

## Reference Operation Groups

### Suture of wound

Suture of wound to head or neck  
Suture of wound (not head and neck)  
Explore infected wound

### Lumbar puncture / drain

Insertion of lumbar drain  
Lumbar puncture  
CSF Infusion studies

### Access CSF

Percutaneous tap of CSF reservoir  
Access EVD or Lumbar Drain

### Insert ICP monitor

Insertion of ICP monitor

### Intubation

Endotracheal intubation

### Arterial line

Insertion of arterial line

### Central Line

Insertion of central line

### Chest drain

Insertion of chest drain

### Injections to Joint or Nerve

Local anaesthetic / steroid injections to joint, spine, occipital nerve but not cutaneous injections.  
Spinal rhizolysis

### Application of Halo or Traction

Application of craniocervical traction  
Application of halo jacket and ring

### Change Battery

Change Battery

### Muscle, Temporal artery and Nerve biopsies

Peripheral nerve biopsy  
Temporal artery biopsy  
Muscle biopsy

### Burr holes

### Image guidance setup

### Close case

### Burr hole evacuation of subdural haematoma

Burr hole/craniectomy for subdural collection (incl CSDH)

### Craniotomy for extradural haematoma

Craniotomy for extradural haematoma

### Craniotomy for subdural haematoma

Craniotomy for subdural haematoma

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## Reference Operation Groups

### Craniotomy for traumatic ICH

Evacuation of traumatic intracerebral haematoma/contusion

### Elevate depressed fracture / penetrating injury

Craniotomy for removal of foreign body/penetrating injury  
Elevation of depressed skull fracture

### Decompressive craniectomy

Supratentorial decompressive craniectomy  
Posterior fossa craniectomy (for stroke)  
Sub temporal decompression

### Cranioplasty

Cranioplasty

## **Dural repair for CSF leak**

Dural repair for CSF fistula

## **Other trauma**

Fixation of facial fractures

Fixation of mandibular fracture

## **Stereotactic / Image guided biopsy of tumour**

Stereotactic biopsy of intrinsic cerebral tumour

Burr hole biopsy of intrinsic cerebral tumour (+/- image guidance)

Brain biopsy

## **Craniotomy for intrinsic tumour**

Craniotomy for frontal intrinsic cerebral tumour

Craniotomy for temporal intrinsic cerebral tumour

Craniotomy for parietal intrinsic cerebral tumour

Craniotomy for occipital intrinsic cerebral tumour

Craniotomy for other intrinsic cerebral tumour

## **Periventricular / suprasellar tumours [Index 1]**

Craniotomy for midline ventricular lesion (eg colloid cyst)

Transcranial approach to sellar or suprasellar lesion

Infratentorial, supracerebellar approach to pineal region tumour

Supratentorial, suboccipital approach to pineal region tumour

Interhemispheric approach to pineal region tumour

## **Craniotomy for meningiomas [Index 1 & 3]**

Excision of meningioma - convexity

Excision of meningioma - sphenoid ridge

Excision of meningioma - subfrontal

Excision of meningioma - parasagittal

Excision of meningioma - falx

Excision of meningioma - Other

## **Craniotomy for other benign lesions**

Supratentorial craniotomy for benign lesions (excl. meningioma)

Supratentorial skull base approach to skull base tumour

## **Trans-sphenoidal procedures [Index 2]**

Trans-sphenoidal excision of pituitary adenoma

Trans-sphenoidal biopsy of sellar lesion (not adenoma)

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## **Reference Operation Groups**

### **Craniotomy for intrinsic tumours [Index 4]**

Midline approach to intrinsic cerebellar tumour

Midline approach to intrinsic brain stem or 4th ventricle tumour

Retrosigmoid approach to intrinsic cerebellar tumour

Retrosigmoid approach to intrinsic brain stem tumour

### **Infratentorial meningiomas [Index 4]**

Retrosigmoid craniotomy and excision of meningioma

Midline posterior fossa craniotomy and excision of meningioma

### **Craniotomy for acoustic neuroma [Index 4]**

Middle fossa approach to vestibular schwannoma

Retrosigmoid approach to vestibular schwannoma

Translabrynthine approach to vestibular schwannoma

### **Other infratentorial benign tumours [Index 4]**

Retrosigmoid craniotomy for benign lesions (excl. schwannoma and meningioma)

Midline posterior fossa craniotomy for benign lesions (excl. meningioma)

Transoral / transfacial approach to skull base tumour

Infratentorial skull base approach to skull base tumour

### **Intracranial abscess**

Drainage of intracerebral abscess

Excision of intracerebral abscess

### **Epidural / subdural empyema**

Drainage of subdural empyema

Drainage of extradural empyema

### **EVD or access device insertion**

Insertion of access device

Insertion of external ventricular drain

## **VP shunt insertion**

Insertion of ventriculoperitoneal shunt

## **VP shunt revision**

Revision/maintenance of cranial CSF drainage system

## **All other shunt procedures**

Removal of cranial CSF drainage system

Other CSF drainage/shunt procedure

Insertion of lumboperitoneal or lumbopleural shunt

Revision/maintenance of spinal CSF drainage system

Removal of spinal shunt system

Insertion of VA shunt

## **Endoscopic procedures [Index 2]**

Endoscopic biopsy of intrinsic cerebral tumour

Endoscopic excision / drainage of ventricular lesion (eg colloid cyst)

Endoscopic third ventriculostomy

Other Endoscopic Procedure (except biopsy)

## **Clipping of intracranial aneurysm [Index 1]**

Clipping of anterior circulation aneurysm

Clipping of posterior circulation aneurysm

## **Craniotomy for AVM [Index 1]**

Craniotomy and excision of AVM

Craniotomy for dural AVM

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# **Reference Operation Groups**

## **Craniotomy for cavernoma [Index 1]**

Craniotomy and excision of Cavernoma

## **Craniotomy for supratentorial ICH**

Craniotomy for spontaneous ICH (supratentorial)

## **Craniotomy for infratentorial ICH [Index 4]**

Craniotomy for spontaneous ICH (infratentorial)

## **Carotid endarterectomy**

Carotid endarterectomy

## **Vascular anastomosis / synangiosis**

Anastomosis of cerebral artery

Cerebral synangiosis

## **Endovascular procedures**

Endovascular embolisation of intracranial aneurysm

Embolisation of AVM

Endovascular occlusion of artery

Other interventional radiological procedure

Cerebral angiogram

Endovascular thrombectomy

## **Cranial operations for epilepsy [Index 1]**

Hemispherectomy (functional or anatomic) for epilepsy

Temporal lobectomy for epilepsy

Lesionectomy for epilepsy

## **Cranial stimulators, electrodes and lesioning**

Implantation of depth electrodes

Thalamotomy for movement disorder

Pallidotomy for movement disorder

Brain stimulation for movement disorder / pain

Revision / removal of brain stimulator or other cortical device

Psychosurgery

Placement of subdural electric grid

## **Insertion of vagal nerve stimulator**

Vagal nerve stimulator for epilepsy

## **Microvascular decompression [Index 4]**

Microvascular decompression of trigeminal nerve

Microvascular decompression of facial nerve

## **Percutaneous lesion of trigeminal nerve**

Percutaneous approach to trigeminal nerve for trigeminal neuralgia

## **DREZ / cordotomy / rhizotomy**

Spinal root rhizotomy  
Open spinal cordotomy  
Percutaneous cordotomy  
DREZ lesion

## **Spinal stimulators / pumps**

Insertion of spinal cord stimulator  
Revision / removal of spinal cord device  
Insertion of spinal drug delivery system

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## **Reference Operation Groups**

### **Cranial nerve procedures**

Excision of lesion of other cranial nerve  
Decompression of other cranial nerve  
Intracranial section of cranial nerve  
Graft to facial (or other) nerve  
Hypoglossal facial anastomosis

### **Craniocervical decompression [Index 5 if durotomy]**

Foramen magnum decompression with durotomy  
Foramen Magnum decompression without durotomy

### **C1, C2 and occipital fusions**

Anterior PEG spinal fixation  
Posterior C1/2 spinal fixation  
Occipito-Cervical fusion (with instrumentation)

### **Anterior cervical procedures**

Anterior cervical fusion  
Primary anterior cervical discectomy +/- graft  
Other anterior cervical decompression  
Revision anterior cervical decompression  
Transoral excision of odontoid  
Anterior cervical disc replacement

### **Posterior cervical procedures**

Posterior cervical fusion  
Primary Posterior Cervical Laminectomy or laminoplasty  
Other posterior cervical decompression  
Revision posterior cervical decompression  
Posterior cervical foraminotomy

### **Thoracic spinal procedures incl scoliosis**

Anterior thoracic or lumbar fusion  
Posterior thoracic or lumbar fusion  
Transthoracic excision of thoracic disc  
Posterior / lateral excision of thoracic disc  
Other posterior thoracic decompression  
Other anterior thoracic decompression  
Anterior thoracic fusion  
Posterior thoracic fusion  
Scoliosis surgery

### **Primary lumbar discectomy**

Primary posterior lumbar discectomy

### **Primary lumbar laminectomy**

Primary lumbar laminectomy for disc/degen disease

### **Other posterior lumbar surgery**

Other decompressive posterior lumbar surgery  
Revision posterior lumbar surgery for disc/degen disease  
Insertion or revision of lumbar interspinous distractor eg X-stop  
Posterior Lumbar Interbody Fusion  
Percutaneous vertebroplasty  
Posterior Lumbar Fusion

### **Anterior lumbar surgery**

Primary anterior lumbar surgery for disc/degen disease  
Revision anterior lumbar surgery for disc/degen disease  
Anterior Lumbar Interbody Fusion

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## Reference Operation Groups

### Infection

Drainage of spinal epidural abscess  
Drainage of spinal subdural abscess

### Intramedullary tumours [Index 5]

Biopsy of intramedullary spinal cord lesion  
Excision / debulking of intramedullary spinal cord lesion

### Intradural extramedullary tumours [Index 5]

Excision of spinal meningioma  
Excision of spinal neurofibroma  
Excision of other intradural, extramedullary lesion

### Extradural tumours

Open biopsy of spine (eg tumour, infection)  
CT guided biopsy of spine (eg tumour, infection)  
Biopsy or excision of extradural spinal tumour

### Dysraphism [Index 5]

Untethering of spinal cord  
Closure of myelomeningocele  
Other surgery for spinal dysraphism  
Closure of encephalocele

### Spinal extradural haematoma

Evacuation of primary spinal extradural haematoma

### Vascular [Index 5]

Surgery for spinal AVM  
Surgery for spinal cavernoma  
Evacuation of primary spinal subdural haematoma

### Syrinx

Insertion of syringoperitoneal or syringopleural shunt  
Fenestration of intramedullary spinal syrinx or cyst

### Peripheral nerve procedures

Carpal tunnel decompression  
Other peripheral nerve decompression  
Section or avulsion of peripheral nerve  
Brachial plexus decompression / cervical rib procedure  
Resection of peripheral nerve lesion  
Insertion/ Revision of Peripheral Nerve Stimulator

### Removal of infected bone flap

Removal of infected bone flap / cranioplasty

### Reopening of wound

Re-opening for post-operative cranial haematoma  
Post-operative re-exploration of spine  
Explore infected wound

### Scalp and skull lesions

Excision of scalp lesion  
Excision of skull lesion

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## Reference Operation Groups

### Procedures not elsewhere coded

Correction of synostosis- vault only  
Correction of synostosis- combined craniofacial procedure  
Cranial procedure not elsewhere coded (cranial contents)  
Cranial procedure not elsewhere coded (skull)  
Spinal cord procedure- not elsewhere coded  
Spinal (bony) procedure- not elsewhere coded  
Stereotactic Radiosurgery

### Burr hole evacuation of subdural haematoma

Burr hole/craniectomy for subdural collection (incl CSDH)

### Craniotomy for extradural haematoma

Craniotomy for extradural haematoma

### Craniotomy for subdural haematoma

Craniotomy for subdural haematoma

## **Craniotomy for traumatic ICH**

Evacuation of traumatic intracerebral haematoma/contusion

## **Elevate depressed fracture / penetrating injury**

Craniotomy for removal of foreign body/penetrating injury

Elevation of depressed skull fracture

## **Decompressive craniectomy**

Supratentorial decompressive craniectomy

Posterior fossa craniectomy (for stroke)

Sub temporal decompression

## **Cranioplasty**

Cranioplasty

## **Other trauma**

Fixation of facial fractures

Fixation of mandibular fracture

Dural repair for CSF fistula

## **Stereotactic / Image guided biopsy of tumour**

Stereotactic biopsy of intrinsic cerebral tumour

Burr hole biopsy of intrinsic cerebral tumour (+/- image guidance)

Brain biopsy

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## **Reference Operation Groups**

### **Craniotomy for supratentorial tumour [Index 6]**

Craniotomy for frontal intrinsic cerebral tumour

Craniotomy for temporal intrinsic cerebral tumour

Craniotomy for parietal intrinsic cerebral tumour

Craniotomy for occipital intrinsic cerebral tumour

Craniotomy for other intrinsic cerebral tumour

Craniotomy for midline ventricular lesion (eg colloid cyst)

Supratentorial craniotomy for benign lesions (excl. meningioma)

Supratentorial skull base approach to skull base tumour

Excision of meningioma - convexity

Excision of meningioma - sphenoid ridge

Excision of meningioma - subfrontal

Excision of meningioma - parasagittal

Excision of meningioma - falx

Excision of meningioma - Other

Transcranial approach to sellar or suprasellar lesion

Supratentorial, suboccipital approach to pineal region tumour

Interhemispheric approach to pineal region tumour

Middle fossa approach to vestibular schwannoma

### **Craniotomy for infratentorial tumour [Index 7]**

Midline approach to intrinsic cerebellar tumour

Midline approach to intrinsic brain stem or 4th ventricle tumour

Retrosigmoid approach to intrinsic cerebellar tumour

Retrosigmoid approach to intrinsic brain stem tumour

Retrosigmoid craniotomy for benign lesions (excl. schwannoma and meningioma)

Midline posterior fossa craniotomy for benign lesions (excl. meningioma)

Transoral / transfacial approach to skull base tumour

Infratentorial skull base approach to skull base tumour

Retrosigmoid craniotomy and excision of meningioma

Midline posterior fossa craniotomy and excision of meningioma

Infratentorial, supracerebellar approach to pineal region tumour

Retrosigmoid approach to vestibular schwannoma

Translabrynthine approach to vestibular schwannoma

### **Trans-sphenoidal [Index 2]**

Trans-sphenoidal excision of pituitary adenoma

Trans-sphenoidal biopsy of sellar lesion (not adenoma)

### **Intracranial abscess**

Drainage of intracerebral abscess

Excision of intracerebral abscess

### **Subdural / epidural empyema**

Drainage of subdural empyema

Drainage of extradural empyema

### **EVD or access device insertion**

Insertion of access device

Insertion of external ventricular drain

## **VP shunt insertion**

Insertion of ventriculoperitoneal shunt

## **VP shunt revision**

Revision/maintenance of cranial CSF drainage system

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# **Reference Operation Groups**

## **All other shunt procedures**

Removal of cranial CSF drainage system

Other CSF drainage/shunt procedure

Insertion of lumboperitoneal or lumbopleural shunt

Revision/maintenance of spinal CSF drainage system

Removal of spinal shunt system

Insertion of VA shunt

## **Endoscopic procedures [Index 2]**

Endoscopic biopsy of intrinsic cerebral tumour

Endoscopic excision / drainage of ventricular lesion (eg colloid cyst)

Endoscopic third ventriculostomy

Other Endoscopic Procedure (except biopsy)

## **Craniotomy for AVM or cavernoma [Index 6]**

Craniotomy and excision of AVM

Craniotomy and excision of Cavernoma

Craniotomy for dural AVM

## **Craniotomy for spontaneous ICH**

Craniotomy for spontaneous ICH (supratentorial)

Craniotomy for spontaneous ICH (infratentorial)

## **Other vascular cases**

Clipping of anterior circulation aneurysm

Clipping of posterior circulation aneurysm

Endovascular embolisation of intracranial aneurysm

Embolisation of AVM

Endovascular occlusion of artery

Other interventional radiological procedure

Cerebral angiogram

Anastomosis of cerebral artery

Carotid endarterectomy

Cerebral synangiosis

## **Craniotomy for epilepsy [Index 6]**

Hemispherectomy (functional or anatomic) for epilepsy

Temporal lobectomy for epilepsy

Lesionectomy for epilepsy

## **Cranial stimulators, electrodes and lesioning**

Implantation of depth electrodes

Thalamotomy for movement disorder

Pallidotomy for movement disorder

Brain stimulation for movement disorder / pain

Revision / removal of brain stimulator or other cortical device

Psychosurgery

Placement of subdural electric grid

## **Insertion of vagal nerve stimulator**

Vagal nerve stimulator for epilepsy

## **Spinal stimulators / pumps**

Insertion of spinal cord stimulator

Revision / removal of spinal cord device

Insertion of spinal drug delivery system

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# **Reference Operation Groups**

## **Cranial nerve procedures**

Excision of lesion of other cranial nerve

Microvascular decompression of trigeminal nerve

Microvascular decompression of facial nerve

Percutaneous approach to trigeminal nerve for trigeminal neuralgia

Decompression of other cranial nerve

Intracranial section of cranial nerve  
Graft to facial (or other) nerve  
Hypoglossal facial anastomosis

## **Craniocervical decompression [Index 5 if durotomy]**

Foramen magnum decompression with durotomy  
Foramen Magnum decompression without durotomy

## **C1, C2 and occipital fusions**

Anterior PEG spinal fixation  
Posterior C1/2 spinal fixation  
Occipito-Cervical fusion (with instrumentation)

## **Decompression +/- fusion (incl. scoliosis)**

Anterior cervical fusion  
Posterior cervical fusion  
Anterior thoracic or lumbar fusion  
Posterior thoracic or lumbar fusion  
Primary Posterior Cervical Laminectomy or laminoplasty  
Other posterior cervical decompression  
Primary anterior cervical discectomy +/- graft  
Other anterior cervical decompression  
Revision anterior cervical decompression  
Revision posterior cervical decompression  
Transoral excision of odontoid  
Transthoracic excision of thoracic disc  
Posterior / lateral excision of thoracic disc  
Other posterior thoracic decompression  
Other anterior thoracic decompression  
Primary posterior lumbar discectomy  
Primary lumbar laminectomy for disc/degen disease  
Other decompressive posterior lumbar surgery  
Primary anterior lumbar surgery for disc/degen disease  
Revision posterior lumbar surgery for disc/degen disease  
Revision anterior lumbar surgery for disc/degen disease  
Insertion or revision of lumbar interspinous distractor eg X-stop  
Posterior Lumbar Interbody Fusion  
Anterior Lumbar Interbody Fusion  
Percutaneous vertebroplasty  
Anterior thoracic fusion  
Posterior thoracic fusion  
Posterior Lumbar Fusion  
Posterior cervical foraminotomy  
Scoliosis surgery  
Anterior cervical disc replacement

## **Infection**

Drainage of spinal epidural abscess  
Drainage of spinal subdural abscess

## **Intramedullary tumours [Index 5]**

Biopsy of intramedullary spinal cord lesion  
Excision / debulking of intramedullary spinal cord lesion  
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## **Reference Operation Groups**

### **Intradural, extramedullary tumours [Index 5]**

Excision of spinal meningioma  
Excision of spinal neurofibroma  
Excision of other intradural, extramedullary lesion

### **Extradural tumours**

Open biopsy of spine (eg tumour, infection)  
CT guided biopsy of spine (eg tumour, infection)  
Biopsy or excision of extradural spinal tumour

### **Dysraphism [Index 5]**

Untethering of spinal cord  
Closure of myelomeningocele  
Other surgery for spinal dysraphism  
Closure of encephalocele

### **Spinal extradural haematoma**

Evacuation of primary spinal extradural haematoma

### **Vascular [Index 5]**



Surgery for spinal AVM  
Surgery for spinal cavernoma  
Evacuation of primary spinal subdural haematoma

## **Syrinx**

Insertion of syringoperitoneal or syringopleural shunt  
Fenestration of intramedullary spinal syrinx or cyst

## **Functional / pain**

Spinal root rhizotomy  
Open spinal cordotomy  
Percutaneous cordotomy  
DREZ lesion

## **Peripheral nerve procedures**

Carpal tunnel decompression  
Other peripheral nerve decompression  
Section or avulsion of peripheral nerve  
Brachial plexus decompression / cervical rib procedure  
Resection of peripheral nerve lesion  
Insertion/ Revision of Peripheral Nerve Stimulator

## **Repair of craniosynostosis**

Correction of synostosis- vault only  
Correction of synostosis- combined craniofacial procedure

## **Reopening of wound**

Removal of infected bone flap / cranioplasty  
Re-opening for post-operative cranial haematoma  
Post-operative re-exploration of spine  
Explore infected wound

## **Scalp and skull lesions**

Excision of scalp lesion  
Excision of skull lesion

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## **Reference Operation Groups**

### **Procedures not elsewhere coded**

Cranial procedure not elsewhere coded (cranial contents)  
Cranial procedure not elsewhere coded (skull)  
Spinal cord procedure- not elsewhere coded  
Spinal (bony) procedure- not elsewhere coded  
Stereotactic Radiosurgery

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## **Reference Operation Groups**

### **Children 0-15 yrs old (min 70)**

Craniotomy for extradural haematoma  
Craniotomy for subdural haematoma  
Burr hole/craniectomy for subdural collection (incl CSDH)  
Craniotomy for removal of foreign body/penetrating injury  
Evacuation of traumatic intracerebral haematoma/contusion  
Elevation of depressed skull fracture  
Fixation of facial fractures  
Fixation of mandibular fracture  
Supratentorial decompressive craniectomy  
Dural repair for CSF fistula  
Clipping of anterior circulation aneurysm  
Clipping of posterior circulation aneurysm  
Endovascular embolisation of intracranial aneurysm  
Embolisation of AVM  
Endovascular occlusion of artery  
Other interventional radiological procedure  
Cerebral angiogram  
Craniotomy and excision of AVM  
Craniotomy and excision of Cavernoma  
Craniotomy for dural AVM  
Anastomosis of cerebral artery  
Craniotomy for spontaneous ICH (supratentorial)  
Craniotomy for spontaneous ICH (infratentorial)  
Carotid endarterectomy  
Posterior fossa craniectomy (for stroke)  
Craniotomy for frontal intrinsic cerebral tumour

Craniotomy for temporal intrinsic cerebral tumour  
 Craniotomy for parietal intrinsic cerebral tumour  
 Craniotomy for occipital intrinsic cerebral tumour  
 Midline approach to intrinsic cerebellar tumour  
 Midline approach to intrinsic brain stem or 4th ventricle tumour  
 Retrosigmoid approach to intrinsic cerebellar tumour  
 Retrosigmoid approach to intrinsic brain stem tumour  
 Craniotomy for other intrinsic cerebral tumour  
 Stereotactic biopsy of intrinsic cerebral tumour  
 Burr hole biopsy of intrinsic cerebral tumour (+/- image guidance)  
 Endoscopic biopsy of intrinsic cerebral tumour  
 Craniotomy for midline ventricular lesion (eg colloid cyst)  
 Endoscopic excision / drainage of ventricular lesion (eg colloid cyst)  
 Supratentorial craniotomy for benign lesions (excl. meningioma)  
 Retrosigmoid craniotomy for benign lesions (excl. schwannoma and meningioma)  
 Midline posterior fossa craniotomy for benign lesions (excl. meningioma)  
 Transoral / transfacial approach to skull base tumour  
 Supratentorial skull base approach to skull base tumour  
 Infratentorial skull base approach to skull base tumour  
 Excision of meningioma - convexity  
 Excision of meningioma - sphenoid ridge  
 Excision of meningioma - subfrontal  
 Excision of meningioma - parasagittal  
 Excision of meningioma - falx  
 Retrosigmoid craniotomy and excision of meningioma  
 Midline posterior fossa craniotomy and excision of meningioma  
 Excision of meningioma - Other  
 Trans-sphenoidal excision of pituitary adenoma  
 Transcranial approach to sellar or suprasellar lesion  
 Trans-sphenoidal biopsy of sellar lesion (not adenoma)  
 Infratentorial, supracerebellar approach to pineal region tumour  
 Supratentorial, suboccipital approach to pineal region tumour  
 Interhemispheric approach to pineal region tumour  
 Hemispherectomy (functional or anatomic) for epilepsy  
 Temporal lobectomy for epilepsy  
 Lesionectomy for epilepsy  
 Vagal nerve stimulator for epilepsy  
 Implantation of depth electrodes  
 Thalamotomy for movement disorder  
 Pallidotomy for movement disorder  
 Brain stimulation for movement disorder / pain  
 Revision / removal of brain stimulator or other cortical device  
 Psychosurgery  
 Middle fossa approach to vestibular schwannoma  
 Retrosigmoid approach to vestibular schwannoma  
 Translabrynthine approach to vestibular schwannoma  
 Excision of lesion of other cranial nerve  
 Microvascular decompression of trigeminal nerve  
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## Reference Operation Groups

### Adult 16 and over yrs old (min 1130)

Craniotomy for extradural haematoma  
 Craniotomy for subdural haematoma  
 Burr hole/craniectomy for subdural collection (incl CSDH)  
 Craniotomy for removal of foreign body/penetrating injury  
 Evacuation of traumatic intracerebral haematoma/confusion  
 Elevation of depressed skull fracture  
 Fixation of facial fractures  
 Fixation of mandibular fracture  
 Supratentorial decompressive craniectomy  
 Dural repair for CSF fistula  
 Clipping of anterior circulation aneurysm  
 Clipping of posterior circulation aneurysm  
 Endovascular embolisation of intracranial aneurysm  
 Embolisation of AVM  
 Endovascular occlusion of artery  
 Other interventional radiological procedure  
 Cerebral angiogram  
 Craniotomy and excision of AVM  
 Craniotomy and excision of Cavernoma  
 Craniotomy for dural AVM  
 Anastomosis of cerebral artery  
 Craniotomy for spontaneous ICH (supratentorial)

Craniotomy for spontaneous ICH (infratentorial)  
 Carotid endarterectomy  
 Posterior fossa craniectomy (for stroke)  
 Craniotomy for frontal intrinsic cerebral tumour  
 Craniotomy for temporal intrinsic cerebral tumour  
 Craniotomy for parietal intrinsic cerebral tumour  
 Craniotomy for occipital intrinsic cerebral tumour  
 Midline approach to intrinsic cerebellar tumour  
 Midline approach to intrinsic brain stem or 4th ventricle tumour  
 Retrosigmoid approach to intrinsic cerebellar tumour  
 Retrosigmoid approach to intrinsic brain stem tumour  
 Craniotomy for other intrinsic cerebral tumour  
 Stereotactic biopsy of intrinsic cerebral tumour  
 Burr hole biopsy of intrinsic cerebral tumour (+/- image guidance)  
 Endoscopic biopsy of intrinsic cerebral tumour  
 Craniotomy for midline ventricular lesion (eg colloid cyst)  
 Endoscopic excision / drainage of ventricular lesion (eg colloid cyst)  
 Supratentorial craniotomy for benign lesions (excl. meningioma)  
 Retrosigmoid craniotomy for benign lesions (excl. schwannoma and meningioma)  
 Midline posterior fossa craniotomy for benign lesions (excl. meningioma)  
 Transoral / transfacial approach to skull base tumour  
 Supratentorial skull base approach to skull base tumour  
 Infratentorial skull base approach to skull base tumour  
 Excision of meningioma - convexity  
 Excision of meningioma - sphenoid ridge  
 Excision of meningioma - subfrontal  
 Excision of meningioma - parasagittal  
 Excision of meningioma - falx  
 Retrosigmoid craniotomy and excision of meningioma  
 Midline posterior fossa craniotomy and excision of meningioma  
 Excision of meningioma - Other  
 Trans-sphenoidal excision of pituitary adenoma  
 Transcranial approach to sellar or suprasellar lesion  
 Trans-sphenoidal biopsy of sellar lesion (not adenoma)  
 Infratentorial, supracerebellar approach to pineal region tumour  
 Supratentorial, suboccipital approach to pineal region tumour  
 Interhemispheric approach to pineal region tumour  
 Hemispherectomy (functional or anatomic) for epilepsy  
 Temporal lobectomy for epilepsy  
 Lesionectomy for epilepsy  
 Vagal nerve stimulator for epilepsy  
 Implantation of depth electrodes  
 Thalamotomy for movement disorder  
 Pallidotomy for movement disorder  
 Brain stimulation for movement disorder / pain  
 Revision / removal of brain stimulator or other cortical device  
 Psychosurgery  
 Middle fossa approach to vestibular schwannoma  
 Retrosigmoid approach to vestibular schwannoma  
 Translabrynthine approach to vestibular schwannoma  
 Excision of lesion of other cranial nerve  
 Microvascular decompression of trigeminal nerve  
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## Reference Operation Groups

### Retrosigmoid

Retrosigmoid approach to intrinsic cerebellar tumour  
 Retrosigmoid approach to intrinsic brain stem tumour  
 Retrosigmoid craniotomy for benign lesions (excl. schwannoma and meningioma)  
 Retrosigmoid craniotomy and excision of meningioma  
 Retrosigmoid approach to vestibular schwannoma  
 Microvascular decompression of trigeminal nerve  
 Microvascular decompression of facial nerve

### Midline posterior fossa

Midline approach to intrinsic cerebellar tumour  
 Midline approach to intrinsic brain stem or 4th ventricle tumour  
 Midline posterior fossa craniotomy for benign lesions (excl. meningioma)  
 Midline posterior fossa craniotomy and excision of meningioma  
 Infratentorial, supracerebellar approach to pineal region tumour  
 Foramen magnum decompression with durotomy

### Microscope

### Image guidance

## Endoscopy

### Cervical internal fixation - anterior

Anterior PEG spinal fixation  
Anterior cervical fusion  
Primary anterior cervical discectomy +/- graft  
Other anterior cervical decompression  
Revision anterior cervical decompression

### Cervical internal fixation - posterior

Posterior C1/2 spinal fixation  
Posterior cervical fusion  
Primary Posterior Cervical Laminectomy or laminoplasty  
Other posterior cervical decompression  
Revision posterior cervical decompression  
Posterior cervical foraminotomy

### Craniocervical fusion

Occipito-Cervical fusion (with instrumentation)

### Thoracolumbar fixation - anterior

Transthoracic excision of thoracic disc  
Other anterior thoracic decompression  
Primary anterior lumbar surgery for disc/degen disease  
Revision anterior lumbar surgery for disc/degen disease  
Anterior Lumbar Interbody Fusion  
Anterior thoracic fusion

### Thoracolumbar fixation - posterior

Posterior / lateral excision of thoracic disc  
Other posterior thoracic decompression  
Primary lumbar laminectomy for disc/degen disease  
Other decompressive posterior lumbar surgery  
Revision posterior lumbar surgery for disc/degen disease  
Posterior Lumbar Interbody Fusion  
Posterior thoracic fusion  
Posterior Lumbar Fusion

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## Reference Operation Groups

### 1: Advanced adult supratentorial (min 10)

Clipping of anterior circulation aneurysm  
Clipping of posterior circulation aneurysm  
Craniotomy and excision of AVM  
Craniotomy and excision of Cavernoma  
Craniotomy for midline ventricular lesion (eg colloid cyst)  
Excision of meningioma - sphenoid ridge  
Excision of meningioma - subfrontal  
Transcranial approach to sellar or suprasellar lesion  
Infratentorial, supracerebellar approach to pineal region tumour  
Supratentorial, suboccipital approach to pineal region tumour  
Interhemispheric approach to pineal region tumour  
Hemispherectomy (functional or anatomic) for epilepsy  
Temporal lobectomy for epilepsy  
Lesionectomy for epilepsy

### 2: Endoscopic and transphenoidal (min 10)

Endoscopic biopsy of intrinsic cerebral tumour  
Endoscopic excision / drainage of ventricular lesion (eg colloid cyst)  
Trans-sphenoidal excision of pituitary adenoma  
Trans-sphenoidal biopsy of sellar lesion (not adenoma)  
Endoscopic third ventriculostomy  
Other Endoscopic Procedure (except biopsy)

### 3: Convexity and Falcine meningiomas (min 10)

Excision of meningioma - convexity  
Excision of meningioma - parasagittal  
Excision of meningioma - falx  
Excision of meningioma - Other

### 4: Advanced adult infratentorial (min 10)

Craniotomy for spontaneous ICH (infratentorial)  
Midline approach to intrinsic cerebellar tumour  
Midline approach to intrinsic brain stem or 4th ventricle tumour  
Retrosigmoid approach to intrinsic cerebellar tumour

Retrosigmoid approach to intrinsic brain stem tumour  
Retrosigmoid craniotomy for benign lesions (excl. schwannoma and meningioma)  
Midline posterior fossa craniotomy for benign lesions (excl. meningioma)  
Transoral / transfacial approach to skull base tumour  
Infratentorial skull base approach to skull base tumour  
Retrosigmoid craniotomy and excision of meningioma  
Midline posterior fossa craniotomy and excision of meningioma  
Middle fossa approach to vestibular schwannoma  
Retrosigmoid approach to vestibular schwannoma  
Translabrynthine approach to vestibular schwannoma  
Microvascular decompression of trigeminal nerve  
Microvascular decompression of facial nerve

## **5: Intradural spine (min 5)**

Foramen magnum decompression with durotomy  
Surgery for spinal AVM  
Surgery for spinal cavernoma  
Evacuation of primary spinal subdural haematoma  
Biopsy of intramedullary spinal cord lesion  
Excision / debulking of intramedullary spinal cord lesion  
Excision of spinal meningioma  
Excision of spinal neurofibroma  
Untethering of spinal cord  
Closure of myelomeningocele  
Other surgery for spinal dysraphism  
Excision of other intradural, extramedullary lesion  
Closure of encephalocele

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## **Reference Operation Groups**

### **6: Advanced paed supratentorial (min 1)**

Clipping of anterior circulation aneurysm  
Clipping of posterior circulation aneurysm  
Craniotomy and excision of AVM  
Craniotomy and excision of Cavernoma  
Craniotomy for dural AVM  
Craniotomy for frontal intrinsic cerebral tumour  
Craniotomy for temporal intrinsic cerebral tumour  
Craniotomy for parietal intrinsic cerebral tumour  
Craniotomy for occipital intrinsic cerebral tumour  
Craniotomy for other intrinsic cerebral tumour  
Craniotomy for midline ventricular lesion (eg colloid cyst)  
Supratentorial craniotomy for benign lesions (excl. meningioma)  
Excision of meningioma - convexity  
Excision of meningioma - sphenoid ridge  
Excision of meningioma - subfrontal  
Excision of meningioma - parasagittal  
Excision of meningioma - falx  
Excision of meningioma - Other  
Transcranial approach to sellar or suprasellar lesion  
Supratentorial, suboccipital approach to pineal region tumour  
Interhemispheric approach to pineal region tumour  
Hemispherectomy (functional or anatomic) for epilepsy  
Temporal lobectomy for epilepsy  
Lesionectomy for epilepsy

### **7: Advanced paed infratentorial (min 1)**

Midline approach to intrinsic cerebellar tumour  
Midline approach to intrinsic brain stem or 4th ventricle tumour  
Retrosigmoid approach to intrinsic cerebellar tumour  
Retrosigmoid approach to intrinsic brain stem tumour  
Retrosigmoid craniotomy for benign lesions (excl. schwannoma and meningioma)  
Midline posterior fossa craniotomy for benign lesions (excl. meningioma)  
Transoral / transfacial approach to skull base tumour  
Retrosigmoid craniotomy and excision of meningioma  
Midline posterior fossa craniotomy and excision of meningioma  
Infratentorial, supracerebellar approach to pineal region tumour

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