NUHS Neurosurgery Minimal Numbers and Achievement Timeline Targets for Core Procedures

The graduating residents should have the technical ability to independently perform all core surgical operations as well as to perform some of the advanced neurosurgical procedures under supervision.
The residents should achieve a minimum of 150 core surgical procedures annually. Minimum of 5 DOPs, with minimum of 2 certifying ability to perform independently, is required for each of the core procedures

Core procedures (Adult)	R3	R4	R5	R6
Burrholes for drainage of subdural hematomas and empyemas	✓			
Ventriculostomy	✓			
Insertion of ICP monitor	✓			
Application of Halo ring and the use of cervical spinal traction				
Application of the stereotactic frame		✓		
Lumbar puncture and Lumbar drain insertion	✓			
Placement of ventriculo-peritoneal shunt and revisions	✓			
Performance of stereotactic brain biopsy		✓		
Cranioplasty		✓		
Craniotomy for trauma and evacuation of EDH, SDH	✓			
Repair of CSF leak			✓	
Craniotomy for decompression in stroke and ICH clot evacuation	✓			
Craniotomy for infections – osteomyelitis, abscess drainage		✓		
Craniotomy for tumour resection (including posterior fossa craniotomy)		✓		
Craniotomy for aneurysm repair, approach to the aneurysm (splitting of the sylvian fissure)				✓
Anterior cervical discectomy			✓	
Laminectomy exposure for decompression and fusion of cervical spinal fracture with instrumentation			✓	
Laminectomy exposure for cervical, thoracic, and lumbar degenerative disc disease		✓		
Laminectomy exposure for epidural metastatic disease and other spinal tumours including intra and extra-medullary spinal cord tumours			✓	
Transphenoidal exposure for resection of pituitary tumours				✓

Core procedures (Pediatric)	R3	R4	R5	R6
Burr holes for drainage of subdural hematomas and empyemas			✓	
Ventriculostomy			✓	
VP shunt insertion and revision			✓	
Insertion ICP monitor			✓	
Craniotomy for trauma, tumour and stroke, including posterior fossa surgery				✓

Reference: Singapore Neurosurgery Residency Programme Training Guide (Revised 21 May 2018)