likely/ infection	Soft tissue infection - any site (especially closed compartments/ joints) not responding to conservative Rx	Delayed primary closure of open wound/fracture - any site	Primary tendon/ nerve repair - all sites.	Unstable closed fractures or joint injuries - unsuitable for conservative Rx	Secondary closure of washed out open wound/ fracture - any site	Fingertip/nail bed repair/terminalisation	Major limb trauma reconstruction unsuitable for conservative Rx
Urology	Upper urinary tract obstruction	Renal stones - pain/ impairment not responsive to conservative Rx	Penile fracture	Infected prosthesis - penile/testicular/ stent						
T & O (including spinal surgery)	Tibial fracture - high energy/displaced, unstable shaft/	Fractures - pathological and peri-prosthetic	Unstable articular fractures that will result in severe disability without operative fixation	Non-hip lower limb frailty fractures requiring fixation to mobilise patient	Spinal Trauma requiring stabilisation without neurological involvement	Acute spinal cord compression - no longer responding to conservative Rx				
ENT	Uncontrolled epistaxis	Sinus surgery for impending catastrophe	Acute mastoiditis and other middle ear conditions not responding to conservative Rx (e.g. Cholesteatoma - complicated)	Traumatic/ cholesteatoma related facial nerve palsy	Traumatic injury to the pinna	Lymph node biopsy - lymphoma where core biopsy inadequate.	Head and neck sepsis - not responding to conservative Rx.	MDT directed Cancer debulking/ biopsy - Microlaryngoscopy +/- laser	Vocal Cord medicalisation for severe aspiration	
Neurosurgery (including spinal surgery)	Depressed skull fracture	Traumatic brain injury - not responding to conservative Rx - neurological compromise	Intracranial haemorrhage - no longer responding to conservative Rx	Acute raised Intra cranial pressure/ hydrocephalus (recoverable stroke/ tumour) - no longer responding to conservative Rx	Battery change for spinal/deep brain/ epilepsy stimulators/pumps	MDT directed paediatric brain tumour surgery				
Cardiothoracic surgery	Empyema not responding to Rx	Coronary Artery Disease - Unstable/ Rest ECG changes and not reposing to conservative Rx	Aortic Valve Disease - Deteriorating Symptoms / Haemodynamically unstable	Mitral Valve Disease - Deteriorating Symptoms / Haemodynamically unstable	Myxoma - Emboli/ Haemodynamically unstable	Chest Trauma				
Vascular surgery	Acute on chronic limb ischaemia	Symptomatic carotid disease	Amputation for limb ischaemia	Diabetic foot sepsis - not responding to conservative Rx	Blocked AV fistula					
Paediatric general and urological surgery	Neonatal Malformations - <i>Duodenal Atresia,</i> <i>Small bowel obstruction</i> <i>Large bowel obstruction</i> <i>Congenital Diaphragmatic Hernia</i> <i>Congenital Pulmonary Airway Malformations (CPAMS) - respiratory compromise</i>	Laparotomy - small bowel obstruction not responding to conservative Rx	Laparotomy - Colectomy for colitis (Ulcerative Colitis/ Hirschsprung's) not responding to conservative Rx	Soft tissue infection - any site not responding to conservative Rx	Central Venous Line insertion for Oncology/Enteral nutrition/Access for antibiotics/Dialysis	Drainage of obstructed renal tract	Malignant tumour/ Lymph node biopsy	Peritoneal Dialysis Catheter Insertion	Resection of Posterior Urethral Valves	Pyloromyotomy
Paediatric orthopaedic surgery	Slipped Upper Femoral Epiphysis	Fractures - <i>Displaced articular/ peri-articular</i> <i>Forearm</i> <i>Femoral</i>	Exposed metalwork							
Paediatric cardiac surgery										
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Priority 3 - Procedures to be performed in < 3 months.										
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General surgery (including oesophago-gastric, HPB, coloproctology, breast, endocrine)	MDT directed resection of colon cancer	MDT directed resection of rectal cancer	MDT Directed cancer surgery <i>Hepatobiliary</i> <i>Pancreatic</i> <i>Oesophagogastric GI</i> <i>Stromal tumour</i>	MDT Directed thyroid cancer surgery - including diagnostic lobectomy.	Salvage surgery for recurrent anal cancer	MDT directed breast cancer resection - <i>Pre-menopausal ER+ without adverse biology</i> <i>Extensive high grade DCIS</i>	MDT directed adrenal resections - intermediate masses <i>>4cm<6cm) with hypersecretion (Cortisol/androgen)</i> <i>metastases - progressing on scan at 3/12.</i>	Cholecystectomy - post acute pancreatitis	Hernia - presenting with complications that have settled with conservative Rx	Parathyroidectomy - symptomatic renal stones/Sepsis not responding to conservative Rx.
OMFS	MDT directed resection of head and neck skin cancer - moderately/well differentiated with no metastases.	MDT directed salivary gland tumours (low grade).	Cleft lip - Alveolar bone grafting (Prior to canine eruption)							
Reconstructive plastic surgery including burns and hands	Burns - reconstruction for eyelid closure/microstomia/joint and neck contracture	Limb contractures	Secondary cleft and non-cleft speech surgery - to avoid breaching 7 yrs of age							
Urology	MDT directed prostate cancer surgery - high/intermediate risk	Stent removal/exchange	Haematuria - investigation for non-visible	MDT directed bladder cancer surgery (not invading muscle)	MDT Directed penile cancer surgery (low grade and premalignant).					
T & O (including spinal surgery)	Hip Avascular Necrosis (night pain/collapse of the joint/going off their feet)	Frozen shoulder - severe and not responding to conservative Rx	Tendon reconstruction/tenodesis - any site	Revision surgery <i>Loosening +/- impending fracture.</i> <i>Recurrent joint instability</i> <i>Planned removal of metalware e.g. across joints.</i>	MDT Directed Benign bone/soft tissue lesion excision biopsy - not otherwise specified	MDT Directed primary sarcoma plus metastases surgery	Arthroscopic removal of joint loose body (Reversible symptoms preventing work)	Locked Knee - ACL/other reconstruction		
ENT	CSF fistula repair	Symptomatic mucocoele (e.g. diplopia/recurrent infection)	Cochlear implant in pre-verbal profound hearing loss where delay will impact on long term outcome.	MDT directed otological cancer surgery.	Micro-Laryngoscopy and papilloma resection (laser/microdebrider/coblation/steel)	Endoscopic treatment of pharyngeal pouch with severe dysphagia				
Neurosurgery (including spinal surgery)										
Cardiothoracic surgery	Stable Non ST Elevation MI									
Vascular surgery	AAA >5.5cm and <7cm diameter									
Paediatric general and urological surgery	Congenital Malformations with delayed Management - Hirschsprung's Disease initially managed with washouts.	Inguinal hernia 3-12 mths of age	Gastrostomy for Failure To Thrive (FTT)	Interval appendicectomy for recurrent symptoms						
Paediatric orthopaedic surgery	Developmental Dislocation of the Hip (DDH) - Primary joint stabilisation	Congenital Talipes Equino Varus (CTEV) - Initial management including tenotomies	Limb length discrepancy/malalignment	MDT Directed Suspected, aggressive benign bone tumour						
Paediatric cardiac surgery										
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