



MASSACHUSETTS

Blue Cross Blue Shield of Massachusetts is an Independent Licensee of the Blue Cross and Blue Shield Association

Medical Policy

Intraoperative Neurophysiologic Monitoring Sensory-Evoked Potentials, Motor-Evoked Potentials, EEG Monitoring

Table of Contents

- [Policy: Commercial](#)
- [Policy: Medicare](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [Information Pertaining to All Policies](#)
- [References](#)
- [Endnotes](#)

Policy Number: 211

BCBSA Reference Number: 7.01.58 (For Plan internal use only)

Related Policies

Vestibular Function Testing, #024

Intraoperative Neurophysiologic Monitoring Sensory-Evoked Potentials, Motor-Evoked Potentials, EEG Monitoring, #701

Policy¹

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Intraoperative Neurophysiologic Monitoring¹

Intraoperative neurophysiologic monitoring, which includes somatosensory-evoked potentials, motor-evoked potentials using transcranial electrical stimulation, brainstem auditory-evoked potentials, electromyography (EMG) of cranial nerves, electroencephalography, and electrocorticography, may be considered **MEDICALLY NECESSARY** in patients undergoing intracerebral surgery or surgery with significant risk for nerve injury when criteria 1 and 2 are met:

1. Monitoring is being conducted in real-time and interpretation is continuously communicated to surgical team.
2. The individual is having the following nerves monitored for the indicated clinical scenarios:

Cranial Nerve

- Spinal, intracranial, vascular procedures
 - Head and neck surgery (e.g., resection of skull base tumor, resection of tumor involving a cranial nerve, cavernous sinus tumor, neck dissection, epileptogenic brain tumor/tissue resection).

Facial Nerve

- Head and/or neck procedures (e.g., acoustic neuroma, microvascular decompression of the facial nerve for hemifacial spasm, parotid tumor resection, cochlear implantation, middle ear, and mastoid surgery and other neurotologic/otologic surgical procedures).

Recurrent Laryngeal Nerve

- **High-risk thyroid or parathyroid surgery**, including:
 - Total thyroidectomy (e.g., complete resection of a lobe of the thyroid, removal of the entire gland or following a prior thyroid surgery where there is scar tissue surrounding the laryngeal nerve) or hemithyroidectomy
 - Repeat thyroid or parathyroid surgery
 - Surgery for cancer
 - Thyrotoxicosis
 - Retrosternal or giant goiter
 - Thyroiditis.
- **Anterior cervical spine surgery** associated with any of the following increased risk situations when monitoring of the laryngeal nerve is necessary:
 - Prior anterior cervical surgery, particularly revision anterior cervical discectomy and fusion, revision surgery through a scarred surgical field, reoperation for pseudarthrosis or revision for failed fusion
 - Multilevel anterior cervical discectomy and fusion
 - Preexisting recurrent laryngeal nerve pathology when there is residual function of the recurrent laryngeal nerve.
- **Other Nerves**
 - **High risk vascular procedures** when there is risk for cerebral ischemia (e.g., surgery of the aortic arch, thoracic aorta, internal carotid artery endarterectomy, intracranial arteriovenous malformation, bronchial artery arteriovenous malformation or tumor, cerebral aneurysm)
 - **Brachial or lumbar plexus surgery**
 - **Spinal procedures with high risk of cord injury** (e.g., spinal cord tumor, spinal fracture with cord compression, mechanical spinal distraction, correction of scoliosis surgery)
 - **Other procedures with a high risk of potential injury to essential nervous system structures** (e.g., Interventional neuroradiology, neuroma of peripheral nerve, leg lengthening procedure when there is traction on the sciatic nerve).

Intraoperative neurophysiologic monitoring for surgery of the cervical spine not meeting the above criteria is considered **NOT MEDICALLY NECESSARY** (e.g. standard anterior cervical discectomy and fusion, cervical disc arthroplasty).

Intraoperative neurophysiologic monitoring during lumbar surgery not meeting the above criteria is considered **NOT MEDICALLY NECESSARY** (e.g. lumbar fusion, laminectomy, discectomy).

Intraoperative neurophysiologic monitoring is considered **NOT MEDICALLY NECESSARY** for **ANY** other indication, including the following:

- Monitoring of epidural injections
- Monitoring during radiofrequency ablation/denervation procedures
- Monitoring during placement of spinal cord stimulator or an intrathecal pain pump.

Intraoperative neurophysiologic monitoring is considered **INVESTIGATIONAL** when the above criteria are not met.

Intraoperative neurophysiologic monitoring of the recurrent laryngeal nerve during anterior cervical spine surgery not meeting the criteria above or during esophageal surgeries is considered **INVESTIGATIONAL**.

Intraoperative monitoring of visual-evoked potentials is considered **INVESTIGATIONAL**

Due to the lack of U.S. Food and Drug Administration approval, intraoperative monitoring of motor-evoked potentials using transcranial magnetic stimulation is considered **INVESTIGATIONAL**.

Intraoperative electromyography and nerve conduction velocity monitoring during surgery on the peripheral nerves are considered **INVESTIGATIONAL**.

Note: The above policy statements refer only to use of these techniques as part of intraoperative monitoring.

Visual Evoked Potential Testing¹

Visual evoked potentials (VEPs) may be considered **MEDICALLY NECESSARY** for the diagnosis, evaluation, or monitoring of any of the following conditions:

- Multiple sclerosis or neuromyelitis optica (NMO), or other demyelinating disorders of the optic nerve; **or**
- Suspected disorder of the optic nerve, optic chiasm or optic radiations not explained by MRI, CT, infectious diseases or metabolic disorders.

Visual evoked potentials (VEPs) are considered **NOT MEDICALLY NECESSARY** for all other uses, including but not limited to routine screening of infants.

Somatosensory Evoked Potential Testing¹

Somatosensory evoked potentials (SSEPs) may be considered **MEDICALLY NECESSARY** when the results will be used to guide clinical management for the following conditions:

- Acute (within 72 hrs. of onset) anoxic encephalopathy; **or**
- Coma following traumatic, hypoxic-ischemic and other diffuse brain injuries; **or**
- Central nervous system deficiency identified on clinical exam when not explained by appropriate imaging studies; **or**
- Demyelinating disease (such as multiple sclerosis) when diagnosis is uncertain and clinical suspicion exists based on neurologic symptoms or cerebrospinal fluid evaluation; **or**
- Myelopathy, unexplained; **or**
- Spinocerebral degeneration (such as Friedreich's ataxia); **or**
- Spinal cord lesions secondary to trauma when the need for surgical intervention is uncertain; **or**
- Suspected brain death.

Somatosensory evoked potentials (SSEPs) are considered **NOT MEDICALLY NECESSARY** for all other uses.

Motor Evoked Potential Testing¹

Motor evoked potentials may be considered **MEDICALLY NECESSARY** when the results will be used to guide clinical management for the following conditions:

- Acute (within 72 hrs. of onset) anoxic encephalopathy; **or**
- Coma following traumatic, hypoxic-ischemic and other diffuse brain injuries; **or**
- Central nervous system deficiency identified on clinical exam when not explained by appropriate imaging studies; **or**
- Demyelinating disease (such as multiple sclerosis) when diagnosis is uncertain and clinical suspicion exists based on neurologic symptoms or cerebrospinal fluid evaluation; **or**
- Myelopathy, unexplained; **or**
- Spinocerebral degeneration (such as Friedreich's ataxia); **or**
- Spinal cord lesions secondary to trauma when the need for surgical intervention is uncertain; **or**
- Suspected brain death.

Motor evoked potentials are considered **MEDICALLY NECESSARY** for evaluation of suspected hysterical or factitious paralysis.

Motor evoked potentials are considered **NOT MEDICALLY NECESSARY** in the non-operative setting when the above criteria are not met.

Motor evoked potentials are considered **NOT MEDICALLY NECESSARY** for all other uses.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is <u>required</u> .
Commercial PPO and Indemnity	Prior authorization is <u>required</u> .

Requesting Prior Authorization Using Authorization Manager

Providers will need to use [Authorization Manager](#) to submit initial authorization requests for services. Authorization Manager, available 24/7, is the quickest way to review authorization requirements, request authorizations, submit clinical documentation, check existing case status, and view/print the decision letter. For commercial members, the requests must meet medical policy guidelines.

To ensure the service request is processed accurately and quickly:

- Enter the facility's NPI or provider ID for where services are being performed.
- Enter the appropriate surgeon's NPI or provider ID as the servicing provider, *not* the billing group.

Authorization Manager Resources

Refer to our [Authorization Manager](#) page for tips, guides, and video demonstrations.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
95940	Continuous intraoperative neurophysiology monitoring in the operating room, one on one monitoring requiring personal attendance, each 15 minutes (List separately in addition to code for primary procedure)

95941	Continuous intraoperative neurophysiology monitoring, from outside the operating room (remote or nearby) or for monitoring of more than one case while in the operating room, per hour (List separately in addition to code for primary procedure)
-------	--

Note: 95941 is considered investigational for Medicare HMO Blue and Medicare PPO Blue.

HCPCS Codes

HCPCS codes:	Code Description
G0453	Continuous intraoperative neurophysiology monitoring, from outside the operating room (remote or nearby), per patient, (attention directed exclusively to one patient) each 15 minutes (list in addition to primary procedure)

When electromyography (EMG) is utilized as part of intraoperative neurophysiologic monitoring, the appropriate EMG CPT code (refer to policy #701) must be utilized in conjunction with codes 95940; 95941 or G0453 above.

ICD-10 Procedure Codes

ICD-10-PCS procedure codes:	Code Description
4A1004G	Monitoring of Central Nervous Electrical Activity, Intraoperative, Open Approach
4A1034G	Monitoring of Central Nervous Electrical Activity, Intraoperative, Percutaneous Approach
4A1074G	Monitoring of Central Nervous Electrical Activity, Intraoperative, Via Natural or Artificial Opening
4A1084G	Monitoring of Central Nervous Electrical Activity, Intraoperative, Via Natural or Artificial Opening Endoscopic
4A10X4G	Monitoring of Central Nervous Electrical Activity, Intraoperative, External Approach
4A1104G	Monitoring of Peripheral Nervous Electrical Activity, Intraoperative, Open Approach
4A1134G	Monitoring of Peripheral Nervous Electrical Activity, Intraoperative, Percutaneous Approach
4A1174G	Monitoring of Peripheral Nervous Electrical Activity, Intraoperative, Via Natural or Artificial Opening
4A1184G	Monitoring of Peripheral Nervous Electrical Activity, Intraoperative, Via Natural or Artificial Opening Endoscopic
4A11X4G	Monitoring of Peripheral Nervous Electrical Activity, Intraoperative, External Approach

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
95925	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper limbs
95926	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in lower limbs
95927	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in the trunk or head
95938	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper and lower limbs

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if medical necessity criteria are met:

ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
C41.2	Malignant neoplasm of vertebral column
C70.0	Malignant neoplasm of cerebral meninges
C70.1	Malignant neoplasm of spinal meninges
C71.0	Malignant neoplasm of cerebrum, except lobes and ventricles
C71.1	Malignant neoplasm of frontal lobe
C71.2	Malignant neoplasm of temporal lobe
C71.3	Malignant neoplasm of parietal lobe
C71.4	Malignant neoplasm of occipital lobe
C71.5	Malignant neoplasm of cerebral ventricle
C71.6	Malignant neoplasm of cerebellum
C71.7	Malignant neoplasm of brain stem
C71.8	Malignant neoplasm of overlapping sites of brain
C71.9	Malignant neoplasm of brain, unspecified
C79.31	Secondary malignant neoplasm of brain
C79.32	Secondary malignant neoplasm of cerebral meninges
C79.49	Secondary malignant neoplasm of other parts of nervous system
C79.51	Secondary malignant neoplasm of bone
D16.6	Benign neoplasm of vertebral column
D32.1	Benign neoplasm of spinal meninges
D33.4	Benign neoplasm of spinal cord
D42.1	Neoplasm of uncertain behavior of spinal meninges
D43.0	Neoplasm of uncertain behavior of brain, supratentorial
D43.1	Neoplasm of uncertain behavior of brain, infratentorial
D43.2	Neoplasm of uncertain behavior of brain, unspecified
D48.0	Neoplasm of uncertain behavior of bone and articular cartilage
D49.2	Neoplasm of unspecified behavior of bone, soft tissue, and skin
D49.6	Neoplasm of unspecified behavior of brain
G11.0	Congenital nonprogressive ataxia
G11.10	Early-onset cerebellar ataxia, unspecified
G11.11	Friedreich ataxia
G11.19	Other early-onset cerebellar ataxia
G11.2	Late-onset cerebellar ataxia
G11.3	Cerebellar ataxia with defective DNA repair
G11.4	Hereditary spastic paraplegia
G11.8	Other hereditary ataxias
G11.9	Hereditary ataxia, unspecified
G36.8	Other specified acute disseminated demyelination
G36.9	Acute disseminated demyelination, unspecified
G37.8	Other specified demyelinating diseases of central nervous system
G37.9	Demyelinating disease of central nervous system, unspecified
G93.1	Anoxic brain damage, not elsewhere classified
G95.89	Other specified diseases of spinal cord
G95.9	Disease of spinal cord, unspecified
G96.810	Intracranial hypotension, unspecified

G96.811	Intracranial hypotension, spontaneous
G96.819	Other intracranial hypotension
G96.89	Other specified disorders of central nervous system
M62.81	Muscle weakness (generalized)
Q85.03	Schwannomatosis
R20.0	Anesthesia of skin
R20.1	Hypoesthesia of skin
R20.2	Paresthesia of skin
R20.3	Hyperesthesia
R20.8	Other disturbances of skin sensation
R20.9	Unspecified disturbances of skin sensation
R25.0	Abnormal head movements
R25.1	Tremor, unspecified
R25.3	Fasciculation
R25.8	Other abnormal involuntary movements
R25.9	Unspecified abnormal involuntary movements
R29.5	Transient paralysis
R40.20	Unspecified coma
R40.2110	Coma scale, eyes open, never, unspecified time
R40.2111	Coma scale, eyes open, never, in the field [EMT or ambulance]
R40.2112	Coma scale, eyes open, never, at arrival to emergency department
R40.2113	Coma scale, eyes open, never, at arrival to emergency department
R40.2120	Coma scale, eyes open, to pain, unspecified time
R40.2121	Coma scale, eyes open, to pain, in the field [EMT or ambulance]
R40.2122	Coma scale, eyes open, to pain, at arrival to emergency department
R40.2123	Coma scale, eyes open, to pain, at hospital admission
R40.2124	Coma scale, eyes open, to pain, 24 hours or more after hospital admission
R40.2130	Coma scale, eyes open, to sound, unspecified time
R40.2131	Coma scale, eyes open, to sound, in the field [EMT or ambulance]
R40.2132	Coma scale, eyes open, to sound, at arrival to emergency department
R40.2133	Coma scale, eyes open, to sound, at hospital admission
R40.2134	Coma scale, eyes open, to sound, 24 hours or more after hospital admission
R40.2140	Coma scale, eyes open, spontaneous, unspecified time
R40.2141	Coma scale, eyes open, spontaneous, in the field [EMT or ambulance]
R40.2142	Coma scale, eyes open, spontaneous, at arrival to emergency department
R40.2143	Coma scale, eyes open, spontaneous, at arrival to emergency department
R40.2144	Coma scale, eyes open, spontaneous, 24 hours or more after hospital admission
R40.2210	Coma scale, best verbal response, none, unspecified time
R40.2211	Coma scale, best verbal response, none, in the field [EMT or ambulance]
R40.2212	Coma scale, best verbal response, none, at arrival to emergency department
R40.2213	Coma scale, best verbal response, none, at hospital admission
R40.2214	Coma scale, best verbal response, none, 24 hours or more after hospital admission
R40.2220	Coma scale, best verbal response, incomprehensible words, unspecified time
R40.2221	Coma scale, best verbal response, incomprehensible words, in the field [EMT or ambulance]
R40.2222	Coma scale, best verbal response, incomprehensible words, at arrival to emergency department
R40.2223	Coma scale, best verbal response, incomprehensible words, at hospital admission
R40.2224	Coma scale, best verbal response, incomprehensible words, 24 hours or more after hospital admission
R40.2230	Coma scale, best verbal response, inappropriate words, unspecified time

R40.2231	Coma scale, best verbal response, inappropriate words, in the field [EMT or ambulance]
R40.2232	Coma scale, best verbal response, inappropriate words, at arrival to emergency department
R40.2233	Coma scale, best verbal response, inappropriate words, at hospital admission
R40.2234	Coma scale, best verbal response, inappropriate words, 24 hours or more after hospital admission
R40.2240	Coma scale, best verbal response, confused conversation, unspecified time
R40.2241	Coma scale, best verbal response, confused conversation, in the field [EMT or ambulance]
R40.2242	Coma scale, best verbal response, confused conversation, at arrival to emergency department
R40.2243	Coma scale, best verbal response, confused conversation, at hospital admission
R40.2244	Coma scale, best verbal response, confused conversation, 24 hours or more after hospital admission
R40.2250	Coma scale, best verbal response, oriented, unspecified time
R40.2251	Coma scale, best verbal response, oriented, in the field [EMT or ambulance]
R40.2252	Coma scale, best verbal response, oriented, at arrival to emergency department
R40.2253	Coma scale, best verbal response, oriented, at hospital admission
R40.2254	Coma scale, best verbal response, oriented, 24 hours or more after hospital admission
R40.2310	Coma scale, best motor response, none, unspecified time
R40.2311	Coma scale, best motor response, none, in the field [EMT or ambulance]
R40.2312	Coma scale, best motor response, none, at arrival to emergency department
R40.2313	Coma scale, best motor response, none, at hospital admission
R40.2314	Coma scale, best motor response, none, 24 hours or more after hospital admission
R40.2320	Coma scale, best motor response, extension, unspecified time
R40.2321	Coma scale, best motor response, extension, in the field [EMT or ambulance]
R40.2322	Coma scale, best motor response, extension, at arrival to emergency department
R40.2323	Coma scale, best motor response, extension, at hospital admission
R40.2324	Coma scale, best motor response, extension, 24 hours or more after hospital admission
R40.2330	Coma scale, best motor response, abnormal flexion, unspecified time
R40.2331	Coma scale, best motor response, abnormal flexion, in the field [EMT or ambulance]
R40.2332	Coma scale, best motor response, abnormal flexion, at arrival to emergency department
R40.2333	Coma scale, best motor response, abnormal flexion, at hospital admission
R40.2334	Coma scale, best motor response, abnormal flexion, 24 hours or more after hospital admission
R40.2340	Coma scale, best motor response, flexion withdrawal, unspecified time
R40.2341	Coma scale, best motor response, flexion withdrawal, in the field [EMT or ambulance]
R40.2342	Coma scale, best motor response, flexion withdrawal, at arrival to emergency department
R40.2343	Coma scale, best motor response, flexion withdrawal, at hospital admission
R40.2344	Coma scale, best motor response, flexion withdrawal, 24 hours or more after hospital admission
R40.2350	Coma scale, best motor response, localizes pain, unspecified time
R40.2351	Coma scale, best motor response, localizes pain, in the field [EMT or ambulance]
R40.2352	Coma scale, best motor response, localizes pain, at arrival to emergency department
R40.2353	Coma scale, best motor response, localizes pain, at hospital admission
R40.2354	Coma scale, best motor response, localizes pain, 24 hours or more after hospital admission
R40.2360	Coma scale, best motor response, obeys commands, unspecified time
R40.2361	Coma scale, best motor response, obeys commands, in the field [EMT or ambulance]

R40.2362	Coma scale, best motor response, obeys commands, at arrival to emergency department
R40.2363	Coma scale, best motor response, obeys commands, at hospital admission
R40.2364	Coma scale, best motor response, obeys commands, 24 hours or more after hospital admission
R40.2410	Glasgow coma scale score 13-15, unspecified time
R40.2411	Glasgow coma scale score 13-15, in the field [EMT or ambulance]
R40.2412	Glasgow coma scale score 13-15, at arrival to emergency department
R40.2413	Glasgow coma scale score 13-15, at hospital admission
R40.2414	Glasgow coma scale score 13-15, 24 hours or more after hospital admission
R40.2420	Glasgow coma scale score 9-12, unspecified time
R40.2421	Glasgow coma scale score 9-12, in the field [EMT or ambulance]
R40.2422	Glasgow coma scale score 9-12, at arrival to emergency department
R40.2423	Glasgow coma scale score 9-12, at hospital admission
R40.2424	Glasgow coma scale score 9-12, 24 hours or more after hospital admission
R40.2430	Glasgow coma scale score 3-8, unspecified time
R40.2431	Glasgow coma scale score 3-8, in the field [EMT or ambulance]
R40.2432	Glasgow coma scale score 3-8, at arrival to emergency department
R40.2433	Glasgow coma scale score 3-8, at hospital admission
R40.2434	Glasgow coma scale score 3-8, 24 hours or more after hospital admission
R40.2440	Other coma, without documented Glasgow coma scale score, or with partial score reported, unspecified time
R40.2441	Other coma, without documented Glasgow coma scale score, or with partial score reported, in the field [EMT or ambulance]
R40.2442	Other coma, without documented Glasgow coma scale score, or with partial score reported, at arrival to emergency department
R40.2443	Other coma, without documented Glasgow coma scale score, or with partial score reported, at hospital admission
R40.2444	Other coma, without documented Glasgow coma scale score, or with partial score reported, 24 hours or more after hospital admission
S01.90XA	Unspecified open wound of unspecified part of head, initial encounter
S01.90XD	Unspecified open wound of unspecified part of head, subsequent encounter
S01.90XS	Unspecified open wound of unspecified part of head, sequela
S06.1X0A	Traumatic cerebral edema without loss of consciousness, initial encounter
S06.1X0D	Traumatic cerebral edema without loss of consciousness, subsequent encounter
S06.1X0S	Traumatic cerebral edema without loss of consciousness, sequela
S06.1X1A	Traumatic cerebral edema with loss of consciousness of 30 minutes or less, initial encounter
S06.1X1D	Traumatic cerebral edema with loss of consciousness of 30 minutes or less, subsequent encounter
S06.1X1S	Traumatic cerebral edema with loss of consciousness of 30 minutes or less, sequela
S06.1X2A	Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.1X2D	Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.1X2S	Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.1X3A	Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.1X3D	Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.1X3S	Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela

S06.1X4A	Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.1X4D	Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.1X4S	Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, sequela
S06.1X5A	Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.1X5D	Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.1X5S	Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.1X6A	Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.1X6D	Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.1X6S	Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.1X7A	Traumatic cerebral edema with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.1X8A	Traumatic cerebral edema with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.1X9A	Traumatic cerebral edema with loss of consciousness of unspecified duration, initial encounter
S06.1X9D	Traumatic cerebral edema with loss of consciousness of unspecified duration, subsequent encounter
S06.1X9S	Traumatic cerebral edema with loss of consciousness of unspecified duration, sequela
S06.2X0A	Diffuse traumatic brain injury without loss of consciousness, initial encounter
S06.2X0D	Diffuse traumatic brain injury without loss of consciousness, subsequent encounter
S06.2X0S	Diffuse traumatic brain injury without loss of consciousness, sequela
S06.2X1A	Diffuse traumatic brain injury with loss of consciousness of 30 minutes or less, initial encounter
S06.2X1D	Diffuse traumatic brain injury with loss of consciousness of 30 minutes or less, subsequent encounter
S06.2X1S	Diffuse traumatic brain injury with loss of consciousness of 30 minutes or less, sequela
S06.2X2A	Diffuse traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.2X2D	Diffuse traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.2X2S	Diffuse traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.2X3A	Diffuse traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.2X3D	Diffuse traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.2X3S	Diffuse traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.2X4A	Diffuse traumatic brain injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.2X4D	Diffuse traumatic brain injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.2X4S	Diffuse traumatic brain injury with loss of consciousness of 6 hours to 24 hours, sequela
S06.2X5A	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious levels, initial encounter

S06.2X5D	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious levels, subsequent encounter
S06.2X5S	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious levels, sequela
S06.2X6A	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.2X6D	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.2X6S	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.2X7A	Diffuse traumatic brain injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.2X8A	Diffuse traumatic brain injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.2X9A	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, initial encounter
S06.2X9D	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, subsequent encounter
S06.2X9S	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, sequela
S06.300A	Unspecified focal traumatic brain injury without loss of consciousness, initial encounter
S06.300D	Unspecified focal traumatic brain injury without loss of consciousness, subsequent encounter
S06.300S	Unspecified focal traumatic brain injury without loss of consciousness, sequela
S06.301A	Unspecified focal traumatic brain injury with loss of consciousness of 30 minutes or less, initial encounter
S06.301D	Unspecified focal traumatic brain injury with loss of consciousness of 30 minutes or less, subsequent encounter
S06.301S	Unspecified focal traumatic brain injury with loss of consciousness of 30 minutes or less, sequela
S06.302A	Unspecified focal traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.302D	Unspecified focal traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.302S	Unspecified focal traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.303A	Unspecified focal traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.303D	Unspecified focal traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.303S	Unspecified focal traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.304A	Unspecified focal traumatic brain injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.304D	Unspecified focal traumatic brain injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.304S	Unspecified focal traumatic brain injury with loss of consciousness of 6 hours to 24 hours, sequela
S06.305A	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.305D	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.305S	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela

S06.306A	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.306D	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.306S	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.307A	Unspecified focal traumatic brain injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.308A	Unspecified focal traumatic brain injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.309A	Unspecified focal traumatic brain injury with loss of consciousness of unspecified duration, initial encounter
S06.309D	Unspecified focal traumatic brain injury with loss of consciousness of unspecified duration, subsequent encounter
S06.309S	Unspecified focal traumatic brain injury with loss of consciousness of unspecified duration, sequela
S06.310A	Contusion and laceration of right cerebrum without loss of consciousness, initial encounter
S06.310D	Contusion and laceration of right cerebrum without loss of consciousness, subsequent encounter
S06.310S	Contusion and laceration of right cerebrum without loss of consciousness, sequela
S06.311A	Contusion and laceration of right cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.311D	Contusion and laceration of right cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.311S	Contusion and laceration of right cerebrum with loss of consciousness of 30 minutes or less, sequela
S06.312A	Contusion and laceration of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.312D	Contusion and laceration of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.312S	Contusion and laceration of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.313A	Contusion and laceration of right cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.313D	Contusion and laceration of right cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.313S	Contusion and laceration of right cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.314A	Contusion and laceration of right cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.314D	Contusion and laceration of right cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.314S	Contusion and laceration of right cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.315A	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.315D	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.315S	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela

S06.316A	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.316D	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.316S	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.317A	Contusion and laceration of right cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.318A	Contusion and laceration of right cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.319A	Contusion and laceration of right cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.319D	Contusion and laceration of right cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.319S	Contusion and laceration of right cerebrum with loss of consciousness of unspecified duration, sequela
S06.320A	Contusion and laceration of left cerebrum without loss of consciousness, initial encounter
S06.320D	Contusion and laceration of left cerebrum without loss of consciousness, subsequent encounter
S06.320S	Contusion and laceration of left cerebrum without loss of consciousness, sequela
S06.321A	Contusion and laceration of left cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.321D	Contusion and laceration of left cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.321S	Contusion and laceration of left cerebrum with loss of consciousness of 30 minutes or less, sequela
S06.322A	Contusion and laceration of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.322D	Contusion and laceration of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.322S	Contusion and laceration of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.323A	Contusion and laceration of left cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.323D	Contusion and laceration of left cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.323S	Contusion and laceration of left cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.324A	Contusion and laceration of left cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.324D	Contusion and laceration of left cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.324S	Contusion and laceration of left cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.325A	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.325D	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.325S	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela

S06.326A	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.326D	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.326S	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.327A	Contusion and laceration of left cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.328A	Contusion and laceration of left cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.329A	Contusion and laceration of left cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.329D	Contusion and laceration of left cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.329S	Contusion and laceration of left cerebrum with loss of consciousness of unspecified duration, sequela
S06.330A	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, initial encounter
S06.330D	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, subsequent encounter
S06.330S	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, sequela
S06.331A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, initial encounter
S06.331D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, subsequent encounter
S06.331S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, sequela
S06.332A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.332D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.332S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.333A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.333D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.333S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.334A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.334D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.334S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela
S06.335A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.335D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.335S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela

S06.336A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.336D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.336S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.337A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.338A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.339A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, initial encounter
S06.339D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, subsequent encounter
S06.339S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, sequela
S06.340A	Traumatic hemorrhage of right cerebrum without loss of consciousness, initial encounter
S06.340D	Traumatic hemorrhage of right cerebrum without loss of consciousness, subsequent encounter
S06.340S	Traumatic hemorrhage of right cerebrum without loss of consciousness, sequela
S06.341A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.341D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.341S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, sequela
S06.342A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.342D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.342S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.343A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter
S06.343D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, subsequent encounter
S06.343S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela
S06.344A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.344D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.344S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.345A	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.345D	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter

S06.345S	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.346A	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.346D	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.346S	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.347A	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.348A	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.349A	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.349D	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.349S	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, sequela
S06.350A	Traumatic hemorrhage of left cerebrum without loss of consciousness, initial encounter
S06.350D	Traumatic hemorrhage of left cerebrum without loss of consciousness, subsequent encounter
S06.350S	Traumatic hemorrhage of left cerebrum without loss of consciousness, sequela
S06.351A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.351D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.351S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, sequela
S06.352A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.352D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.352S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.353A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter
S06.353D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, subsequent encounter
S06.353S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela
S06.354A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.354D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.354S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.355A	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.355D	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.355S	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela

S06.356A	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.356D	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.356S	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.357A	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.358A	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.359A	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.359D	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.359S	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, sequela
S06.360A	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, initial encounter
S06.360D	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, subsequent encounter
S06.360S	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, sequela
S06.361A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, initial encounter
S06.361D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, subsequent encounter
S06.361S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, sequela
S06.362A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.362D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.362S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.363A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter
S06.363D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, subsequent encounter
S06.363S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela
S06.364A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.364D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.364S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela
S06.365A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela
S06.365D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.365S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela

S06.366A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.366D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.366S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.367A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.368A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.369A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, initial encounter
S06.369D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, subsequent encounter
S06.369S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, sequela
S06.370A	Contusion, laceration, and hemorrhage of cerebellum without loss of consciousness, initial encounter
S06.370D	Contusion, laceration, and hemorrhage of cerebellum without loss of consciousness, subsequent encounter
S06.370S	Contusion, laceration, and hemorrhage of cerebellum without loss of consciousness, sequela
S06.371A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 30 minutes or less, initial encounter
S06.371D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.371S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 30 minutes or less, sequela
S06.372A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.372D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.372S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.373A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.373D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.373S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.374A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.374D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.374S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 6 hours to 24 hours, sequela
S06.375A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.375D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter

S06.375S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.376A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.376D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.376S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.377A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.378A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.379A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of unspecified duration, initial encounter
S06.379D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of unspecified duration, subsequent encounter
S06.379S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of unspecified duration, sequela
S06.380A	Contusion, laceration, and hemorrhage of brainstem without loss of consciousness, initial encounter
S06.380D	Contusion, laceration, and hemorrhage of brainstem without loss of consciousness, subsequent encounter
S06.380S	Contusion, laceration, and hemorrhage of brainstem without loss of consciousness, sequela
S06.381A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 30 minutes or less, initial encounter
S06.381D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 30 minutes or less, subsequent encounter
S06.381S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 30 minutes or less, sequela
S06.382A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.382D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.382S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.383A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.383D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.383S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.384A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.384D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.384S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 6 hours to 24 hours, sequela
S06.385A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter

S06.385D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.385S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.386A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.386D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.386S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.387A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.388A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.389A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of unspecified duration, initial encounter
S06.389D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of unspecified duration, subsequent encounter
S06.389S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of unspecified duration, sequela
S06.4X0A	Epidural hemorrhage without loss of consciousness, initial encounter
S06.4X0D	Epidural hemorrhage without loss of consciousness, subsequent encounter
S06.4X0S	Epidural hemorrhage without loss of consciousness, sequela
S06.4X1A	Epidural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.4X1D	Epidural hemorrhage with loss of consciousness of 30 minutes or less, subsequent encounter
S06.4X1S	Epidural hemorrhage with loss of consciousness of 30 minutes or less, sequela
S06.4X2A	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.4X2D	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.4X2S	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.4X3A	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.4X3D	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.4X3S	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.4X4A	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.4X4D	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.4X4S	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela
S06.4X5A	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.4X5D	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.4X5S	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela

S06.4X6A	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.4X6D	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.4X6S	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.4X7A	Epidural hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.4X8A	Epidural hemorrhage with loss of consciousness of any duration with death due to other causes prior to regaining consciousness, initial encounter
S06.4X9A	Epidural hemorrhage with loss of consciousness of unspecified duration, initial encounter
S06.4X9D	Epidural hemorrhage with loss of consciousness of unspecified duration, subsequent encounter
S06.4X9S	Epidural hemorrhage with loss of consciousness of unspecified duration, sequela
S06.5X0A	Traumatic subdural hemorrhage without loss of consciousness, initial encounter
S06.5X0D	Traumatic subdural hemorrhage without loss of consciousness, subsequent encounter
S06.5X0S	Traumatic subdural hemorrhage without loss of consciousness, sequela
S06.5X1A	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.5X1D	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, subsequent encounter
S06.5X1S	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, sequela
S06.5X2A	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.5X2D	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.5X2S	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.5X3A	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.5X3D	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.5X3S	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.5X4A	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.5X4D	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.5X4S	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela
S06.5X5A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.5X5D	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.5X5S	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.5X6A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.5X6D	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter

S06.5X6S	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.5X7A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to brain injury before regaining consciousness, initial encounter
S06.5X8A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to other cause before regaining consciousness, initial encounter
S06.5X9A	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, initial encounter
S06.5X9D	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, subsequent encounter
S06.5X9S	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, sequela
S06.6X0A	Traumatic subarachnoid hemorrhage without loss of consciousness, initial encounter
S06.6X0D	Traumatic subarachnoid hemorrhage without loss of consciousness, subsequent encounter
S06.6X0S	Traumatic subarachnoid hemorrhage without loss of consciousness, sequela
S06.6X1A	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.6X1D	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, subsequent encounter
S06.6X1S	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, sequela
S06.6X2A	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.6X2D	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.6X2S	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.6X3A	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.6X3D	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.6X3S	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.6X4A	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.6X4D	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.6X4S	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela
S06.6X5A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.6X5D	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.6X5S	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.6X6A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.6X6D	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.6X6S	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela

S06.6X9A	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial encounter
S06.6X9D	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, subsequent encounter
S06.6X9S	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, sequela
S06.890A	Other specified intracranial injury without loss of consciousness, initial encounter
S06.890D	Other specified intracranial injury without loss of consciousness, subsequent encounter
S06.890S	Other specified intracranial injury without loss of consciousness, sequela
S06.891A	Other specified intracranial injury with loss of consciousness of 30 minutes or less, initial encounter
S06.891D	Other specified intracranial injury with loss of consciousness of 30 minutes or less, subsequent encounter
S06.891S	Other specified intracranial injury with loss of consciousness of 30 minutes or less, sequela
S06.892A	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.892D	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.892S	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.893A	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.893D	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.893S	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.894A	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.894D	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.894S	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, sequela
S06.895A	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.895D	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.895S	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.896A	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.896D	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.896S	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.899A	Other specified intracranial injury with loss of consciousness of unspecified duration, initial encounter
S06.899D	Other specified intracranial injury with loss of consciousness of unspecified duration, subsequent encounter
S06.899S	Other specified intracranial injury with loss of consciousness of unspecified duration, sequela
S06.9X0A	Unspecified intracranial injury without loss of consciousness, initial encounter
S06.9X0D	Unspecified intracranial injury without loss of consciousness, subsequent encounter

S06.9X0S	Unspecified intracranial injury without loss of consciousness, sequela
S06.9X1A	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, initial encounter
S06.9X1D	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, subsequent encounter
S06.9X1S	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, sequela
S06.9X2A	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.9X2D	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.9X2S	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.9X3A	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.9X3D	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.9X3S	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.9X4A	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.9X4D	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.9X4S	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, sequela
S06.9X5A	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.9X5D	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.9X5S	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.9X6A	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.9X6D	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.9X6S	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.9X9A	Unspecified intracranial injury with loss of consciousness of unspecified duration, initial encounter
S06.9X9D	Unspecified intracranial injury with loss of consciousness of unspecified duration, subsequent encounter
S06.9X9S	Unspecified intracranial injury with loss of consciousness of unspecified duration, sequela
S09.8XXA	Other Specified Injuries Of Head, Initial Encounter
S09.8XXD	Other Specified Injuries Of Head, Subsequent Encounter
S09.8XXS	Other Specified Injuries Of Head, Sequela
S09.90XA	Unspecified injury of head, initial encounter
S09.90XD	Unspecified injury of head, subsequent encounter
S09.90XS	Unspecified injury of head, sequela
S14.101A	Unspecified injury at C1 level of cervical spinal cord, initial encounter
S14.101D	Unspecified injury at C1 level of cervical spinal cord, subsequent encounter
S14.101S	Unspecified injury at C1 level of cervical spinal cord, sequela
S14.102A	Unspecified injury at C2 level of cervical spinal cord, initial encounter
S14.102D	Unspecified injury at C2 level of cervical spinal cord, subsequent encounter
S14.102S	Unspecified injury at C2 level of cervical spinal cord, sequela

S14.103A	Unspecified injury at C3 level of cervical spinal cord, initial encounter
S14.103D	Unspecified injury at C3 level of cervical spinal cord, subsequent encounter
S14.103S	Unspecified injury at C3 level of cervical spinal cord, sequela
S14.104A	Unspecified injury at C4 level of cervical spinal cord, initial encounter
S14.104D	Unspecified injury at C4 level of cervical spinal cord, subsequent encounter
S14.104S	Unspecified injury at C4 level of cervical spinal cord, sequela
S14.105A	Unspecified injury at C5 level of cervical spinal cord, initial encounter
S14.105D	Unspecified injury at C5 level of cervical spinal cord, subsequent encounter
S14.105S	Unspecified injury at C5 level of cervical spinal cord, sequela
S14.106A	Unspecified injury at C6 level of cervical spinal cord, initial encounter
S14.106D	Unspecified injury at C6 level of cervical spinal cord, subsequent encounter
S14.106S	Unspecified injury at C6 level of cervical spinal cord, sequela
S14.107A	Unspecified injury at C7 level of cervical spinal cord, initial encounter
S14.107D	Unspecified injury at C7 level of cervical spinal cord, subsequent encounter
S14.107S	Unspecified injury at C7 level of cervical spinal cord, sequela
S14.108A	Unspecified injury at C8 level of cervical spinal cord, initial encounter
S14.108D	Unspecified injury at C8 level of cervical spinal cord, subsequent encounter
S14.108S	Unspecified injury at C8 level of cervical spinal cord, sequela
S14.109A	Unspecified injury at unspecified level of cervical spinal cord, initial encounter
S14.109D	Unspecified injury at unspecified level of cervical spinal cord, subsequent encounter
S14.109S	Unspecified injury at unspecified level of cervical spinal cord, sequela
S14.111A	Complete Lesion At C1 Level Of Cervical Spinal Cord, Initial Encounter
S14.111D	Complete Lesion At C1 Level Of Cervical Spinal Cord, Subsequent Encounter
S14.111S	Complete Lesion At C1 Level Of Cervical Spinal Cord, Sequela
S14.112A	Complete Lesion At C2 Level Of Cervical Spinal Cord, Initial Encounter
S14.112D	Complete Lesion At C2 Level Of Cervical Spinal Cord, Subsequent Encounter
S14.112S	Complete Lesion At C2 Level Of Cervical Spinal Cord, Sequela
S14.113A	Complete Lesion At C3 Level Of Cervical Spinal Cord, Initial Encounter
S14.113D	Complete Lesion At C3 Level Of Cervical Spinal Cord, Subsequent Encounter
S14.113S	Complete Lesion at C3 Level of Cervical Spinal Cord, Sequela
S14.114A	Complete Lesion at C4 Level of Cervical Spinal Cord, Initial Encounter
S14.114D	Complete Lesion at C4 Level of Cervical Spinal Cord, Subsequent Encounter
S14.114S	Complete Lesion at C4 Level of Cervical Spinal Cord, Sequela
S14.115A	Complete Lesion at C5 Level of Cervical Spinal Cord, Initial Encounter
S14.115D	Complete Lesion at C5 Level of Cervical Spinal Cord, Subsequent Encounter
S14.115S	Complete Lesion at C5 Level of Cervical Spinal Cord, Sequela
S14.116A	Complete Lesion at C6 Level of Cervical Spinal Cord, Initial Encounter
S14.116D	Complete Lesion at C6 Level of Cervical Spinal Cord, Subsequent Encounter
S14.116S	Complete Lesion at C6 Level of Cervical Spinal Cord, Sequela
S14.117A	Complete Lesion at C7 Level of Cervical Spinal Cord, Initial Encounter
S14.117D	Complete Lesion at C7 Level of Cervical Spinal Cord, Subsequent Encounter
S14.117S	Complete Lesion at C7 Level of Cervical Spinal Cord, Sequela
S14.118A	Complete Lesion at C8 Level of Cervical Spinal Cord, Initial Encounter
S14.118D	Complete Lesion at C8 Level of Cervical Spinal Cord, Subsequent Encounter
S14.118S	Complete Lesion at C8 Level of Cervical Spinal Cord, Sequela
S14.119A	Complete Lesion at Unspecified Level of Cervical Spinal Cord, Initial Encounter
S14.119D	Complete Lesion at Unspecified Level Of Cervical Spinal Cord, Subsequent Encounter
S14.119S	Complete Lesion at Unspecified Level of Cervical Spinal Cord, Sequela
S14.121A	Central cord syndrome at C1 level of cervical spinal cord, initial encounter
S14.121D	Central cord syndrome at C1 level of cervical spinal cord, subsequent encounter
S14.121S	Central cord syndrome at C1 level of cervical spinal cord, sequela

S14.139D	Anterior cord syndrome at unspecified level of cervical spinal cord, subsequent encounter
S14.139S	Anterior cord syndrome at unspecified level of cervical spinal cord, sequela
S14.141A	Brown-Sequard Syndrome at C1 Level of Cervical Spinal Cord, Initial Encounter
S14.141D	Brown-Sequard Syndrome at C1 Level of Cervical Spinal Cord, Subsequent Encounter
S14.141S	Brown-Sequard Syndrome at C1 Level of Cervical Spinal Cord, Sequela
S14.142A	Brown-Sequard Syndrome at C2 Level of Cervical Spinal Cord, Initial Encounter
S14.142D	Brown-Sequard Syndrome at C2 Level of Cervical Spinal Cord, Subsequent Encounter
S14.142S	Brown-Sequard Syndrome at C2 Level of Cervical Spinal Cord, Sequela
S14.143A	Brown-Sequard Syndrome at C3 Level of Cervical Spinal Cord, Initial Encounter
S14.143D	Brown-Sequard Syndrome at C3 Level of Cervical Spinal Cord, Subsequent Encounter
S14.143S	Brown-Sequard Syndrome at C3 Level of Cervical Spinal Cord, Sequela
S14.144A	Brown-Sequard Syndrome at C4 Level of Cervical Spinal Cord, Initial Encounter
S14.144D	Brown-Sequard Syndrome at C4 Level of Cervical Spinal Cord, Subsequent Encounter
S14.144S	Brown-Sequard Syndrome at C4 Level of Cervical Spinal Cord, Sequela
S14.145A	Brown-Sequard Syndrome at C5 Level of Cervical Spinal Cord, Initial Encounter
S14.145D	Brown-Sequard Syndrome at C5 Level of Cervical Spinal Cord, Subsequent Encounter
S14.145S	Brown-Sequard Syndrome at C5 Level of Cervical Spinal Cord, Sequela
S14.146A	Brown-Sequard Syndrome at C6 Level of Cervical Spinal Cord, Initial Encounter
S14.146D	Brown-Sequard Syndrome at C6 Level of Cervical Spinal Cord, Subsequent Encounter
S14.146S	Brown-Sequard Syndrome at C6 Level of Cervical Spinal Cord, Sequela
S14.147A	Brown-Sequard Syndrome at C7 Level of Cervical Spinal Cord, Initial Encounter
S14.147D	Brown-Sequard Syndrome at C7 Level of Cervical Spinal Cord, Subsequent Encounter
S14.147S	Brown-Sequard Syndrome at C7 Level of Cervical Spinal Cord, Sequela
S14.148A	Brown-Sequard Syndrome at C8 Level of Cervical Spinal Cord, Initial Encounter
S14.148D	Brown-Sequard Syndrome at C8 Level of Cervical Spinal Cord, Subsequent Encounter
S14.148S	Brown-Sequard Syndrome at C8 Level of Cervical Spinal Cord, Sequela
S14.149A	Brown-Sequard Syndrome at Unspecified Level of Cervical Spinal Cord, Initial Encounter
S14.149D	Brown-Sequard Syndrome at Unspecified Level of Cervical Spinal Cord, Subsequent Encounter
S14.149S	Brown-Sequard Syndrome at Unspecified Level of Cervical Spinal Cord, Sequela
S14.151A	Other Incomplete Lesion at C1 Level of Cervical Spinal Cord, Initial Encounter
S14.151D	Other Incomplete Lesion at C1 Level of Cervical Spinal Cord, Subsequent Encounter
S14.151S	Other Incomplete Lesion at C1 Level of Cervical Spinal Cord, Sequela
S14.152A	Other Incomplete Lesion at C2 Level of Cervical Spinal Cord, Initial Encounter
S14.152D	Other Incomplete Lesion at C2 Level of Cervical Spinal Cord, Subsequent Encounter
S14.152S	Other Incomplete Lesion at C2 Level of Cervical Spinal Cord, Sequela
S14.153A	Other Incomplete Lesion at C3 Level of Cervical Spinal Cord, Initial Encounter
S14.153D	Other Incomplete Lesion at C3 Level of Cervical Spinal Cord, Subsequent Encounter
S14.153S	Other Incomplete Lesion at C3 Level of Cervical Spinal Cord, Sequela
S14.154A	Other Incomplete Lesion at C4 Level of Cervical Spinal Cord, Initial Encounter
S14.154D	Other Incomplete Lesion at C4 Level of Cervical Spinal Cord, Subsequent Encounter
S14.154S	Other Incomplete Lesion at C4 Level of Cervical Spinal Cord, Sequela
S14.155A	Other Incomplete Lesion at C5 Level of Cervical Spinal Cord, Initial Encounter
S14.155D	Other Incomplete Lesion at C5 Level of Cervical Spinal Cord, Subsequent Encounter
S14.155S	Other Incomplete Lesion at C5 Level of Cervical Spinal Cord, Sequela
S14.156A	Other Incomplete Lesion at C6 Level of Cervical Spinal Cord, Initial Encounter
S14.156D	Other Incomplete Lesion at C6 Level of Cervical Spinal Cord, Subsequent Encounter
S14.156S	Other Incomplete Lesion at C6 Level of Cervical Spinal Cord, Sequela
S14.157A	Other Incomplete Lesion at C7 Level of Cervical Spinal Cord, Initial Encounter

S14.157D	Other Incomplete Lesion at C7 Level of Cervical Spinal Cord, Subsequent Encounter
S14.157S	Other Incomplete Lesion at C7 Level of Cervical Spinal Cord, Sequela
S14.158A	Other Incomplete Lesion at C8 Level of Cervical Spinal Cord, Initial Encounter
S14.158D	Other Incomplete Lesion at C8 Level of Cervical Spinal Cord, Subsequent Encounter
S14.158S	Other Incomplete Lesion at C8 Level of Cervical Spinal Cord, Sequela
S14.159A	Other Incomplete Lesion at Unspecified Level of Cervical Spinal Cord, Initial Encounter
S14.159D	Other Incomplete Lesion at Unspecified Level of Cervical Spinal Cord, Subsequent Encounter
S14.159S	Other Incomplete Lesion at Unspecified Level of Cervical Spinal Cord, Sequela
S24.101A	Unspecified injury at T1 level of thoracic spinal cord, initial encounter
S24.101D	Unspecified injury at T1 level of thoracic spinal cord, subsequent encounter
S24.101S	Unspecified injury at T1 level of thoracic spinal cord, sequela
S24.102A	Unspecified injury at T2-T6 level of thoracic spinal cord, initial encounter
S24.102D	Unspecified injury at T2-T6 level of thoracic spinal cord, subsequent encounter
S24.102S	Unspecified injury at T2-T6 level of thoracic spinal cord, sequela
S24.103A	Unspecified injury at T7-T10 level of thoracic spinal cord, initial encounter
S24.103D	Unspecified injury at T7-T10 level of thoracic spinal cord, subsequent encounter
S24.103S	Unspecified injury at T7-T10 level of thoracic spinal cord, sequela
S24.104A	Unspecified injury at T11-T12 level of thoracic spinal cord, initial encounter
S24.104D	Unspecified injury at T11-T12 level of thoracic spinal cord, subsequent encounter
S24.104S	Unspecified injury at T11-T12 level of thoracic spinal cord, sequela
S24.109A	Unspecified injury at unspecified level of thoracic spinal cord, initial encounter
S24.109D	Unspecified injury at unspecified level of thoracic spinal cord, subsequent encounter
S24.109S	Unspecified injury at unspecified level of thoracic spinal cord, sequela
S24.111A	Complete Lesion at T1 Level of Thoracic Spinal Cord, Initial Encounter
S24.111D	Complete Lesion at T1 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.111S	Complete Lesion at T1 Level of Thoracic Spinal Cord, Sequela
S24.112A	Complete Lesion at T2-T6 Level of Thoracic Spinal Cord, Initial Encounter
S24.112D	Complete Lesion at T2-T6 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.112S	Complete Lesion at T2-T6 Level of Thoracic Spinal Cord, Sequela
S24.113A	Complete Lesion at T7-T10 Level of Thoracic Spinal Cord, Initial Encounter
S24.113D	Complete Lesion at T7-T10 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.113S	Complete Lesion at T7-T10 Level of Thoracic Spinal Cord, Sequela
S24.114A	Complete Lesion at T11-T12 Level of Thoracic Spinal Cord, Initial Encounter
S24.114D	Complete Lesion at T11-T12 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.114S	Complete Lesion at T11-T12 Level of Thoracic Spinal Cord, Sequela
S24.119A	Complete Lesion at Unspecified Level of Thoracic Spinal Cord, Initial Encounter
S24.119D	Complete Lesion at Unspecified Level of Thoracic Spinal Cord, Subsequent Encounter
S24.119S	Complete Lesion at Unspecified Level of Thoracic Spinal Cord, Sequela
S24.131A	Anterior cord syndrome at T1 level of thoracic spinal cord, initial encounter
S24.131D	Anterior cord syndrome at T1 level of thoracic spinal cord, subsequent encounter
S24.131S	Anterior cord syndrome at T1 level of thoracic spinal cord, sequela
S24.132A	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, initial encounter
S24.132D	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, subsequent encounter
S24.132S	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, sequela
S24.133A	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, initial encounter
S24.133D	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, subsequent encounter
S24.133S	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, sequela
S24.134A	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, initial encounter
S24.134D	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, subsequent encounter
S24.134S	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, sequela

S24.139A	Anterior cord syndrome at unspecified level of thoracic spinal cord, initial encounter
S24.139D	Anterior cord syndrome at unspecified level of thoracic spinal cord, subsequent encounter
S24.139S	Anterior cord syndrome at unspecified level of thoracic spinal cord, sequela
S24.141A	Brown-Sequard Syndrome at T1 Level of Thoracic Spinal Cord, Initial Encounter
S24.141D	Brown-Sequard Syndrome at T1 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.141S	Brown-Sequard Syndrome at T1 Level of Thoracic Spinal Cord, Sequela
S24.142A	Brown-Sequard Syndrome at T2-T6 Level of Thoracic Spinal Cord, Initial Encounter
S24.142D	Brown-Sequard Syndrome at T2-T6 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.142S	Brown-Sequard Syndrome at T2-T6 Level of Thoracic Spinal Cord, Sequela
S24.143A	Brown-Sequard Syndrome at T7-T10 Level of Thoracic Spinal Cord, Initial Encounter
S24.143D	Brown-Sequard Syndrome at T7-T10 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.143S	Brown-Sequard Syndrome at T7-T10 Level of Thoracic Spinal Cord, Sequela
S24.144A	Brown-Sequard Syndrome at T11-T12 Level of Thoracic Spinal Cord, Initial Encounter
S24.144D	Brown-Sequard Syndrome at T11-T12 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.144S	Brown-Sequard Syndrome at T11-T12 Level of Thoracic Spinal Cord, Sequela
S24.149A	Brown-Sequard Syndrome at Unspecified Level of Thoracic Spinal Cord, Initial Encounter
S24.149D	Brown-Sequard Syndrome at Unspecified Level of Thoracic Spinal Cord, Subsequent Encounter
S24.149S	Brown-Sequard Syndrome at Unspecified Level of Thoracic Spinal Cord, Sequela
S24.151A	Other Incomplete Lesion at T1 Level of Thoracic Spinal Cord, Initial Encounter
S24.151D	Other Incomplete Lesion at T1 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.151S	Other Incomplete Lesion at T1 Level of Thoracic Spinal Cord, Sequela
S24.152A	Other Incomplete Lesion at T2-T6 Level of Thoracic Spinal Cord, Initial Encounter
S24.152D	Other Incomplete Lesion at T2-T6 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.152S	Other Incomplete Lesion at T2-T6 Level of Thoracic Spinal Cord, Sequela
S24.153A	Other Incomplete Lesion at T7-T10 Level of Thoracic Spinal Cord, Initial Encounter
S24.153D	Other Incomplete Lesion at T7-T10 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.153S	Other Incomplete Lesion at T7-T10 Level of Thoracic Spinal Cord, Sequela
S24.154A	Other Incomplete Lesion at T11-T12 Level of Thoracic Spinal Cord, Initial Encounter
S24.154D	Other Incomplete Lesion at T11-T12 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.154S	Other Incomplete Lesion at T11-T12 Level of Thoracic Spinal Cord, Sequela
S24.159A	Other Incomplete Lesion at Unspecified Level of Thoracic Spinal Cord, Initial Encounter
S24.159D	Other Incomplete Lesion at Unspecified Level of Thoracic Spinal Cord, Subsequent Encounter
S24.159S	Other Incomplete Lesion at Unspecified Level of Thoracic Spinal Cord, Sequela
S34.101A	Unspecified injury to L1 level of lumbar spinal cord, initial encounter
S34.101D	Unspecified injury to L1 level of lumbar spinal cord, subsequent encounter
S34.101S	Unspecified injury to L1 level of lumbar spinal cord, sequela
S34.102A	Unspecified injury to L2 level of lumbar spinal cord, initial encounter
S34.102D	Unspecified injury to L2 level of lumbar spinal cord, subsequent encounter
S34.102S	Unspecified injury to L2 level of lumbar spinal cord, sequela
S34.103A	Unspecified injury to L3 level of lumbar spinal cord, initial encounter
S34.103D	Unspecified injury to L3 level of lumbar spinal cord, subsequent encounter
S34.103S	Unspecified injury to L3 level of lumbar spinal cord, sequela

S34.104A	Unspecified injury to L4 level of lumbar spinal cord, initial encounter
S34.104D	Unspecified injury to L4 level of lumbar spinal cord, subsequent encounter
S34.104S	Unspecified injury to L4 level of lumbar spinal cord, sequela
S34.105A	Unspecified injury to L5 level of lumbar spinal cord, initial encounter
S34.105D	Unspecified injury to L5 level of lumbar spinal cord, subsequent encounter
S34.105S	Unspecified injury to L5 level of lumbar spinal cord, sequela
S34.109A	Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109D	Unspecified injury to unspecified level of lumbar spinal cord, subsequent encounter
S34.109S	Unspecified injury to unspecified level of lumbar spinal cord, sequela
S34.111A	Complete Lesion of L1 Level of Lumbar Spinal Cord, Initial Encounter
S34.111D	Complete Lesion of L1 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.111S	Complete Lesion of L1 Level of Lumbar Spinal Cord, Sequela
S34.112A	Complete Lesion of L2 Level of Lumbar Spinal Cord, Initial Encounter
S34.112D	Complete Lesion of L2 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.112S	Complete Lesion of L2 Level of Lumbar Spinal Cord, Sequela
S34.113A	Complete Lesion of L3 Level of Lumbar Spinal Cord, Initial Encounter
S34.113D	Complete Lesion of L3 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.113S	Complete Lesion of L3 Level of Lumbar Spinal Cord, Sequela
S34.114A	Complete Lesion of L4 Level of Lumbar Spinal Cord, Initial Encounter
S34.114D	Complete Lesion of L4 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.114S	Complete Lesion of L4 Level of Lumbar Spinal Cord, Sequela
S34.115A	Complete Lesion of L5 Level of Lumbar Spinal Cord, Initial Encounter
S34.115D	Complete Lesion of L5 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.115S	Complete Lesion of L5 Level of Lumbar Spinal Cord, Sequela
S34.119A	Complete Lesion of Unspecified Level of Lumbar Spinal Cord, Initial Encounter
S34.119D	Complete Lesion of Unspecified Level of Lumbar Spinal Cord, Subsequent Encounter
S34.119S	Complete Lesion of Unspecified Level of Lumbar Spinal Cord, Sequela
S34.121A	Incomplete Lesion of L1 Level of Lumbar Spinal Cord, Initial Encounter
S34.121D	Incomplete Lesion of L1 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.121S	Incomplete Lesion of L1 Level of Lumbar Spinal Cord, Sequela
S34.122A	Incomplete Lesion of L2 Level of Lumbar Spinal Cord, Initial Encounter
S34.122D	Incomplete Lesion of L2 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.122S	Incomplete Lesion of L2 Level of Lumbar Spinal Cord, Sequela
S34.123A	Incomplete Lesion of L3 Level of Lumbar Spinal Cord, Initial Encounter
S34.123D	Incomplete Lesion of L3 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.123S	Incomplete Lesion of L3 Level of Lumbar Spinal Cord, Sequela
S34.124A	Incomplete Lesion of L4 Level of Lumbar Spinal Cord, Initial Encounter
S34.124D	Incomplete Lesion of L4 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.124S	Incomplete Lesion of L4 Level of Lumbar Spinal Cord, Sequela
S34.125A	Incomplete Lesion of L5 Level of Lumbar Spinal Cord, Initial Encounter
S34.125D	Incomplete Lesion of L5 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.125S	Incomplete Lesion of L5 Level of Lumbar Spinal Cord, Sequela
S34.129A	Incomplete Lesion of Unspecified Level of Lumbar Spinal Cord, Initial Encounter
S34.129D	Incomplete Lesion of Unspecified Level of Lumbar Spinal Cord, Subsequent Encounter
S34.129S	Incomplete Lesion of Unspecified Level of Lumbar Spinal Cord, Sequela
S34.131A	Complete Lesion of Sacral Spinal Cord, Initial Encounter
S34.131D	Complete Lesion of Sacral Spinal Cord, Subsequent Encounter
S34.131S	Complete Lesion of Sacral Spinal Cord, Sequela
S34.132A	Incomplete Lesion of Sacral Spinal Cord, Initial Encounter
S34.132D	Incomplete Lesion of Sacral Spinal Cord, Subsequent Encounter
S34.132S	Incomplete Lesion of Sacral Spinal Cord, Sequela

S34.139A	Unspecified Injury to Sacral Spinal Cord, Initial Encounter
S34.139D	Unspecified Injury to Sacral Spinal Cord, Subsequent Encounter
S34.139S	Unspecified Injury to Sacral Spinal Cord, Sequela

The above **medical necessity criteria MUST** be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
95928	Central motor evoked potential study (transcranial motor stimulation); upper limbs
95929	Central motor evoked potential study (transcranial motor stimulation); lower limbs
95939	Central motor evoked potential study (transcranial motor stimulation); in upper and lower limbs

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if **medical necessity criteria** are met:

ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
C41.2	Malignant neoplasm of vertebral column
C70.0	Malignant neoplasm of cerebral meninges
C70.1	Malignant neoplasm of spinal meninges
C71.0	Malignant neoplasm of cerebrum, except lobes and ventricles
C71.1	Malignant neoplasm of frontal lobe
C71.2	Malignant neoplasm of temporal lobe
C71.3	Malignant neoplasm of parietal lobe
C71.4	Malignant neoplasm of occipital lobe
C71.5	Malignant neoplasm of cerebral ventricle
C71.6	Malignant neoplasm of cerebellum
C71.7	Malignant neoplasm of brain stem
C71.8	Malignant neoplasm of overlapping sites of brain
C71.9	Malignant neoplasm of brain, unspecified
C79.31	Secondary malignant neoplasm of brain
C79.32	Secondary malignant neoplasm of cerebral meninges
C79.49	Secondary malignant neoplasm of other parts of nervous system
C79.51	Secondary malignant neoplasm of bone
D16.6	Benign neoplasm of vertebral column
D32.1	Benign neoplasm of spinal meninges
D33.4	Benign neoplasm of spinal cord
D42.1	Neoplasm of uncertain behavior of spinal meninges
D43.0	Neoplasm of uncertain behavior of brain, supratentorial
D43.1	Neoplasm of uncertain behavior of brain, infratentorial
D43.2	Neoplasm of uncertain behavior of brain, unspecified
D48.0	Neoplasm of uncertain behavior of bone and articular cartilage
D49.2	Neoplasm of unspecified behavior of bone, soft tissue, and skin
D49.6	Neoplasm of unspecified behavior of brain
F44.4	Conversion disorder with motor symptom or deficit

F68.10	Factitious disorder imposed on self, unspecified
F68.11	Factitious disorder imposed on self, with predominantly psychological signs and symptoms
F68.12	Factitious disorder imposed on self, with predominantly physical signs and symptoms
F68.13	Factitious disorder imposed on self, with combined psychological and physical signs and symptoms
F68.8	Other specified disorders of adult personality and behavior
G11.0	Congenital nonprogressive ataxia
G11.10	Early-onset cerebellar ataxia, unspecified
G11.11	Friedreich ataxia
G11.19	Other early-onset cerebellar ataxia
G11.2	Late-onset cerebellar ataxia
G11.3	Cerebellar ataxia with defective DNA repair
G11.4	Hereditary spastic paraplegia
G11.8	Other hereditary ataxias
G11.9	Hereditary ataxia, unspecified
G36.8	Other specified acute disseminated demyelination
G36.9	Acute disseminated demyelination, unspecified
G37.8	Other specified demyelinating diseases of central nervous system
G37.9	Demyelinating disease of central nervous system, unspecified
G93.1	Anoxic brain damage, not elsewhere classified
G95.89	Other specified diseases of spinal cord
G95.9	Disease of spinal cord, unspecified
G96.810	Intracranial hypotension, unspecified
G96.811	Intracranial hypotension, spontaneous
G96.819	Other intracranial hypotension
G96.89	Other specified disorders of central nervous system
M62.81	Muscle weakness (generalized)
Q85.03	Schwannomatosis
R20.0	Anesthesia of skin
R20.1	Hypoesthesia of skin
R20.2	Paresthesia of skin
R20.3	Hyperesthesia
R20.8	Other disturbances of skin sensation
R20.9	Unspecified disturbances of skin sensation
R25.0	Abnormal head movements
R25.1	Tremor, unspecified
R25.3	Fasciculation
R25.8	Other abnormal involuntary movements
R25.9	Unspecified abnormal involuntary movements
R29.5	Transient paralysis
R40.20	Unspecified coma
R40.2110	Coma scale, eyes open, never, unspecified time
R40.2111	Coma scale, eyes open, never, in the field [EMT or ambulance]
R40.2112	Coma scale, eyes open, never, at arrival to emergency department
R40.2113	Coma scale, eyes open, never, at arrival to emergency department
R40.2120	Coma scale, eyes open, to pain, unspecified time
R40.2121	Coma scale, eyes open, to pain, in the field [EMT or ambulance]
R40.2122	Coma scale, eyes open, to pain, at arrival to emergency department
R40.2123	Coma scale, eyes open, to pain, at hospital admission
R40.2124	Coma scale, eyes open, to pain, 24 hours or more after hospital admission

R40.2130	Coma scale, eyes open, to sound, unspecified time
R40.2131	Coma scale, eyes open, to sound, in the field [EMT or ambulance]
R40.2132	Coma scale, eyes open, to sound, at arrival to emergency department
R40.2133	Coma scale, eyes open, to sound, at hospital admission
R40.2134	Coma scale, eyes open, to sound, 24 hours or more after hospital admission
R40.2140	Coma scale, eyes open, spontaneous, unspecified time
R40.2141	Coma scale, eyes open, spontaneous, in the field [EMT or ambulance]
R40.2142	Coma scale, eyes open, spontaneous, at arrival to emergency department
R40.2143	Coma scale, eyes open, spontaneous, at arrival to emergency department
R40.2144	Coma scale, eyes open, spontaneous, 24 hours or more after hospital admission
R40.2210	Coma scale, best verbal response, none, unspecified time
R40.2211	Coma scale, best verbal response, none, in the field [EMT or ambulance]
R40.2212	Coma scale, best verbal response, none, at arrival to emergency department
R40.2213	Coma scale, best verbal response, none, at hospital admission
R40.2214	Coma scale, best verbal response, none, 24 hours or more after hospital admission
R40.2220	Coma scale, best verbal response, incomprehensible words, unspecified time
R40.2221	Coma scale, best verbal response, incomprehensible words, in the field [EMT or ambulance]
R40.2222	Coma scale, best verbal response, incomprehensible words, at arrival to emergency department
R40.2223	Coma scale, best verbal response, incomprehensible words, at hospital admission
R40.2224	Coma scale, best verbal response, incomprehensible words, 24 hours or more after hospital admission
R40.2230	Coma scale, best verbal response, inappropriate words, unspecified time
R40.2231	Coma scale, best verbal response, inappropriate words, in the field [EMT or ambulance]
R40.2232	Coma scale, best verbal response, inappropriate words, at arrival to emergency department
R40.2233	Coma scale, best verbal response, inappropriate words, at hospital admission
R40.2234	Coma scale, best verbal response, inappropriate words, 24 hours or more after hospital admission
R40.2240	Coma scale, best verbal response, confused conversation, unspecified time
R40.2241	Coma scale, best verbal response, confused conversation, in the field [EMT or ambulance]
R40.2242	Coma scale, best verbal response, confused conversation, at arrival to emergency department
R40.2243	Coma scale, best verbal response, confused conversation, at hospital admission
R40.2244	Coma scale, best verbal response, confused conversation, 24 hours or more after hospital admission
R40.2250	Coma scale, best verbal response, oriented, unspecified time
R40.2251	Coma scale, best verbal response, oriented, in the field [EMT or ambulance]
R40.2252	Coma scale, best verbal response, oriented, at arrival to emergency department
R40.2253	Coma scale, best verbal response, oriented, at hospital admission
R40.2254	Coma scale, best verbal response, oriented, 24 hours or more after hospital admission
R40.2310	Coma scale, best motor response, none, unspecified time
R40.2311	Coma scale, best motor response, none, in the field [EMT or ambulance]
R40.2312	Coma scale, best motor response, none, at arrival to emergency department
R40.2313	Coma scale, best motor response, none, at hospital admission
R40.2314	Coma scale, best motor response, none, 24 hours or more after hospital admission
R40.2320	Coma scale, best motor response, extension, unspecified time
R40.2321	Coma scale, best motor response, extension, in the field [EMT or ambulance]
R40.2322	Coma scale, best motor response, extension, at arrival to emergency department

R40.2323	Coma scale, best motor response, extension, at hospital admission
R40.2324	Coma scale, best motor response, extension, 24 hours or more after hospital admission
R40.2330	Coma scale, best motor response, abnormal flexion, unspecified time
R40.2331	Coma scale, best motor response, abnormal flexion, in the field [EMT or ambulance]
R40.2332	Coma scale, best motor response, abnormal flexion, at arrival to emergency department
R40.2333	Coma scale, best motor response, abnormal flexion, at hospital admission
R40.2334	Coma scale, best motor response, abnormal flexion, 24 hours or more after hospital admission
R40.2340	Coma scale, best motor response, flexion withdrawal, unspecified time
R40.2341	Coma scale, best motor response, flexion withdrawal, in the field [EMT or ambulance]
R40.2342	Coma scale, best motor response, flexion withdrawal, at arrival to emergency department
R40.2343	Coma scale, best motor response, flexion withdrawal, at hospital admission
R40.2344	Coma scale, best motor response, flexion withdrawal, 24 hours or more after hospital admission
R40.2350	Coma scale, best motor response, localizes pain, unspecified time
R40.2351	Coma scale, best motor response, localizes pain, in the field [EMT or ambulance]
R40.2352	Coma scale, best motor response, localizes pain, at arrival to emergency department
R40.2353	Coma scale, best motor response, localizes pain, at hospital admission
R40.2354	Coma scale, best motor response, localizes pain, 24 hours or more after hospital admission
R40.2360	Coma scale, best motor response, obeys commands, unspecified time
R40.2361	Coma scale, best motor response, obeys commands, in the field [EMT or ambulance]
R40.2362	Coma scale, best motor response, obeys commands, at arrival to emergency department
R40.2363	Coma scale, best motor response, obeys commands, at hospital admission
R40.2364	Coma scale, best motor response, obeys commands, 24 hours or more after hospital admission
R40.2410	Glasgow coma scale score 13-15, unspecified time
R40.2411	Glasgow coma scale score 13-15, in the field [EMT or ambulance]
R40.2412	Glasgow coma scale score 13-15, at arrival to emergency department
R40.2413	Glasgow coma scale score 13-15, at hospital admission
R40.2414	Glasgow coma scale score 13-15, 24 hours or more after hospital admission
R40.2420	Glasgow coma scale score 9-12, unspecified time
R40.2421	Glasgow coma scale score 9-12, in the field [EMT or ambulance]
R40.2422	Glasgow coma scale score 9-12, at arrival to emergency department
R40.2423	Glasgow coma scale score 9-12, at hospital admission
R40.2424	Glasgow coma scale score 9-12, 24 hours or more after hospital admission
R40.2430	Glasgow coma scale score 3-8, unspecified time
R40.2431	Glasgow coma scale score 3-8, in the field [EMT or ambulance]
R40.2432	Glasgow coma scale score 3-8, at arrival to emergency department
R40.2433	Glasgow coma scale score 3-8, at hospital admission
R40.2434	Glasgow coma scale score 3-8, 24 hours or more after hospital admission
R40.2440	Other coma, without documented Glasgow coma scale score, or with partial score reported, unspecified time
R40.2441	Other coma, without documented Glasgow coma scale score, or with partial score reported, in the field [EMT or ambulance]
R40.2442	Other coma, without documented Glasgow coma scale score, or with partial score reported, at arrival to emergency department
R40.2443	Other coma, without documented Glasgow coma scale score, or with partial score reported, at hospital admission

R40.2444	Other coma, without documented Glasgow coma scale score, or with partial score reported, 24 hours or more after hospital admission
S01.90XA	Unspecified open wound of unspecified part of head, initial encounter
S01.90XD	Unspecified open wound of unspecified part of head, subsequent encounter
S01.90XS	Unspecified open wound of unspecified part of head, sequela
S06.1X0A	Traumatic cerebral edema without loss of consciousness, initial encounter
S06.1X0D	Traumatic cerebral edema without loss of consciousness, subsequent encounter
S06.1X0S	Traumatic cerebral edema without loss of consciousness, sequela
S06.1X1A	Traumatic cerebral edema with loss of consciousness of 30 minutes or less, initial encounter
S06.1X1D	Traumatic cerebral edema with loss of consciousness of 30 minutes or less, subsequent encounter
S06.1X1S	Traumatic cerebral edema with loss of consciousness of 30 minutes or less, sequela
S06.1X2A	Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.1X2D	Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.1X2S	Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.1X3A	Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.1X3D	Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.1X3S	Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.1X4A	Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.1X4D	Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.1X4S	Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, sequela
S06.1X5A	Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.1X5D	Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.1X5S	Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.1X6A	Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.1X6D	Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.1X6S	Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.1X7A	Traumatic cerebral edema with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.1X8A	Traumatic cerebral edema with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.1X9A	Traumatic cerebral edema with loss of consciousness of unspecified duration, initial encounter
S06.1X9D	Traumatic cerebral edema with loss of consciousness of unspecified duration, subsequent encounter
S06.1X9S	Traumatic cerebral edema with loss of consciousness of unspecified duration, sequela
S06.2X0A	Diffuse traumatic brain injury without loss of consciousness, initial encounter
S06.2X0D	Diffuse traumatic brain injury without loss of consciousness, subsequent encounter
S06.2X0S	Diffuse traumatic brain injury without loss of consciousness, sequela

S06.2X1A	Diffuse traumatic brain injury with loss of consciousness of 30 minutes or less, initial encounter
S06.2X1D	Diffuse traumatic brain injury with loss of consciousness of 30 minutes or less, subsequent encounter
S06.2X1S	Diffuse traumatic brain injury with loss of consciousness of 30 minutes or less, sequela
S06.2X2A	Diffuse traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.2X2D	Diffuse traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.2X2S	Diffuse traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.2X3A	Diffuse traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.2X3D	Diffuse traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.2X3S	Diffuse traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.2X4A	Diffuse traumatic brain injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.2X4D	Diffuse traumatic brain injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.2X4S	Diffuse traumatic brain injury with loss of consciousness of 6 hours to 24 hours, sequela
S06.2X5A	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious levels, initial encounter
S06.2X5D	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious levels, subsequent encounter
S06.2X5S	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious levels, sequela
S06.2X6A	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.2X6D	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.2X6S	Diffuse traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.2X7A	Diffuse traumatic brain injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.2X8A	Diffuse traumatic brain injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.2X9A	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, initial encounter
S06.2X9D	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, subsequent encounter
S06.2X9S	Diffuse traumatic brain injury with loss of consciousness of unspecified duration, sequela
S06.300A	Unspecified focal traumatic brain injury without loss of consciousness, initial encounter
S06.300D	Unspecified focal traumatic brain injury without loss of consciousness, subsequent encounter
S06.300S	Unspecified focal traumatic brain injury without loss of consciousness, sequela
S06.301A	Unspecified focal traumatic brain injury with loss of consciousness of 30 minutes or less, initial encounter
S06.301D	Unspecified focal traumatic brain injury with loss of consciousness of 30 minutes or less, subsequent encounter

S06.301S	Unspecified focal traumatic brain injury with loss of consciousness of 30 minutes or less, sequela
S06.302A	Unspecified focal traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.302D	Unspecified focal traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.302S	Unspecified focal traumatic brain injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.303A	Unspecified focal traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.303D	Unspecified focal traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.303S	Unspecified focal traumatic brain injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.304A	Unspecified focal traumatic brain injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.304D	Unspecified focal traumatic brain injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.304S	Unspecified focal traumatic brain injury with loss of consciousness of 6 hours to 24 hours, sequela
S06.305A	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.305D	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.305S	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.306A	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.306D	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.306S	Unspecified focal traumatic brain injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.307A	Unspecified focal traumatic brain injury with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.308A	Unspecified focal traumatic brain injury with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.309A	Unspecified focal traumatic brain injury with loss of consciousness of unspecified duration, initial encounter
S06.309D	Unspecified focal traumatic brain injury with loss of consciousness of unspecified duration, subsequent encounter
S06.309S	Unspecified focal traumatic brain injury with loss of consciousness of unspecified duration, sequela
S06.310A	Contusion and laceration of right cerebrum without loss of consciousness, initial encounter
S06.310D	Contusion and laceration of right cerebrum without loss of consciousness, subsequent encounter
S06.310S	Contusion and laceration of right cerebrum without loss of consciousness, sequela
S06.311A	Contusion and laceration of right cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.311D	Contusion and laceration of right cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.311S	Contusion and laceration of right cerebrum with loss of consciousness of 30 minutes or less, sequela

S06.312A	Contusion and laceration of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.312D	Contusion and laceration of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.312S	Contusion and laceration of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.313A	Contusion and laceration of right cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.313D	Contusion and laceration of right cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.313S	Contusion and laceration of right cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.314A	Contusion and laceration of right cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.314D	Contusion and laceration of right cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.314S	Contusion and laceration of right cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.315A	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.315D	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.315S	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.316A	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.316D	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.316S	Contusion and laceration of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.317A	Contusion and laceration of right cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.318A	Contusion and laceration of right cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.319A	Contusion and laceration of right cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.319D	Contusion and laceration of right cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.319S	Contusion and laceration of right cerebrum with loss of consciousness of unspecified duration, sequela
S06.320A	Contusion and laceration of left cerebrum without loss of consciousness, initial encounter
S06.320D	Contusion and laceration of left cerebrum without loss of consciousness, subsequent encounter
S06.320S	Contusion and laceration of left cerebrum without loss of consciousness, sequela
S06.321A	Contusion and laceration of left cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.321D	Contusion and laceration of left cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.321S	Contusion and laceration of left cerebrum with loss of consciousness of 30 minutes or less, sequela
S06.322A	Contusion and laceration of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter

S06.322D	Contusion and laceration of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.322S	Contusion and laceration of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.323A	Contusion and laceration of left cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.323D	Contusion and laceration of left cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.323S	Contusion and laceration of left cerebrum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.324A	Contusion and laceration of left cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.324D	Contusion and laceration of left cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.324S	Contusion and laceration of left cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.325A	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.325D	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.325S	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.326A	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.326D	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.326S	Contusion and laceration of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.327A	Contusion and laceration of left cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.328A	Contusion and laceration of left cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.329A	Contusion and laceration of left cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.329D	Contusion and laceration of left cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.329S	Contusion and laceration of left cerebrum with loss of consciousness of unspecified duration, sequela
S06.330A	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, initial encounter
S06.330D	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, subsequent encounter
S06.330S	Contusion and laceration of cerebrum, unspecified, without loss of consciousness, sequela
S06.331A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, initial encounter
S06.331D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, subsequent encounter
S06.331S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, sequela
S06.332A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, initial encounter

S06.332D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.332S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.333A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.333D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.333S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.334A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.334D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.334S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela
S06.335A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.335D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.335S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.336A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.336D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.336S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.337A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.338A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.339A	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, initial encounter
S06.339D	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, subsequent encounter
S06.339S	Contusion and laceration of cerebrum, unspecified, with loss of consciousness of unspecified duration, sequela
S06.340A	Traumatic hemorrhage of right cerebrum without loss of consciousness, initial encounter
S06.340D	Traumatic hemorrhage of right cerebrum without loss of consciousness, subsequent encounter
S06.340S	Traumatic hemorrhage of right cerebrum without loss of consciousness, sequela
S06.341A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.341D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.341S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 30 minutes or less, sequela

S06.342A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.342D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.342S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.343A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter
S06.343D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, subsequent encounter
S06.343S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela
S06.344A	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.344D	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.344S	Traumatic hemorrhage of right cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.345A	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.345D	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.345S	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.346A	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.346D	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.346S	Traumatic hemorrhage of right cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.347A	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.348A	Traumatic hemorrhage of right cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.349A	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.349D	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.349S	Traumatic hemorrhage of right cerebrum with loss of consciousness of unspecified duration, sequela
S06.350A	Traumatic hemorrhage of left cerebrum without loss of consciousness, initial encounter
S06.350D	Traumatic hemorrhage of left cerebrum without loss of consciousness, subsequent encounter
S06.350S	Traumatic hemorrhage of left cerebrum without loss of consciousness, sequela
S06.351A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, initial encounter
S06.351D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.351S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 30 minutes or less, sequela
S06.352A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, initial encounter

S06.352D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.352S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.353A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter
S06.353D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, subsequent encounter
S06.353S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela
S06.354A	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.354D	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.354S	Traumatic hemorrhage of left cerebrum with loss of consciousness of 6 hours to 24 hours, sequela
S06.355A	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.355D	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.355S	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.356A	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.356D	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.356S	Traumatic hemorrhage of left cerebrum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.357A	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.358A	Traumatic hemorrhage of left cerebrum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.359A	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, initial encounter
S06.359D	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, subsequent encounter
S06.359S	Traumatic hemorrhage of left cerebrum with loss of consciousness of unspecified duration, sequela
S06.360A	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, initial encounter
S06.360D	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, subsequent encounter
S06.360S	Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness, sequela
S06.361A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, initial encounter
S06.361D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, subsequent encounter
S06.361S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 30 minutes or less, sequela
S06.362A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, initial encounter

S06.362D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.362S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.363A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, initial encounter
S06.363D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, subsequent encounter
S06.363S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 1 hours to 5 hours 59 minutes, sequela
S06.364A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.364D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.364S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela
S06.365A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, sequela
S06.365D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.365S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.366A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.366D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.366S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.367A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.368A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.369A	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, initial encounter
S06.369D	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, subsequent encounter
S06.369S	Traumatic hemorrhage of cerebrum, unspecified, with loss of consciousness of unspecified duration, sequela
S06.370A	Contusion, laceration, and hemorrhage of cerebellum without loss of consciousness, initial encounter
S06.370D	Contusion, laceration, and hemorrhage of cerebellum without loss of consciousness, subsequent encounter
S06.370S	Contusion, laceration, and hemorrhage of cerebellum without loss of consciousness, sequela
S06.371A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 30 minutes or less, initial encounter
S06.371D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 30 minutes or less, subsequent encounter
S06.371S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 30 minutes or less, sequela

S06.372A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.372D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.372S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.373A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.373D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.373S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.374A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.374D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.374S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of 6 hours to 24 hours, sequela
S06.375A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.375D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.375S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.376A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.376D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.376S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.377A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.378A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.379A	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of unspecified duration, initial encounter
S06.379D	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of unspecified duration, subsequent encounter
S06.379S	Contusion, laceration, and hemorrhage of cerebellum with loss of consciousness of unspecified duration, sequela
S06.380A	Contusion, laceration, and hemorrhage of brainstem without loss of consciousness, initial encounter
S06.380D	Contusion, laceration, and hemorrhage of brainstem without loss of consciousness, subsequent encounter
S06.380S	Contusion, laceration, and hemorrhage of brainstem without loss of consciousness, sequela
S06.381A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 30 minutes or less, initial encounter
S06.381D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 30 minutes or less, subsequent encounter

S06.381S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 30 minutes or less, sequela
S06.382A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.382D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.382S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.383A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.383D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.383S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.384A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.384D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.384S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of 6 hours to 24 hours, sequela
S06.385A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.385D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.385S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.386A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.386D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.386S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.387A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.388A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.389A	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of unspecified duration, initial encounter
S06.389D	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of unspecified duration, subsequent encounter
S06.389S	Contusion, laceration, and hemorrhage of brainstem with loss of consciousness of unspecified duration, sequela
S06.4X0A	Epidural hemorrhage without loss of consciousness, initial encounter
S06.4X0D	Epidural hemorrhage without loss of consciousness, subsequent encounter
S06.4X0S	Epidural hemorrhage without loss of consciousness, sequela
S06.4X1A	Epidural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.4X1D	Epidural hemorrhage with loss of consciousness of 30 minutes or less, subsequent encounter
S06.4X1S	Epidural hemorrhage with loss of consciousness of 30 minutes or less, sequela

S06.4X2A	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.4X2D	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.4X2S	Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.4X3A	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.4X3D	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.4X3S	Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.4X4A	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.4X4D	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.4X4S	Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela
S06.4X5A	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.4X5D	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.4X5S	Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.4X6A	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.4X6D	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.4X6S	Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.4X7A	Epidural hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.4X8A	Epidural hemorrhage with loss of consciousness of any duration with death due to other causes prior to regaining consciousness, initial encounter
S06.4X9A	Epidural hemorrhage with loss of consciousness of unspecified duration, initial encounter
S06.4X9D	Epidural hemorrhage with loss of consciousness of unspecified duration, subsequent encounter
S06.4X9S	Epidural hemorrhage with loss of consciousness of unspecified duration, sequela
S06.5X0A	Traumatic subdural hemorrhage without loss of consciousness, initial encounter
S06.5X0D	Traumatic subdural hemorrhage without loss of consciousness, subsequent encounter
S06.5X0S	Traumatic subdural hemorrhage without loss of consciousness, sequela
S06.5X1A	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.5X1D	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, subsequent encounter
S06.5X1S	Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, sequela
S06.5X2A	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.5X2D	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.5X2S	Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.5X3A	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter

S06.5X3D	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.5X3S	Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.5X4A	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.5X4D	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.5X4S	Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela
S06.5X5A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.5X5D	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.5X5S	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.5X6A	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.5X6D	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.5X6S	Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.5X7A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to brain injury before regaining consciousness, initial encounter
S06.5X8A	Traumatic subdural hemorrhage with loss of consciousness of any duration with death due to other cause before regaining consciousness, initial encounter
S06.5X9A	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, initial encounter
S06.5X9D	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, subsequent encounter
S06.5X9S	Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, sequela
S06.6X0A	Traumatic subarachnoid hemorrhage without loss of consciousness, initial encounter
S06.6X0D	Traumatic subarachnoid hemorrhage without loss of consciousness, subsequent encounter
S06.6X0S	Traumatic subarachnoid hemorrhage without loss of consciousness, sequela
S06.6X1A	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.6X1D	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, subsequent encounter
S06.6X1S	Traumatic subarachnoid hemorrhage with loss of consciousness of 30 minutes or less, sequela
S06.6X2A	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.6X2D	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.6X2S	Traumatic subarachnoid hemorrhage with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.6X3A	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.6X3D	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter

S06.6X3S	Traumatic subarachnoid hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.6X4A	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.6X4D	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.6X4S	Traumatic subarachnoid hemorrhage with loss of consciousness of 6 hours to 24 hours, sequela
S06.6X5A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.6X5D	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.6X5S	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.6X6A	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.6X6D	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.6X6S	Traumatic subarachnoid hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.6X9A	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial encounter
S06.6X9D	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, subsequent encounter
S06.6X9S	Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, sequela
S06.890A	Other specified intracranial injury without loss of consciousness, initial encounter
S06.890D	Other specified intracranial injury without loss of consciousness, subsequent encounter
S06.890S	Other specified intracranial injury without loss of consciousness, sequela
S06.891A	Other specified intracranial injury with loss of consciousness of 30 minutes or less, initial encounter
S06.891D	Other specified intracranial injury with loss of consciousness of 30 minutes or less, subsequent encounter
S06.891S	Other specified intracranial injury with loss of consciousness of 30 minutes or less, sequela
S06.892A	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.892D	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.892S	Other specified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.893A	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.893D	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.893S	Other specified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.894A	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.894D	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.894S	Other specified intracranial injury with loss of consciousness of 6 hours to 24 hours, sequela

S06.895A	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.895D	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.895S	Other specified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.896A	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.896D	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.896S	Other specified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.899A	Other specified intracranial injury with loss of consciousness of unspecified duration, initial encounter
S06.899D	Other specified intracranial injury with loss of consciousness of unspecified duration, subsequent encounter
S06.899S	Other specified intracranial injury with loss of consciousness of unspecified duration, sequela
S06.9X0A	Unspecified intracranial injury without loss of consciousness, initial encounter
S06.9X0D	Unspecified intracranial injury without loss of consciousness, subsequent encounter
S06.9X0S	Unspecified intracranial injury without loss of consciousness, sequela
S06.9X1A	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, initial encounter
S06.9X1D	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, subsequent encounter
S06.9X1S	Unspecified intracranial injury with loss of consciousness of 30 minutes or less, sequela
S06.9X2A	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.9X2D	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, subsequent encounter
S06.9X2S	Unspecified intracranial injury with loss of consciousness of 31 minutes to 59 minutes, sequela
S06.9X3A	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.9X3D	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, subsequent encounter
S06.9X3S	Unspecified intracranial injury with loss of consciousness of 1 hour to 5 hours 59 minutes, sequela
S06.9X4A	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.9X4D	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, subsequent encounter
S06.9X4S	Unspecified intracranial injury with loss of consciousness of 6 hours to 24 hours, sequela
S06.9X5A	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.9X5D	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, subsequent encounter
S06.9X5S	Unspecified intracranial injury with loss of consciousness greater than 24 hours with return to pre-existing conscious level, sequela
S06.9X6A	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter

S06.9X6D	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, subsequent encounter
S06.9X6S	Unspecified intracranial injury with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, sequela
S06.9X9A	Unspecified intracranial injury with loss of consciousness of unspecified duration, initial encounter
S06.9X9D	Unspecified intracranial injury with loss of consciousness of unspecified duration, subsequent encounter
S06.9X9S	Unspecified intracranial injury with loss of consciousness of unspecified duration, sequela
S09.8XXA	Other Specified Injuries Of Head, Initial Encounter
S09.8XXD	Other Specified Injuries Of Head, Subsequent Encounter
S09.8XXS	Other Specified Injuries Of Head, Sequela
S09.90XA	Unspecified injury of head, initial encounter
S09.90XD	Unspecified injury of head, subsequent encounter
S09.90XS	Unspecified injury of head, sequela
S14.101A	Unspecified injury at C1 level of cervical spinal cord, initial encounter
S14.101D	Unspecified injury at C1 level of cervical spinal cord, subsequent encounter
S14.101S	Unspecified injury at C1 level of cervical spinal cord, sequela
S14.102A	Unspecified injury at C2 level of cervical spinal cord, initial encounter
S14.102D	Unspecified injury at C2 level of cervical spinal cord, subsequent encounter
S14.102S	Unspecified injury at C2 level of cervical spinal cord, sequela
S14.103A	Unspecified injury at C3 level of cervical spinal cord, initial encounter
S14.103D	Unspecified injury at C3 level of cervical spinal cord, subsequent encounter
S14.103S	Unspecified injury at C3 level of cervical spinal cord, sequela
S14.104A	Unspecified injury at C4 level of cervical spinal cord, initial encounter
S14.104D	Unspecified injury at C4 level of cervical spinal cord, subsequent encounter
S14.104S	Unspecified injury at C4 level of cervical spinal cord, sequela
S14.105A	Unspecified injury at C5 level of cervical spinal cord, initial encounter
S14.105D	Unspecified injury at C5 level of cervical spinal cord, subsequent encounter
S14.105S	Unspecified injury at C5 level of cervical spinal cord, sequela
S14.106A	Unspecified injury at C6 level of cervical spinal cord, initial encounter
S14.106D	Unspecified injury at C6 level of cervical spinal cord, subsequent encounter
S14.106S	Unspecified injury at C6 level of cervical spinal cord, sequela
S14.107A	Unspecified injury at C7 level of cervical spinal cord, initial encounter
S14.107D	Unspecified injury at C7 level of cervical spinal cord, subsequent encounter
S14.107S	Unspecified injury at C7 level of cervical spinal cord, sequela
S14.108A	Unspecified injury at C8 level of cervical spinal cord, initial encounter
S14.108D	Unspecified injury at C8 level of cervical spinal cord, subsequent encounter
S14.108S	Unspecified injury at C8 level of cervical spinal cord, sequela
S14.109A	Unspecified injury at unspecified level of cervical spinal cord, initial encounter
S14.109D	Unspecified injury at unspecified level of cervical spinal cord, subsequent encounter
S14.109S	Unspecified injury at unspecified level of cervical spinal cord, sequela
S14.111A	Complete Lesion At C1 Level Of Cervical Spinal Cord, Initial Encounter
S14.111D	Complete Lesion At C1 Level Of Cervical Spinal Cord, Subsequent Encounter
S14.111S	Complete Lesion At C1 Level Of Cervical Spinal Cord, Sequela
S14.112A	Complete Lesion At C2 Level Of Cervical Spinal Cord, Initial Encounter
S14.112D	Complete Lesion At C2 Level Of Cervical Spinal Cord, Subsequent Encounter
S14.112S	Complete Lesion At C2 Level Of Cervical Spinal Cord, Sequela
S14.113A	Complete Lesion At C3 Level Of Cervical Spinal Cord, Initial Encounter
S14.113D	Complete Lesion At C3 Level Of Cervical Spinal Cord, Subsequent Encounter

S14.113S	Complete Lesion at C3 Level of Cervical Spinal Cord, Sequela
S14.114A	Complete Lesion at C4 Level of Cervical Spinal Cord, Initial Encounter
S14.114D	Complete Lesion at C4 Level of Cervical Spinal Cord, Subsequent Encounter
S14.114S	Complete Lesion at C4 Level of Cervical Spinal Cord, Sequela
S14.115A	Complete Lesion at C5 Level of Cervical Spinal Cord, Initial Encounter
S14.115D	Complete Lesion at C5 Level of Cervical Spinal Cord, Subsequent Encounter
S14.115S	Complete Lesion at C5 Level of Cervical Spinal Cord, Sequela
S14.116A	Complete Lesion at C6 Level of Cervical Spinal Cord, Initial Encounter
S14.116D	Complete Lesion at C6 Level of Cervical Spinal Cord, Subsequent Encounter
S14.116S	Complete Lesion at C6 Level of Cervical Spinal Cord, Sequela
S14.117A	Complete Lesion at C7 Level of Cervical Spinal Cord, Initial Encounter
S14.117D	Complete Lesion at C7 Level of Cervical Spinal Cord, Subsequent Encounter
S14.117S	Complete Lesion at C7 Level of Cervical Spinal Cord, Sequela
S14.118A	Complete Lesion at C8 Level of Cervical Spinal Cord, Initial Encounter
S14.118D	Complete Lesion at C8 Level of Cervical Spinal Cord, Subsequent Encounter
S14.118S	Complete Lesion at C8 Level of Cervical Spinal Cord, Sequela
S14.119A	Complete Lesion at Unspecified Level of Cervical Spinal Cord, Initial Encounter
S14.119D	Complete Lesion at Unspecified Level Of Cervical Spinal Cord, Subsequent Encounter
S14.119S	Complete Lesion at Unspecified Level of Cervical Spinal Cord, Sequela
S14.121A	Central cord syndrome at C1 level of cervical spinal cord, initial encounter
S14.121D	Central cord syndrome at C1 level of cervical spinal cord, subsequent encounter
S14.121S	Central cord syndrome at C1 level of cervical spinal cord, sequela
S14.122A	Central cord syndrome at C2 level of cervical spinal cord, initial encounter
S14.122D	Central cord syndrome at C2 level of cervical spinal cord, subsequent encounter
S14.122S	Central cord syndrome at C2 level of cervical spinal cord, sequela
S14.123A	Central cord syndrome at C3 level of cervical spinal cord, initial encounter
S14.123D	Central cord syndrome at C3 level of cervical spinal cord, subsequent encounter
S14.123S	Central cord syndrome at C3 level of cervical spinal cord, sequela
S14.124A	Central cord syndrome at C4 level of cervical spinal cord, initial encounter
S14.124D	Central cord syndrome at C4 level of cervical spinal cord, subsequent encounter
S14.124S	Central cord syndrome at C4 level of cervical spinal cord, sequela
S14.125A	Central cord syndrome at C5 level of cervical spinal cord, initial encounter
S14.125D	Central cord syndrome at C5 level of cervical spinal cord, subsequent encounter
S14.125S	Central cord syndrome at C5 level of cervical spinal cord, sequela
S14.126A	Central cord syndrome at C6 level of cervical spinal cord, initial encounter
S14.126D	Central cord syndrome at C6 level of cervical spinal cord, subsequent encounter
S14.126S	Central cord syndrome at C6 level of cervical spinal cord, sequela
S14.127A	Central cord syndrome at C7 level of cervical spinal cord, initial encounter
S14.127D	Central cord syndrome at C7 level of cervical spinal cord, subsequent encounter
S14.127S	Central cord syndrome at C7 level of cervical spinal cord, sequela
S14.128A	Central cord syndrome at C8 level of cervical spinal cord, initial encounter
S14.128D	Central cord syndrome at C8 level of cervical spinal cord, subsequent encounter
S14.128S	Central cord syndrome at C8 level of cervical spinal cord, sequela
S14.129A	Central cord syndrome at unspecified level of cervical spinal cord, initial encounter
S14.129D	Central cord syndrome at unspecified level of cervical spinal cord, subsequent encounter
S14.129S	Central cord syndrome at unspecified level of cervical spinal cord, sequela
S14.131A	Anterior cord syndrome at C1 level of cervical spinal cord, initial encounter
S14.131D	Anterior cord syndrome at C1 level of cervical spinal cord, subsequent encounter
S14.131S	Anterior cord syndrome at C1 level of cervical spinal cord, sequela
S14.132A	Anterior cord syndrome at C2 level of cervical spinal cord, initial encounter

S14.132D	Anterior cord syndrome at C2 level of cervical spinal cord, subsequent encounter
S14.132S	Anterior cord syndrome at C2 level of cervical spinal cord, sequela
S14.133A	Anterior cord syndrome at C3 level of cervical spinal cord, initial encounter
S14.133D	Anterior cord syndrome at C3 level of cervical spinal cord, subsequent encounter
S14.133S	Anterior cord syndrome at C3 level of cervical spinal cord, sequela
S14.134A	Anterior cord syndrome at C4 level of cervical spinal cord, initial encounter
S14.134D	Anterior cord syndrome at C4 level of cervical spinal cord, subsequent encounter
S14.134S	Anterior cord syndrome at C4 level of cervical spinal cord, sequela
S14.135A	Anterior cord syndrome at C5 level of cervical spinal cord, initial encounter
S14.135D	Anterior cord syndrome at C5 level of cervical spinal cord, subsequent encounter
S14.135S	Anterior cord syndrome at C5 level of cervical spinal cord, sequela
S14.136A	Anterior cord syndrome at C6 level of cervical spinal cord, initial encounter
S14.136D	Anterior cord syndrome at C6 level of cervical spinal cord, subsequent encounter
S14.136S	Anterior cord syndrome at C6 level of cervical spinal cord, sequela
S14.137A	Anterior cord syndrome at C7 level of cervical spinal cord, initial encounter
S14.137D	Anterior cord syndrome at C7 level of cervical spinal cord, subsequent encounter
S14.137S	Anterior cord syndrome at C7 level of cervical spinal cord, sequela
S14.138A	Anterior cord syndrome at C8 level of cervical spinal cord, initial encounter
S14.138D	Anterior cord syndrome at C8 level of cervical spinal cord, subsequent encounter
S14.138S	Anterior cord syndrome at C8 level of cervical spinal cord, sequela
S14.139A	Anterior cord syndrome at unspecified level of cervical spinal cord, initial encounter
S14.139D	Anterior cord syndrome at unspecified level of cervical spinal cord, subsequent encounter
S14.139S	Anterior cord syndrome at unspecified level of cervical spinal cord, sequela
S14.141A	Brown-Sequard Syndrome at C1 Level of Cervical Spinal Cord, Initial Encounter
S14.141D	Brown-Sequard Syndrome at C1 Level of Cervical Spinal Cord, Subsequent Encounter
S14.141S	Brown-Sequard Syndrome at C1 Level of Cervical Spinal Cord, Sequela
S14.142A	Brown-Sequard Syndrome at C2 Level of Cervical Spinal Cord, Initial Encounter
S14.142D	Brown-Sequard Syndrome at C2 Level of Cervical Spinal Cord, Subsequent Encounter
S14.142S	Brown-Sequard Syndrome at C2 Level of Cervical Spinal Cord, Sequela
S14.143A	Brown-Sequard Syndrome at C3 Level of Cervical Spinal Cord, Initial Encounter
S14.143D	Brown-Sequard Syndrome at C3 Level of Cervical Spinal Cord, Subsequent Encounter
S14.143S	Brown-Sequard Syndrome at C3 Level of Cervical Spinal Cord, Sequela
S14.144A	Brown-Sequard Syndrome at C4 Level of Cervical Spinal Cord, Initial Encounter
S14.144D	Brown-Sequard Syndrome at C4 Level of Cervical Spinal Cord, Subsequent Encounter
S14.144S	Brown-Sequard Syndrome at C4 Level of Cervical Spinal Cord, Sequela
S14.145A	Brown-Sequard Syndrome at C5 Level of Cervical Spinal Cord, Initial Encounter
S14.145D	Brown-Sequard Syndrome at C5 Level of Cervical Spinal Cord, Subsequent Encounter
S14.145S	Brown-Sequard Syndrome at C5 Level of Cervical Spinal Cord, Sequela
S14.146A	Brown-Sequard Syndrome at C6 Level of Cervical Spinal Cord, Initial Encounter
S14.146D	Brown-Sequard Syndrome at C6 Level of Cervical Spinal Cord, Subsequent Encounter
S14.146S	Brown-Sequard Syndrome at C6 Level of Cervical Spinal Cord, Sequela
S14.147A	Brown-Sequard Syndrome at C7 Level of Cervical Spinal Cord, Initial Encounter
S14.147D	Brown-Sequard Syndrome at C7 Level of Cervical Spinal Cord, Subsequent Encounter
S14.147S	Brown-Sequard Syndrome at C7 Level of Cervical Spinal Cord, Sequela
S14.148A	Brown-Sequard Syndrome at C8 Level of Cervical Spinal Cord, Initial Encounter
S14.148D	Brown-Sequard Syndrome at C8 Level of Cervical Spinal Cord, Subsequent Encounter
S14.148S	Brown-Sequard Syndrome at C8 Level of Cervical Spinal Cord, Sequela
S14.149A	Brown-Sequard Syndrome at Unspecified Level of Cervical Spinal Cord, Initial Encounter

S14.149D	Brown-Sequard Syndrome at Unspecified Level of Cervical Spinal Cord, Subsequent Encounter
S14.149S	Brown-Sequard Syndrome at Unspecified Level of Cervical Spinal Cord, Sequela
S14.151A	Other Incomplete Lesion at C1 Level of Cervical Spinal Cord, Initial Encounter
S14.151D	Other Incomplete Lesion at C1 Level of Cervical Spinal Cord, Subsequent Encounter
S14.151S	Other Incomplete Lesion at C1 Level of Cervical Spinal Cord, Sequela
S14.152A	Other Incomplete Lesion at C2 Level of Cervical Spinal Cord, Initial Encounter
S14.152D	Other Incomplete Lesion at C2 Level of Cervical Spinal Cord, Subsequent Encounter
S14.152S	Other Incomplete Lesion at C2 Level of Cervical Spinal Cord, Sequela
S14.153A	Other Incomplete Lesion at C3 Level of Cervical Spinal Cord, Initial Encounter
S14.153D	Other Incomplete Lesion at C3 Level of Cervical Spinal Cord, Subsequent Encounter
S14.153S	Other Incomplete Lesion at C3 Level of Cervical Spinal Cord, Sequela
S14.154A	Other Incomplete Lesion at C4 Level of Cervical Spinal Cord, Initial Encounter
S14.154D	Other Incomplete Lesion at C4 Level of Cervical Spinal Cord, Subsequent Encounter
S14.154S	Other Incomplete Lesion at C4 Level of Cervical Spinal Cord, Sequela
S14.155A	Other Incomplete Lesion at C5 Level of Cervical Spinal Cord, Initial Encounter
S14.155D	Other Incomplete Lesion at C5 Level of Cervical Spinal Cord, Subsequent Encounter
S14.155S	Other Incomplete Lesion at C5 Level of Cervical Spinal Cord, Sequela
S14.156A	Other Incomplete Lesion at C6 Level of Cervical Spinal Cord, Initial Encounter
S14.156D	Other Incomplete Lesion at C6 Level of Cervical Spinal Cord, Subsequent Encounter
S14.156S	Other Incomplete Lesion at C6 Level of Cervical Spinal Cord, Sequela
S14.157A	Other Incomplete Lesion at C7 Level of Cervical Spinal Cord, Initial Encounter
S14.157D	Other Incomplete Lesion at C7 Level of Cervical Spinal Cord, Subsequent Encounter
S14.157S	Other Incomplete Lesion at C7 Level of Cervical Spinal Cord, Sequela
S14.158A	Other Incomplete Lesion at C8 Level of Cervical Spinal Cord, Initial Encounter
S14.158D	Other Incomplete Lesion at C8 Level of Cervical Spinal Cord, Subsequent Encounter
S14.158S	Other Incomplete Lesion at C8 Level of Cervical Spinal Cord, Sequela
S14.159A	Other Incomplete Lesion at Unspecified Level of Cervical Spinal Cord, Initial Encounter
S14.159D	Other Incomplete Lesion at Unspecified Level of Cervical Spinal Cord, Subsequent Encounter
S14.159S	Other Incomplete Lesion at Unspecified Level of Cervical Spinal Cord, Sequela
S24.101A	Unspecified injury at T1 level of thoracic spinal cord, initial encounter
S24.101D	Unspecified injury at T1 level of thoracic spinal cord, subsequent encounter
S24.101S	Unspecified injury at T1 level of thoracic spinal cord, sequela
S24.102A	Unspecified injury at T2-T6 level of thoracic spinal cord, initial encounter
S24.102D	Unspecified injury at T2-T6 level of thoracic spinal cord, subsequent encounter
S24.102S	Unspecified injury at T2-T6 level of thoracic spinal cord, sequela
S24.103A	Unspecified injury at T7-T10 level of thoracic spinal cord, initial encounter
S24.103D	Unspecified injury at T7-T10 level of thoracic spinal cord, subsequent encounter
S24.103S	Unspecified injury at T7-T10 level of thoracic spinal cord, sequela
S24.104A	Unspecified injury at T11-T12 level of thoracic spinal cord, initial encounter
S24.104D	Unspecified injury at T11-T12 level of thoracic spinal cord, subsequent encounter
S24.104S	Unspecified injury at T11-T12 level of thoracic spinal cord, sequela
S24.109A	Unspecified injury at unspecified level of thoracic spinal cord, initial encounter
S24.109D	Unspecified injury at unspecified level of thoracic spinal cord, subsequent encounter
S24.109S	Unspecified injury at unspecified level of thoracic spinal cord, sequela
S24.111A	Complete Lesion at T1 Level of Thoracic Spinal Cord, Initial Encounter
S24.111D	Complete Lesion at T1 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.111S	Complete Lesion at T1 Level of Thoracic Spinal Cord, Sequela
S24.112A	Complete Lesion at T2-T6 Level of Thoracic Spinal Cord, Initial Encounter
S24.112D	Complete Lesion at T2-T6 Level of Thoracic Spinal Cord, Subsequent Encounter

S24.112S	Complete Lesion at T2-T6 Level of Thoracic Spinal Cord, Sequela
S24.113A	Complete Lesion at T7-T10 Level of Thoracic Spinal Cord, Initial Encounter
S24.113D	Complete Lesion at T7-T10 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.113S	Complete Lesion at T7-T10 Level of Thoracic Spinal Cord, Sequela
S24.114A	Complete Lesion at T11-T12 Level of Thoracic Spinal Cord, Initial Encounter
S24.114D	Complete Lesion at T11-T12 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.114S	Complete Lesion at T11-T12 Level of Thoracic Spinal Cord, Sequela
S24.119A	Complete Lesion at Unspecified Level of Thoracic Spinal Cord, Initial Encounter
S24.119D	Complete Lesion at Unspecified Level of Thoracic Spinal Cord, Subsequent Encounter
S24.119S	Complete Lesion at Unspecified Level of Thoracic Spinal Cord, Sequela
S24.131A	Anterior cord syndrome at T1 level of thoracic spinal cord, initial encounter
S24.131D	Anterior cord syndrome at T1 level of thoracic spinal cord, subsequent encounter
S24.131S	Anterior cord syndrome at T1 level of thoracic spinal cord, sequela
S24.132A	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, initial encounter
S24.132D	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, subsequent encounter
S24.132S	Anterior cord syndrome at T2-T6 level of thoracic spinal cord, sequela
S24.133A	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, initial encounter
S24.133D	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, subsequent encounter
S24.133S	Anterior cord syndrome at T7-T10 level of thoracic spinal cord, sequela
S24.134A	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, initial encounter
S24.134D	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, subsequent encounter
S24.134S	Anterior cord syndrome at T11-T12 level of thoracic spinal cord, sequela
S24.139A	Anterior cord syndrome at unspecified level of thoracic spinal cord, initial encounter
S24.139D	Anterior cord syndrome at unspecified level of thoracic spinal cord, subsequent encounter
S24.139S	Anterior cord syndrome at unspecified level of thoracic spinal cord, sequela
S24.141A	Brown-Sequard Syndrome at T1 Level of Thoracic Spinal Cord, Initial Encounter
S24.141D	Brown-Sequard Syndrome at T1 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.141S	Brown-Sequard Syndrome at T1 Level of Thoracic Spinal Cord, Sequela
S24.142A	Brown-Sequard Syndrome at T2-T6 Level of Thoracic Spinal Cord, Initial Encounter
S24.142D	Brown-Sequard Syndrome at T2-T6 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.142S	Brown-Sequard Syndrome at T2-T6 Level of Thoracic Spinal Cord, Sequela
S24.143A	Brown-Sequard Syndrome at T7-T10 Level of Thoracic Spinal Cord, Initial Encounter
S24.143D	Brown-Sequard Syndrome at T7-T10 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.143S	Brown-Sequard Syndrome at T7-T10 Level of Thoracic Spinal Cord, Sequela
S24.144A	Brown-Sequard Syndrome at T11-T12 Level of Thoracic Spinal Cord, Initial Encounter
S24.144D	Brown-Sequard Syndrome at T11-T12 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.144S	Brown-Sequard Syndrome at T11-T12 Level of Thoracic Spinal Cord, Sequela
S24.149A	Brown-Sequard Syndrome at Unspecified Level of Thoracic Spinal Cord, Initial Encounter
S24.149D	Brown-Sequard Syndrome at Unspecified Level of Thoracic Spinal Cord, Subsequent Encounter
S24.149S	Brown-Sequard Syndrome at Unspecified Level of Thoracic Spinal Cord, Sequela
S24.151A	Other Incomplete Lesion at T1 Level of Thoracic Spinal Cord, Initial Encounter
S24.151D	Other Incomplete Lesion at T1 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.151S	Other Incomplete Lesion at T1 Level of Thoracic Spinal Cord, Sequela
S24.152A	Other Incomplete Lesion at T2-T6 Level of Thoracic Spinal Cord, Initial Encounter
S24.152D	Other Incomplete Lesion at T2-T6 Level of Thoracic Spinal Cord, Subsequent Encounter

S24.152S	Other Incomplete Lesion at T2-T6 Level of Thoracic Spinal Cord, Sequela
S24.153A	Other Incomplete Lesion at T7-T10 Level of Thoracic Spinal Cord, Initial Encounter
S24.153D	Other Incomplete Lesion at T7-T10 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.153S	Other Incomplete Lesion at T7-T10 Level of Thoracic Spinal Cord, Sequela
S24.154A	Other Incomplete Lesion at T11-T12 Level of Thoracic Spinal Cord, Initial Encounter
S24.154D	Other Incomplete Lesion at T11-T12 Level of Thoracic Spinal Cord, Subsequent Encounter
S24.154S	Other Incomplete Lesion at T11-T12 Level of Thoracic Spinal Cord, Sequela
S24.159A	Other Incomplete Lesion at Unspecified Level of Thoracic Spinal Cord, Initial Encounter
S24.159D	Other Incomplete Lesion at Unspecified Level of Thoracic Spinal Cord, Subsequent Encounter
S24.159S	Other Incomplete Lesion at Unspecified Level of Thoracic Spinal Cord, Sequela
S34.101A	Unspecified injury to L1 level of lumbar spinal cord, initial encounter
S34.101D	Unspecified injury to L1 level of lumbar spinal cord, subsequent encounter
S34.101S	Unspecified injury to L1 level of lumbar spinal cord, sequela
S34.102A	Unspecified injury to L2 level of lumbar spinal cord, initial encounter
S34.102D	Unspecified injury to L2 level of lumbar spinal cord, subsequent encounter
S34.102S	Unspecified injury to L2 level of lumbar spinal cord, sequela
S34.103A	Unspecified injury to L3 level of lumbar spinal cord, initial encounter
S34.103D	Unspecified injury to L3 level of lumbar spinal cord, subsequent encounter
S34.103S	Unspecified injury to L3 level of lumbar spinal cord, sequela
S34.104A	Unspecified injury to L4 level of lumbar spinal cord, initial encounter
S34.104D	Unspecified injury to L4 level of lumbar spinal cord, subsequent encounter
S34.104S	Unspecified injury to L4 level of lumbar spinal cord, sequela
S34.105A	Unspecified injury to L5 level of lumbar spinal cord, initial encounter
S34.105D	Unspecified injury to L5 level of lumbar spinal cord, subsequent encounter
S34.105S	Unspecified injury to L5 level of lumbar spinal cord, sequela
S34.109A	Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109D	Unspecified injury to unspecified level of lumbar spinal cord, subsequent encounter
S34.109S	Unspecified injury to unspecified level of lumbar spinal cord, sequela
S34.111A	Complete Lesion of L1 Level of Lumbar Spinal Cord, Initial Encounter
S34.111D	Complete Lesion of L1 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.111S	Complete Lesion of L1 Level of Lumbar Spinal Cord, Sequela
S34.112A	Complete Lesion of L2 Level of Lumbar Spinal Cord, Initial Encounter
S34.112D	Complete Lesion of L2 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.112S	Complete Lesion of L2 Level of Lumbar Spinal Cord, Sequela
S34.113A	Complete Lesion of L3 Level of Lumbar Spinal Cord, Initial Encounter
S34.113D	Complete Lesion of L3 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.113S	Complete Lesion of L3 Level of Lumbar Spinal Cord, Sequela
S34.114A	Complete Lesion of L4 Level of Lumbar Spinal Cord, Initial Encounter
S34.114D	Complete Lesion of L4 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.114S	Complete Lesion of L4 Level of Lumbar Spinal Cord, Sequela
S34.115A	Complete Lesion of L5 Level of Lumbar Spinal Cord, Initial Encounter
S34.115D	Complete Lesion of L5 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.115S	Complete Lesion of L5 Level of Lumbar Spinal Cord, Sequela
S34.119A	Complete Lesion of Unspecified Level of Lumbar Spinal Cord, Initial Encounter
S34.119D	Complete Lesion of Unspecified Level of Lumbar Spinal Cord, Subsequent Encounter
S34.119S	Complete Lesion of Unspecified Level of Lumbar Spinal Cord, Sequela
S34.121A	Incomplete Lesion of L1 Level of Lumbar Spinal Cord, Initial Encounter
S34.121D	Incomplete Lesion of L1 Level of Lumbar Spinal Cord, Subsequent Encounter

S34.121S	Incomplete Lesion of L1 Level of Lumbar Spinal Cord, Sequela
S34.122A	Incomplete Lesion of L2 Level of Lumbar Spinal Cord, Initial Encounter
S34.122D	Incomplete Lesion of L2 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.122S	Incomplete Lesion of L2 Level of Lumbar Spinal Cord, Sequela
S34.123A	Incomplete Lesion of L3 Level of Lumbar Spinal Cord, Initial Encounter
S34.123D	Incomplete Lesion of L3 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.123S	Incomplete Lesion of L3 Level of Lumbar Spinal Cord, Sequela
S34.124A	Incomplete Lesion of L4 Level of Lumbar Spinal Cord, Initial Encounter
S34.124D	Incomplete Lesion of L4 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.124S	Incomplete Lesion of L4 Level of Lumbar Spinal Cord, Sequela
S34.125A	Incomplete Lesion of L5 Level of Lumbar Spinal Cord, Initial Encounter
S34.125D	Incomplete Lesion of L5 Level of Lumbar Spinal Cord, Subsequent Encounter
S34.125S	Incomplete Lesion of L5 Level of Lumbar Spinal Cord, Sequela
S34.129A	Incomplete Lesion of Unspecified Level of Lumbar Spinal Cord, Initial Encounter
S34.129D	Incomplete Lesion of Unspecified Level of Lumbar Spinal Cord, Subsequent Encounter
S34.129S	Incomplete Lesion of Unspecified Level of Lumbar Spinal Cord, Sequela
S34.131A	Complete Lesion of Sacral Spinal Cord, Initial Encounter
S34.131D	Complete Lesion of Sacral Spinal Cord, Subsequent Encounter
S34.131S	Complete Lesion of Sacral Spinal Cord, Sequela
S34.132A	Incomplete Lesion of Sacral Spinal Cord, Initial Encounter
S34.132D	Incomplete Lesion of Sacral Spinal Cord, Subsequent Encounter
S34.132S	Incomplete Lesion of Sacral Spinal Cord, Sequela
S34.139A	Unspecified Injury to Sacral Spinal Cord, Initial Encounter
S34.139D	Unspecified Injury to Sacral Spinal Cord, Subsequent Encounter
S34.139S	Unspecified Injury to Sacral Spinal Cord, Sequela

The above **medical necessity criteria MUST** be met for the following codes to be covered for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

CPT Codes

CPT codes:	Code Description
95930	Visual evoked potential (VEP) checkerboard or flash testing, central nervous system except glaucoma, with interpretation and report

The following CPT code is considered investigational for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

CPT Codes

CPT codes:	Code Description
0464T	Visual evoked potential, testing for glaucoma, with interpretation and report

Description

Intraoperative Neurophysiologic Monitoring

The principal goal of intraoperative neurophysiologic monitoring is the identification of nervous system impairment on the assumption that prompt intervention will prevent permanent deficits. Correctable factors at surgery include circulatory disturbance, excess compression from retraction, bony structures, hematomas, or mechanical stretching. The technology is continuously evolving with refinements in equipment and analytic techniques, including recording, with several patients monitored under the

supervision of a physician who is outside the operating room. The different methodologies of monitoring are described below.

Sensory-Evoked Potentials

Sensory-evoked potentials describe the responses of the sensory pathways to sensory or electrical stimuli. Intraoperative monitoring of sensory-evoked potentials is used to assess the functional integrity of central nervous system pathways during surgeries that put the spinal cord or brain at risk for significant ischemia or traumatic injury. The basic principles of sensory-evoked potential monitoring involve identification of a neurologic region at risk, selection and stimulation of a nerve that carries a signal through the at-risk region and recording and interpreting the signal at certain standardized points along the pathway. Monitoring of sensory-evoked potentials is commonly used in the following procedures: carotid endarterectomy, brain surgery involving vasculature, surgery with distraction compression or ischemia of the spinal cord and brainstem, and acoustic neuroma surgery. Sensory-evoked potentials can be further categorized by type of stimulation used, as follows.

Somatosensory-Evoked Potentials

Somatosensory-evoked potentials are cortical responses elicited by peripheral nerve stimulations. Peripheral nerves, such as the median, ulnar, or tibial nerves, are typically stimulated, but in some situations, the spinal cord may be stimulated directly. The recording is done either cortically or at the level of the spinal cord above the surgical procedure. Intraoperative monitoring of somatosensory-evoked potentials is most commonly used during orthopedic or neurologic surgery to prompt intervention to reduce surgically induced morbidity and/or to monitor the level of anesthesia. One of the most common indications for somatosensory-evoked potential monitoring is in patients undergoing corrective surgery for scoliosis. In this setting, somatosensory-evoked potential monitors the status of the posterior column pathways and thus does not reflect ischemia in the anterior (motor) pathways. Several different techniques are commonly used, including stimulation of a relevant peripheral nerve with monitoring from the scalp, from interspinous ligament needle electrodes, or from catheter electrodes in the epidural space.

Brainstem Auditory-Evoked Potentials

Brainstem auditory-evoked potentials are generated in response to auditory clicks and can define the functional status of the auditory nerve. Surgical resection of a cerebellopontine angle tumor, such as an acoustic neuroma, places the auditory nerves at risk, and brainstem auditory-evoked potentials have been extensively used to monitor auditory function during these procedures.

Visual-Evoked Potentials

Visual-evoked potentials (VEPs) with light flashes are used to track visual signals from the retina to the occipital cortex. Visual-evoked potential (VEP) monitoring has been used for surgery on lesions near the optic chiasm. However, VEPs are very difficult to interpret due to their sensitivity to anesthesia, temperature, and blood pressure.

Motor-Evoked Potentials

Motor-evoked potentials are recorded from muscles following direct or transcranial electrical stimulation of motor cortex or pulsed magnetic stimulation provided using a coil placed over the head. Peripheral motor responses (muscle activity) are recorded by electrodes placed on the skin at prescribed points along the motor pathways. Motor-evoked potentials, especially when induced by magnetic stimulation, can be affected by anesthesia. The Digitimer electrical cortical stimulator received U.S. Food and Drug Administration (FDA) premarket approval in 2002. Devices for transcranial magnetic stimulation have not been approved by the FDA for this use.

Multimodal intraoperative neurophysiologic monitoring, in which more than 1 technique is used, most commonly with somatosensory-evoked potentials and motor-evoked potentials, has also been described.

Electromyogram Monitoring and Nerve Conduction Velocity Measurements

Electromyogram (EMG) monitoring and nerve conduction velocity measurements can be performed in the operating room and may be used to assess the status of the cranial or peripheral nerves (eg, to identify

the extent of nerve damage before nerve grafting or during resection of tumors). For procedures with a risk of vocal cord paralysis due to damage to the recurrent laryngeal nerve (ie, during carotid artery, thyroid, parathyroid, goiter, or anterior cervical spine procedures), monitoring of the vocal cords or vocal cord muscles has been performed. These techniques may also be used during procedures proximal to the nerve roots and peripheral nerves to assess the presence of excessive traction or other impairment. Surgery in the region of cranial nerves can be monitored by electrically stimulating the proximal (brain) end of the nerve and recording via EMG activity in the facial or neck muscles. Thus, monitoring is done in the direction opposite that of sensory-evoked potentials but the purpose is similar, to verify that the neural pathway is intact.

Electroencephalogram Monitoring

Spontaneous electroencephalogram (EEG) monitoring can also be used during surgery and can be subdivided as follows:

- EEG monitoring has been widely used to monitor cerebral ischemia secondary to carotid cross-clamping during a carotid endarterectomy. EEG monitoring may identify those patients who would benefit from the use of a vascular shunt during the procedure to restore adequate cerebral perfusion. Conversely, shunts, which have an associated risk of iatrogenic complications, may be avoided in those patients with a normal EEG activity. Carotid endarterectomy may be done with the patient under local anesthesia so that monitoring of cortical function can be directly assessed.
- Electrocorticography is the recording of EEG activity directly from a surgically exposed cerebral cortex. Electrocorticography is typically used to define the sensory cortex and map the critical limits of a surgical resection. Electrocorticography recordings have been most frequently used to identify epileptogenic regions for resection. In these applications, electrocorticography does not constitute monitoring, per se.

Intraoperative neurophysiologic monitoring, including somatosensory-evoked potentials and motor-evoked potentials using transcranial electrical stimulation, brainstem auditory-evoked potentials, EMG of cranial nerves, EEG, and electrocorticography, has broad acceptance, particularly for spine surgery and open abdominal aorta aneurysm repairs. These indications have long been considered the standard of care, as evidenced by numerous society guidelines, including those from the American Academy of Neurology, American Clinical Neurophysiology Society, American Association of Neurological Surgeons, Congress of Neurologic Surgeons, and American Association of Neuromuscular & Electrodiagnostic Medicine.^{1,2,3,4,5,6,5} Therefore, this evidence review focuses on monitoring of the recurrent laryngeal nerve during neck and esophageal surgeries and monitoring of peripheral nerves.

Summary

For individuals who are undergoing thyroid or parathyroid surgery and are at high risk of injury to the recurrent laryngeal nerve who receive intraoperative neurophysiologic monitoring, the evidence includes a large randomized controlled trial (RCT) and systematic reviews. Relevant outcomes are morbid events, functional outcomes, and quality of life. The strongest evidence on neurophysiologic monitoring derives from a RCT of 1000 patients undergoing thyroid surgery. This RCT found a significant reduction in recurrent laryngeal nerve injury in patients at high-risk for injury. High-risk in this trial was defined as surgery for cancer, thyrotoxicosis, retrosternal or giant goiter, or thyroiditis. The high-risk category may also include patients with prior thyroid or parathyroid surgery or total thyroidectomy. A low volume of surgeries might also contribute to a higher risk for recurrent laryngeal nerve injury. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who are undergoing anterior cervical spine surgery and are at high-risk of injury to the recurrent laryngeal nerve who receive intraoperative neurophysiologic monitoring, the evidence includes 3 systematic reviews of case series and cohort studies. Relevant outcomes are morbid events, functional outcomes, and quality of life. Two of the 3 analyses compared the risk of nerve injury using intraoperative neurophysiologic monitoring with no intraoperative neurophysiologic monitoring and found no statistically significant difference. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who are undergoing esophageal surgery who receive intraoperative neurophysiologic monitoring, the evidence includes a systematic review of mainly nonrandomized comparative studies. Relevant outcomes are morbid events, functional outcomes, and quality of life. The systematic review found less recurrent laryngeal nerve palsy with intraoperative neurophysiologic monitoring, but conclusions are limited by the design of the included studies. Current evidence is not sufficiently robust to determine whether neurophysiologic monitoring reduces recurrent laryngeal nerve injury in patients undergoing esophageal surgery for esophageal cancer. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who are undergoing surgery proximal to a peripheral nerve who receive intraoperative neurophysiologic monitoring, the evidence includes case series and a controlled cohort study. Relevant outcomes are morbid events, functional outcomes, and quality of life. Surgical guidance with peripheral intraoperative neurophysiologic monitoring and the predictive ability of monitoring of peripheral nerves have been reported. No prospective comparative studies were identified that assessed whether outcomes are improved with neurophysiologic monitoring. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who are undergoing spinal instrumentation requiring screws or distraction who receive intraoperative neurophysiologic monitoring, the evidence includes systematic reviews of nonrandomized studies. Relevant outcomes are morbid events, functional outcomes, and quality of life. The available evidence suggests that intraoperative neurophysiologic monitoring has high sensitivity and specificity for detecting neurologic deficits. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

2017 Input

Clinical input was sought to help determine whether the use of intraoperative neurophysiologic monitoring of the recurrent laryngeal nerve for individuals undergoing cervical spine surgery would provide a clinically meaningful improvement in net health outcome and whether the use is consistent with generally accepted medical practice. In response to requests, clinical input was received from 5 specialty society-level responses while this policy was under review in 2017.

For individuals undergoing cervical spine surgery who receive intraoperative neurophysiologic monitoring of the recurrent laryngeal nerve, clinical input supports this use provides a clinically meaningful improvement in net health outcome and indicates this use is consistent with generally accepted medical practice in a subgroup of appropriately selected patients. The following patient selection criteria are based on clinical expert opinion and information from clinical study populations:

- prior anterior cervical surgery, particularly revision anterior cervical discectomy and fusion, revision surgery through a scarred surgical field, reoperation for pseudarthrosis, or revision for failed fusion;
- multilevel anterior cervical discectomy and fusion; and
- preexisting recurrent laryngeal nerve pathology, when there is residual function of the recurrent laryngeal nerve.

Thus, the above indication may be considered medically necessary considering the suggestive evidence and clinical input support.

Policy History

Date	Action
11/2024	Policy revised. Motor evoked potentials expanded to include additional medically necessary indications. Effective 11/1/2024.
6/2024	Annual policy review. References updated. Policy statements unchanged.
2/2024	Policy clarified. Added cross-reference to related policy #701 regarding electromyography (EMG), and coding clarification regarding need for both EMG CPT code and intraoperative monitoring code if EMG is being used for intraoperative monitoring.
9/2023	Policy clarified to include prior authorization requests using Authorization Manager.

6/2023	Policy updated with literature review through March 6, 2023; references added. New indication for spinal instrumentation requiring screws or distraction added. No changes to policy statement as the new indication would be covered within the existing medically necessary policy statement on intraoperative neurophysiologic monitoring during spinal, intracranial, or vascular procedures. Minor editorial refinements to policy statements; intent unchanged.
8/2022	Annual policy review. Literature review through August 2022 on SSEP, VEP, MEP testing. No new references. Policy statements unchanged.
6/2022	Annual policy review. Policy statement on intraoperative electromyography and nerve conduction velocity monitoring during surgery on the peripheral nerves changed from "not medically necessary" to "investigational." Policy intent unchanged.
11/2021	Policy clarified to indicate that IONM of the facial nerve may be indicated during cochlear implantation, middle ear, and mastoid surgery and other neurotologic/otologic surgical procedures).
6/2021	Monitoring of the laryngeal nerve clarified. Total thyroidectomy clarified to include hemithyroidectomy.
5/2021	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
1/2021	Medicare information removed. See MP #132 Medicare Advantage Management for local coverage determination and national coverage determination reference.
10/2020	Clarified coding information.
6/2020	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
12/2019	Policy clarified to indicate that IONM may be indicated for intracerebral surgical procedures.
10/2019	Policy clarified to remove the note indicating that training of four monitoring is considered integral to intraoperative monitoring and/or administration of anesthesia.
6/2019	Intraoperative neurophysiologic monitoring policy criteria revised. Prior authorization is required for HMO Commercial Managed Care (HMO and POS) Commercial PPO and Indemnity. Clarified coding information. Effective 6/1/2019.
12/2018	Local Coverage Determination (LCD): Intraoperative Neurophysiological Testing (L34623) added for Medicare Advantage. Effective 10/1/2018.
10/2018	Clarified coding information.
5/2018	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
4/2018	Clarified coding information.
1/2018	Clarified coding information.
10/2017	Annual policy review. New medically necessary and investigational indications described. Effective 10/1/2017.
3/2017	Coverage for Medicare Advantage members clarified based on Local Coverage Determination (LCD): Visual Electrophysiology Testing (L36831). Effective 3/16/2017.
1/2017	Clarified coding information for the 2017 code changes.
10/2016	Clarified coding information.
8/2016	Clarified coding information.
5/2016	New investigational indications described. Effective 5/1/2016. Medical policy ICD 10 remediation: Formatting, editing and coding updates. Coding information clarified.
2/2016	Intraoperative neurophysiologic monitoring (IONM) definition clarified. 2/2016
7/2014	Coding information clarified.
6/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
1/2013	Updated to add new HCPCS code G0453, effective 1/1/2013.
12/2012	Updated to add new CPT codes 95940 and 95941. Effective 1/1/2013.
3/2012	Reviewed Medical Policy Group - Allergy, Asthma, Immunology and ENT/Otolaryngology, no changes in coverage.

2/2012	Reviewed Medical Policy Group - Psychiatry and Ophthalmology, no changes in coverage.
1/2012	Reviewed Medical Policy Group - Neurology and Neurosurgery, no changes in coverage.
12/2011	Updated medically necessary, investigational, and not medically necessary criteria for intra-operative neurophysiologic monitoring along with the coding information and title renamed. Effective 12/1/2011.
3/2011	Reviewed Medical Policy Group - Allergy/Asthma/Immunology and ENT/Otolaryngology, no changes in coverage.
2/2011	Reviewed Medical Policy Group - Psychiatry and Ophthalmology, no changes in coverage.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

References

1. Assessment: intraoperative neurophysiology. Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. *Neurology*. Nov 1990; 40(11): 1644-6. PMID 2234418
2. Nuwer MR, Emerson RG, Galloway G, et al. Evidence-based guideline update: intraoperative spinal monitoring with somatosensory and transcranial electrical motor evoked potentials: report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology and the American Clinical Neurophysiology Society. *Neurology*. Feb 21 2012; 78(8): 585-9. PMID 22351796
3. Skinner SA, Cohen BA, Morledge DE, et al. Practice guidelines for the supervising professional: intraoperative neurophysiological monitoring. *J Clin Monit Comput*. Apr 2014; 28(2): 103-11. PMID 24022172
4. American Clinical Neurophysiology Society. ACNS Guidelines and Consensus Statements. <http://www.acns.org/practice/guidelines>. Accessed March 3, 2024.
5. American Association of Neuromuscular & Electrodiagnostic Medicine. Position Statement: Recommended Policy for Electrodiagnostic Medicine. updated 2023; <https://www.aanem.org/Advocacy/Position-Statements/Recommended-Policy-for-Electrodiagnostic-Medicine>. Accessed March 1, 2024.
6. Resnick DK, Choudhri TF, Dailey AT, et al. Guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 15: electrophysiological monitoring and lumbar fusion. *J Neurosurg Spine*. Jun 2005; 2(6): 725-32. PMID 16028743
7. Cozzi AT, Ottavi A, Lozza P, et al. Intraoperative Neuromonitoring Does Not Reduce the Risk of Temporary and Definitive Recurrent Laryngeal Nerve Damage during Thyroid Surgery: A Systematic Review and Meta-Analysis of Endoscopic Findings from 73,325 Nerves at Risk. *J Pers Med*. Sep 23 2023; 13(10). PMID 37888040
8. Henry BM, Graves MJ, Vikse J, et al. The current state of intermittent intraoperative neural monitoring for prevention of recurrent laryngeal nerve injury during thyroidectomy: a PRISMA-compliant systematic review of overlapping meta-analyses. *Langenbecks Arch Surg*. Jun 2017; 402(4): 663-673. PMID 28378238
9. Pisanu A, Porceddu G, Podda M, et al. Systematic review with meta-analysis of studies comparing intraoperative neuromonitoring of recurrent laryngeal nerves versus visualization alone during thyroidectomy. *J Surg Res*. May 01 2014; 188(1): 152-61. PMID 24433869
10. Sun W, Liu J, Zhang H, et al. A meta-analysis of intraoperative neuromonitoring of recurrent laryngeal nerve palsy during thyroid reoperations. *Clin Endocrinol (Oxf)*. Nov 2017; 87(5): 572-580. PMID 28585717

11. Pardal-Refoyo JL, Ochoa-Sangrador C. Bilateral recurrent laryngeal nerve injury in total thyroidectomy with or without intraoperative neuromonitoring. Systematic review and meta-analysis. *Acta Otorrinolaringol Esp.* 2016; 67(2): 66-74. PMID 26025358
12. Barczyński M, Konturek A, Cichoń S. Randomized clinical trial of visualization versus neuromonitoring of recurrent laryngeal nerves during thyroidectomy. *Br J Surg.* Mar 2009; 96(3): 240-6. PMID 19177420
13. Vasileiadis I, Karatzas T, Charitoudis G, et al. Association of Intraoperative Neuromonitoring With Reduced Recurrent Laryngeal Nerve Injury in Patients Undergoing Total Thyroidectomy. *JAMA Otolaryngol Head Neck Surg.* Oct 01 2016; 142(10): 994-1001. PMID 27490310
14. Ajiboye RM, Zoller SD, Sharma A, et al. Intraoperative Neuromonitoring for Anterior Cervical Spine Surgery: What Is the Evidence?. *Spine (Phila Pa 1976).* Mar 15 2017; 42(6): 385-393. PMID 27390917
15. Erwood MS, Hadley MN, Gordon AS, et al. Recurrent laryngeal nerve injury following reoperative anterior cervical discectomy and fusion: a meta-analysis. *J Neurosurg Spine.* Aug 2016; 25(2): 198-204. PMID 27015129
16. Daniel JW, Botelho RV, Milano JB, et al. Intraoperative Neurophysiological Monitoring in Spine Surgery: A Systematic Review and Meta-Analysis. *Spine (Phila Pa 1976).* Aug 2018; 43(16): 1154-1160. PMID 30063222
17. Chen B, Yang T, Wang W, et al. Application of Intraoperative Neuromonitoring (IONM) of the Recurrent Laryngeal Nerve during Esophagectomy: A Systematic Review and Meta-Analysis. *J Clin Med.* Jan 10 2023; 12(2). PMID 36675495
18. Komatsu S, Konishi T, Matsubara D, et al. Continuous Recurrent Laryngeal Nerve Monitoring During Single-Port Mediastinoscopic Radical Esophagectomy for Esophageal Cancer. *J Gastrointest Surg.* Dec 2022; 26(12): 2444-2450. PMID 36221021
19. Huang CL, Chen CM, Hung WH, et al. Clinical Outcome of Intraoperative Recurrent Laryngeal Nerve Monitoring during Thoracoscopic Esophagectomy and Mediastinal Lymph Node Dissection for Esophageal Cancer. *J Clin Med.* Aug 23 2022; 11(17). PMID 36078880
20. Zhao L, He J, Qin Y, et al. Application of intraoperative nerve monitoring for recurrent laryngeal nerves in minimally invasive McKeown esophagectomy. *Dis Esophagus.* Jul 12 2022; 35(7). PMID 34864953
21. Yuda M, Nishikawa K, Ishikawa Y, et al. Intraoperative nerve monitoring during esophagectomy reduces the risk of recurrent laryngeal nerve palsy. *Surg Endosc.* Jun 2022; 36(6): 3957-3964. PMID 34494155
22. Takeda S, Iida M, Kanekiyo S, et al. Efficacy of intraoperative recurrent laryngeal neuromonitoring during surgery for esophageal cancer. *Ann Gastroenterol Surg.* Jan 2021; 5(1): 83-92. PMID 33532684
23. Fujimoto D, Taniguchi K, Kobayashi H. Intraoperative neuromonitoring during prone thoracoscopic esophagectomy for esophageal cancer reduces the incidence of recurrent laryngeal nerve palsy: a single-center study. *Updates Surg.* Apr 2021; 73(2): 587-595. PMID 33415692
24. Kobayashi H, Kondo M, Mizumoto M, et al. Technique and surgical outcomes of mesenterization and intra-operative neural monitoring to reduce recurrent laryngeal nerve paralysis after thoracoscopic esophagectomy: A cohort study. *Int J Surg.* Aug 2018; 56: 301-306. PMID 29879478
25. Zhu W, Yang F, Cao J, Zhao C, Dong B, Chen D. Application of recurrent laryngeal nerve detector in the neck anastomosis of upper or middle-thoracic esophageal carcinoma. *Cancer Res Clin.* 2018;30:233236.
26. Hikage M, Kamei T, Nakano T, et al. Impact of routine recurrent laryngeal nerve monitoring in prone esophagectomy with mediastinal lymph node dissection. *Surg Endosc.* Jul 2017; 31(7): 2986-2996. PMID 27826777
27. Zhong D, Zhou Y, Li Y, et al. Intraoperative recurrent laryngeal nerve monitoring: a useful method for patients with esophageal cancer. *Dis Esophagus.* Jul 2014; 27(5): 444-51. PMID 23020300
28. Kneist W, Kauff DW, Juhre V, et al. Is intraoperative neuromonitoring associated with better functional outcome in patients undergoing open TME? Results of a case-control study. *Eur J Surg Oncol.* Sep 2013; 39(9): 994-9. PMID 23810330
29. Kneist W, Kauff DW, Rubenwolf P, et al. Intraoperative monitoring of bladder and internal anal sphincter innervation: a predictor of erectile function following low anterior rectal resection for rectal cancer? Results of a prospective clinical study. *Dig Surg.* 2013; 30(4-6): 459-65. PMID 24481247

30. Clarkson JHW, Ozyurekoglu T, Mujadzic M, et al. An evaluation of the information gained from the use of intraoperative nerve recording in the management of suspected brachial plexus root avulsion. *Plast Reconstr Surg.* Mar 2011; 127(3): 1237-1243. PMID 21364425
31. Zhang W, Chen M, Zhang W, et al. Use of electrophysiological monitoring in selective rhizotomy treating glossopharyngeal neuralgia. *J Craniomaxillofac Surg.* Jul 2014; 42(5): e182-5. PMID 24095216
32. Ochs BC, Herzka A, Yaylali I. Intraoperative neurophysiological monitoring of somatosensory evoked potentials during hip arthroscopy surgery. *Neurodiagn J.* Dec 2012; 52(4): 312-9. PMID 23301281
33. Jahangiri FR. Multimodality neurophysiological monitoring during tibial/fibular osteotomies for preventing peripheral nerve injuries. *Neurodiagn J.* Jun 2013; 53(2): 153-68. PMID 23833842
34. Nagda SH, Rogers KJ, Sestokas AK, et al. Neer Award 2005: Peripheral nerve function during shoulder arthroplasty using intraoperative nerve monitoring. *J Shoulder Elbow Surg.* 2007; 16(3 Suppl): S2-8. PMID 17493556
35. Reddy RP, Chang R, Coutinho DV, et al. Triggered Electromyography is a Useful Intraoperative Adjunct to Predict Postoperative Neurological Deficit Following Lumbar Pedicle Screw Instrumentation. *Global Spine J.* Jun 2022; 12(5): 1003-1011. PMID 34013769
36. Thirumala PD, Crammond DJ, Loke YK, et al. Diagnostic accuracy of motor evoked potentials to detect neurological deficit during idiopathic scoliosis correction: a systematic review. *J Neurosurg Spine.* Mar 2017; 26(3): 374-383. PMID 27935448
37. Alemo S, Sayadipour A. Role of intraoperative neurophysiologic monitoring in lumbosacral spine fusion and instrumentation: a retrospective study. *World Neurosurg.* Jan 2010; 73(1): 72-6; discussion e7. PMID 20452872
38. Bindal RK, Ghosh S. Intraoperative electromyography monitoring in minimally invasive transforaminal lumbar interbody fusion. *J Neurosurg Spine.* Feb 2007; 6(2): 126-32. PMID 17330579
39. Bose B, Wierzbowski LR, Sestokas AK. Neurophysiologic monitoring of spinal nerve root function during instrumented posterior lumbar spine surgery. *Spine (Phila Pa 1976).* Jul 01 2002; 27(13): 1444-50. PMID 12131744
40. Clements DH, Morledge DE, Martin WH, et al. Evoked and spontaneous electromyography to evaluate lumbosacral pedicle screw placement. *Spine (Phila Pa 1976).* Mar 01 1996; 21(5): 600-4. PMID 8852316
41. Darden BV, Wood KE, Hatley MK, et al. Evaluation of pedicle screw insertion monitored by intraoperative evoked electromyography. *J Spinal Disord.* Feb 1996; 9(1): 8-16. PMID 8727451
42. Luo W, Zhang F, Liu T, et al. Minimally invasive transforaminal lumbar interbody fusion aided with computer-assisted spinal navigation system combined with electromyography monitoring. *Chin Med J (Engl).* Nov 2012; 125(22): 3947-51. PMID 23158122
43. Maguire J, Wallace S, Madiga R, et al. Evaluation of intrapedicular screw position using intraoperative evoked electromyography. *Spine (Phila Pa 1976).* May 01 1995; 20(9): 1068-74. PMID 7631237
44. Papadopoulos EC, Girardi FP, Sama A, et al. Accuracy of single-time, multilevel registration in image-guided spinal surgery. *Spine J.* 2005; 5(3): 263-7; discussion 268. PMID 15863081
45. Sutter MA, Eggspuehler A, Grob D, et al. Multimodal intraoperative monitoring (MIOM) during 409 lumbosacral surgical procedures in 409 patients. *Eur Spine J.* Nov 2007; 16 Suppl 2(Suppl 2): S221-8. PMID 17912559
46. Welch WC, Rose RD, Balzer JR, et al. Evaluation with evoked and spontaneous electromyography during lumbar instrumentation: a prospective study. *J Neurosurg.* Sep 1997; 87(3): 397-402. PMID 9285605
47. Wood MJ, Mannion RJ. Improving accuracy and reducing radiation exposure in minimally invasive lumbar interbody fusion. *J Neurosurg Spine.* May 2010; 12(5): 533-9. PMID 20433301
48. Wood MJ, McMillen J. The surgical learning curve and accuracy of minimally invasive lumbar pedicle screw placement using CT based computer-assisted navigation plus continuous electromyography monitoring - a retrospective review of 627 screws in 150 patients. *Int J Spine Surg.* 2014; 8. PMID 25694919
49. Melachuri SR, Melachuri MK, Anetakis K, et al. Diagnostic Accuracy of Thresholds Less Than or Equal to 8mA in Pedicle Screw Testing During Lumbar Spine Procedures to Predict New Postoperative Lower Extremity Neurological Deficits. *Spine (Phila Pa 1976).* Jan 15 2021; 46(2): E139-E145. PMID 33347093

50. Accadbled F, Henry P, de Gauzy JS, et al. Spinal cord monitoring in scoliosis surgery using an epidural electrode. Results of a prospective, consecutive series of 191 cases. *Spine (Phila Pa 1976)*. Oct 15 2006; 31(22): 2614-23. PMID 17047554
51. Eggspuehler A, Sutter MA, Grob D, et al. Multimodal intraoperative monitoring during surgery of spinal deformities in 217 patients. *Eur Spine J*. Nov 2007; 16 Suppl 2(Suppl 2): S188-96. PMID 17632737
52. El-Hawary R, Sucato DJ, Sparagana S, et al. Spinal cord monitoring in patients with spinal deformity and neural axis abnormalities: a comparison with adolescent idiopathic scoliosis patients. *Spine (Phila Pa 1976)*. Sep 01 2006; 31(19): E698-706. PMID 16946643
53. Feng B, Qiu G, Shen J, et al. Impact of multimodal intraoperative monitoring during surgery for spine deformity and potential risk factors for neurological monitoring changes. *J Spinal Disord Tech*. Jun 2012; 25(4): E108-14. PMID 22367467
54. Kundnani VK, Zhu L, Tak H, et al. Multimodal intraoperative neuromonitoring in corrective surgery for adolescent idiopathic scoliosis: Evaluation of 354 consecutive cases. *Indian J Orthop*. Jan 2010; 44(1): 64-72. PMID 20165679
55. Lo YL, Dan YF, Teo A, et al. The value of bilateral ipsilateral and contralateral motor evoked potential monitoring in scoliosis surgery. *Eur Spine J*. Sep 2008; 17 Suppl 2(Suppl 2): S236-8. PMID 17874145
56. Luk KD, Hu Y, Wong YW, et al. Evaluation of various evoked potential techniques for spinal cord monitoring during scoliosis surgery. *Spine (Phila Pa 1976)*. Aug 15 2001; 26(16): 1772-7. PMID 11493849
57. Macdonald DB, Al Zayed Z, Al Saddigi A. Four-limb muscle motor evoked potential and optimized somatosensory evoked potential monitoring with decussation assessment: results in 206 thoracolumbar spine surgeries. *Eur Spine J*. Nov 2007; 16 Suppl 2(Suppl 2): S171-87. PMID 17638028
58. Noonan KJ, Walker T, Feinberg JR, et al. Factors related to false- versus true-positive neuromonitoring changes in adolescent idiopathic scoliosis surgery. *Spine (Phila Pa 1976)*. Apr 15 2002; 27(8): 825-30. PMID 11935104
59. Pastorelli F, Di Silvestre M, Plasmati R, et al. The prevention of neural complications in the surgical treatment of scoliosis: the role of the neurophysiological intraoperative monitoring. *Eur Spine J*. May 2011; 20 Suppl 1(Suppl 1): S105-14. PMID 21416379
60. Péréon Y, Bernard JM, Fayet G, et al. Usefulness of neurogenic motor evoked potentials for spinal cord monitoring: findings in 112 consecutive patients undergoing surgery for spinal deformity. *Electroencephalogr Clin Neurophysiol*. Jan 1998; 108(1): 17-23. PMID 9474058
61. Schwartz DM, Auerbach JD, Dormans JP, et al. Neurophysiological detection of impending spinal cord injury during scoliosis surgery. *J Bone Joint Surg Am*. Nov 2007; 89(11): 2440-9. PMID 17974887
62. Tsirikos AI, Duckworth AD, Henderson LE, et al. Multimodal Intraoperative Spinal Cord Monitoring during Spinal Deformity Surgery: Efficacy, Diagnostic Characteristics, and Algorithm Development. *Med Princ Pract*. 2020; 29(1): 6-17. PMID 31158841
63. American Academy of Neurology. Model Coverage Policy: Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing. 2012; https://www.aan.com/siteassets/home-page/tools-and-resources/practicing-neurologist--administrators/billing-and-coding/model-coverage-policies/16iommodelpolicy_tr.pdf. Accessed March 1, 2024.
64. American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS). Joint Section on Disorders of the Spine and Peripheral Nerves updated position statement: intraoperative electrophysiological monitoring. January 2018. <https://spinesection.org/about/position-statements/interoperative-electrophysiological-monitoring/>. Accessed March 2, 2024.
65. Sharan A, Groff MW, Dailey AT, et al. Guideline update for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 15: electrophysiological monitoring and lumbar fusion. *J Neurosurg Spine*. Jul 2014; 21(1): 102-5. PMID 24980592
66. American Clinical Neurophysiology Society. Guideline 11A: Recommended Standards for Neurophysiologic Intraoperative Monitoring Principles. 2009; <https://www.acns.org/pdf/guidelines/Guideline-11A.pdf>. Accessed March 3, 2024.
67. Diercks GR, Rastatter JC, Kazahaya K, et al. Pediatric intraoperative nerve monitoring during thyroid surgery: A review from the American Head and Neck Society Endocrine Surgery Section and the

International Neural Monitoring Study Group. *Head Neck*. Jun 2022; 44(6): 1468-1480. PMID 35261110

68. Macdonald DB, Skinner S, Shils J, et al. Intraoperative motor evoked potential monitoring - a position statement by the American Society of Neurophysiological Monitoring. *Clin Neurophysiol*. Dec 2013; 124(12): 2291-316. PMID 24055297
69. Halsey MF, Myung KS, Ghag A, et al. Neurophysiological monitoring of spinal cord function during spinal deformity surgery: 2020 SRS neuromonitoring information statement. *Spine Deform*. Aug 2020; 8(4): 591-596. PMID 32451978
70. National Institute for Health and Care Excellence (NICE). Intraoperative nerve monitoring during thyroid surgery [IPG255]. 2008; <https://www.nice.org.uk/guidance/ipg255/chapter/1-guidance>. Accessed March 1, 2024.
71. Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) for Electroencephalographic Monitoring During Surgical Procedures Involving the Cerebral Vasculature (160.8). 2006; <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=77&ncdver=2&CoverageSelection=National&Keyword=monitoring&KeywordLookUp=Title&KeywordLookUp=Title&KeywordLookUp=Title&KeywordSearchType=And&KeywordSearchType=And&KeywordSearchType=And&bc=gAAAACAAAA&>. Accessed March 2, 2024.
72. Centers for Medicare & Medicaid Services. Billing Medicare for Remote Intraoperative Neurophysiology Monitoring in CY 2013. Updated September 2020; <https://www.cms.gov/medicare/medicare-fee-for-service-payment/physicianfeesched/downloads/faq-remote-ionm.pdf>. Accessed March 1, 2024.

Endnotes

¹ Based on expert opinion