Cigna Medical Coverage Policy

Subject **Somatosensory Evoked Potentials**

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Nerve Conduction Velocity Studies and Electromyography

Coverage Policy

Cigna covers somatosensory evoked potentials (SSEPs) as medically necessary when prior diagnostic testing has failed to confirm a diagnosis for ANY of the following:

- coma
- myoclonus
- multiple sclerosis and other demyelinating diseases (e.g., adrenoleukodystrophy, adrenomyeloneuropathy, metachromatic leukodystrophy, and Pelizaeus-Merzbacher disease)
- spinocerebellar degeneration
- spinal cord trauma
- subacute combined degeneration of the spinal cord (e.g., Lichtheim disease)
- degenerative nontraumatic spinal cord lesions (e.g., cervical spondylotic myelopathy)
- syringomyelia
- hereditary spastic paraplegia

Cigna does not cover SSEPs for ANY other indication, including the evaluation of disorders of the lumbosacral roots, such as radiculopathies, thoracic root disorders, or cervical root disorders because it is considered experimental, investigational or unproven for these indications.

Cigna covers intraoperative monitoring (IOM) of somatosensory evoked potentials (SSEPs) as medically necessary when ALL of the following conditions are met:

- There is significant risk of nerve or spinal cord injury during a surgical procedure, such as the following (this list may not be all inclusive):

- aortic and thoracic aneurysm repair
- aortic cross-clamping
- arteriovenous malformation of the of the spinal cord
- brachial plexus surgery/brachial plexus exploration after injury to the brachial plexus
- cerebral vascular surgery (e.g., carotid endarterectomy, cerebral aneurysm, hypothermic coronary bypass procedures)
- clipping of intracranial aneurysms
- cortical localization
- interventional neuroradiology
- pelvic fractures
- release of a tethered cord
- repair of coarctation of the aorta
- resection of fourth ventricular cyst
- resection of intracranial vascular lesions involving the sensory cortex
- resection of spinal cord tumor, cyst, or vascular lesion
- scoliosis correction with instrumentation
- spinal angiography procedures
- cervical and thoraco-lumbar spinal cord surgery (e.g., anterior and posterior cervical spinal fusions)
- surgical stabilization of spine fractures with or without spinal cord decompression
- stereotactic surgery of the brain or brain stem, thalamus, and cerebral cortex
- thalamus tumor resection / thalamotomy
- thyroid surgery

- IOM is performed by either a licensed physician trained in clinical neurophysiology (e.g., neurologist, physiatrist) or a trained technologist who is practicing within the scope of his/her license/certification as defined by state law or appropriate authorities and is working under the direct supervision of a physician trained in neurophysiology, and is not the operating surgeon or anesthesiologist.
- IOM is interpreted by a licensed physician trained in clinical neurophysiology, other than the operating surgeon or anesthesiologist, who is either physically in attendance in the operating suite or present by means of a real-time remote mechanism for all electroneurodiagnostic (END) monitoring situations and is immediately available to interpret the recording and advise the surgeon.
- Monitoring is conducted and interpreted real-time (either on-site or at a remote location) and continuously communicated to the surgical team.

Cigna does not cover intraoperative monitoring (IOM) of SSEPs for ANY other indication, including during lumbar surgery performed below L1/L2 because it is considered not medically necessary.

General Background

Somatosensory evoked potentials (SSEPs) are noninvasive studies performed by repetitive, submaximal, electrical stimulation of a sensory or mixed sensorimotor peripheral nerve used to aid in the determination of a diagnosis. SSEPs are also used in the intraoperative setting to determine nerve pathway integrity for neurosurgical, orthopedic and vascular procedures that may result in nerve injury. During intraoperative monitoring, needle electrodes are used since they require smaller currents and reduce the stimulus artifact.

The evoked potential response depends on the functional integrity of the nerve that is stimulated. SSEPs are an extension of the electrodiagnostic evaluation and are used to evaluate nerves that cannot be studied by conventional nerve conduction studies, including electromyography. An abnormal SSEP points to a problem in the nerve conduction mechanism that carries the impulse to the brain, however, the SSEP abnormality is not disease specific—an abnormal SSEP indicates impairments associated with certain disorders. An abnormal SSEP signifies an impaired pathway, helps to localize it, and provides a prognostic guide. The SSEP does not provide any indication about the nature of the underlying pathological processes. Although evoked potentials offer additional information regarding function that can be clinically useful, magnetic resonance imaging (MRI) is often the preferred test to determine structural abnormalities and provides more specific information regarding neurologic structures.

SSEPs are altered by impairment of the somatosensory pathway which may occur as a result of both diffuse (e.g., diseases of myelin, hereditary system degenerations, coma) or local disorders (e.g., tumors, vascular lesions). SSEP abnormalities can be detected in a variety of different settings; therefore, the electrophysiologic findings should be interpreted in the clinical context in which they are obtained (e.g., assessing functional integrity, diagnostic purposes, determining the course of neurological disorders, determining pathological involvement). SSEPS are helpful in evaluating ill-defined complaints. A physician assesses the patient and determines a preliminary differential diagnosis; SSEP testing may then be performed by a trained technologist under the direct supervision of a trained electrodiagnostic physician. Direct supervision implies that a physician is in close proximity to the patient undergoing testing, is immediately available to provide the trained technician with assistance and direction if necessary, and is responsible for determining the SSEP studies that are appropriate.

Evoked potentials are used to assist in diagnosing ill-defined neurological conditions and to categorize afferent pathways that may be responsible for the resulting symptoms experienced by the patient. Conditions for which SSEPS offer clinical utility include (American Association of Neuromuscular and Electrodiagnostic Medicine [AANEM], 2004):

- spinal cord trauma
- subacute combined degeneration
- non traumatic spinal cord lesions (e.g., cervical spondylosis)
- multiple sclerosis
- spinocerebellar degeneration
- myoclonus
- coma

In addition, SSEPs are also useful to evaluate spinal compression associated with syringomyelia and for assessment of hereditary spastic paraplegia (AANEM, 1999).

SSEPs have been utilized to evaluate other peripheral nerve disorders such as acute inflammatory demyelinating polyradiculoneuropathy and focal neuropathies (e.g., entrapment neuropathies, carpal tunnel syndrome, lateral femoral cutaneous neuropathy, medial and lateral plantar neuropathy, saphenous neuropathy, intercostals neuropathy, trigeminal neuropathy, plexopathy) in addition to nerve root dysfunction (i.e., lumbosacral root [acute radiculopathies], thoracic root, cervical root). However, the diagnostic utility of SSEPs for these conditions remains controversial (AANEM, 1999). The AANEM reported that the available evidence is not convincing that SSEPs for these indications provide information that cannot be obtained with conventional nerve conduction studies or needle electromyography.

SSEPS are rarely used to assess peripheral neuropathy as standard nerve conduction velocity studies are the preferred test.

There are no data to suggest a role for SSEPs in the evaluation of behavioral health disorders. The usefulness of evoked potential testing in psychiatry, including SSEPs, is still under investigation (Guse and Love, 2005).

Recordings of SSEP can be normal even in patients with extreme sensory deficits due to the presence of multiple parallel, afferent somatosensory pathways. This procedure is often performed to investigate patients with multiple sclerosis (MS); various coma states, such as those from post-traumatic injury or post-anoxia; suspected brain death; and to indicate the extensiveness of lesion damage in spinal cord injuries. The return or presence of a cortically-generated response to stimulation of a nerve below the injured portion of the cord indicates an incomplete lesion and therefore may offer a better prognosis.

SSEP testing is typically performed bilaterally. Depending on the clinical situation being investigated, several nerves in one extremity may have to be tested and compared with the opposite limb. The physician’s SSEP report should indicate which nerves were tested, latencies at various testing points and an evaluation of whether the results were normal or abnormal.

Sensitivity and specificity reports for electrodiagnostic testing methods (in general) vary. A clearly established measure of comparison is lacking in the medical literature, making comparisons across studies difficult. Some studies have compared results with clinical examination findings, imaging studies such as magnetic resonance imaging, computed tomography, myelography, or the observation of nerve root compression during surgery. Interobserver differences, the variety of tests employed, the presence of symptoms that may influence patient outcomes (e.g., pain), the presence of abnormal imaging studies in asymptomatic patients, and the subjectivity of the surgeon's interpretations may all lead to variances in sensitivity and specificity results. Despite these variances however, electrodiagnostic testing is commonly used to assist in diagnosing disorders involving the nerves, muscles and neuromuscular junction.

Intraoperative Monitoring
Intraoperative monitoring is commonly performed during high-risk complex surgeries where resultant damage to the brain and/or spinal cord may occur. The goal is to improve patient safety by identifying the impairment early so permanent deficits do not result in injuries to the CNS pathways, subsequently improving surgical outcomes.

SSEP is a standard test for intraoperative monitoring; however, motor evoked potentials (MEPs) are also used to monitor motor neurophysiological pathways in addition to electromyography (EMG), also referred to as multimodal intraoperative monitoring (MIOM). SSEP and EMG monitoring combined allows for an intraoperative evaluation that is both sensitive to damage and specific with regards to predicting outcome. SSEPs have low sensitivity to predict damage but high specificity whereas EMG has high sensitivity to nerve root function but low specificity in terms of predicting a persistent neurological deficit (Gunnarsson, et al., 2004).

The performance of intraoperative monitoring reflects only the time spent during ongoing concurrent real time electrophysiologic monitoring. While baseline studies are performed immediately prior to the proposed surgery, intraoperative monitoring services do not include the time spent in activities performing or interpreting baseline studies.

The AANEM and the AAN published guidance for intraoperative monitoring. According to a position statement by the AANEM (2008) regarding the role of the intraoperative monitoring team, during intraoperative monitoring baseline tracings should be obtained prior to the surgical intervention. Monitoring should continue until closing of the surgical procedure, but may be terminated earlier upon discretion of the surgeon. A logbook should be completed for each patient and include the time of the procedure, the time of each surgical manipulation of the central or peripheral nervous system, and the name, dose and times of anesthetics administered which may affect the central or peripheral nervous system or muscle.

The intraoperative monitoring team should consist of surgeons who have a fundamental background in neurophysiology, a monitoring team with a fundamental background in intraoperative monitoring, and anesthesiologists. In addition, according to the AANEM (2008), the IOM team must include a trained clinical neurophysiologist (MD or DO).

Monitoring must be performed by qualified personnel acting within the scope of his/her license/certification as defined by state law or appropriate authorities. According to a guideline by the AAN (2008), it is expected that a specifically trained technologist or non-physician monitorist, preferably with credentials from the American Board of Neurophysiologic Monitoring or the American Board of Registration of Electrodiagnostic Technologists (ABRET), will be in continuous attendance in the operating room, with either the physical or electronic capacity for real-time communication with the supervising physician. Although credentialing varies among professional organizations, the AANEM and AAN both provide guidance that the monitoring technologist should be under the direct supervision of a clinical neurophysiologist (AAN, 2008; AANEM, 2008).

Typically the physician acts as a remote backup, with the actual intra-operative monitoring being performed in the operating room by a technologist. Some operating rooms have a central physician monitoring room, where a physician may simultaneously monitor cases. The number of procedures being monitored by the clinical neurophysiologist physician is determined by the nature of the surgical procedure. However, according to the AAN (2008) monitoring more than three cases simultaneously is not recommended. The severity of the case being monitored may determine the location of the neurophysiologist; they may be located in the operating room, in the same building, monitoring real-time recordings from a remote location, or at a location from which the operating room is accessible within minutes to view the recording procedure.

When performing intraoperative monitoring, the electroneurodiagnostic technologist should monitor only one surgical procedure at a time; multiple monitoring could result in restricted surgical efficiency, prolonged anesthesia, and possible compromise of judgment (American Society of Electroneurodiagnostic Technologists' [ASET], 2005).

Real-time monitoring allows for timely intervention to prevent risk of damage. Consequently, it is imperative that either the physical (on-site) or electronic capacity (off-site, remote location) for real-time communication exists between the monitoring team and surgeon.

Indications: Despite varying indications in the published literature and from professional societies, there appears to be consensus that determining the need for intraoperative monitoring of SSEPs is dependent upon the complexity of the surgery and the risk of potential damage to neural structures. In general, monitoring of SSEPs is used most often in patients undergoing surgical procedures involving the spinal column and/or spinal cord, and orthopedic, vascular, or other neurological surgery when there is risk of nerve or spinal cord injury. The spinal cord ends between L1 and L2. Because of the risk for damage to the spinal cord SSEP (and MEP) may be monitored with spine surgery cephalad to the termination of the cord (Jameson, et al., 2007). Surgery where SSEP monitoring has been recommended includes the following (American Society of Neurophysiological Monitoring [ASNM], 2005, updated 2010; Mahla, et al., 2005; Aminoff, 2003; Linden, et al., 1997):

- aortic and thoracic aneurysm repair
- aortic cross-clamping
- arteriovenous malformation of the spinal cord
- brachial plexus surgery/ brachial plexus exploration after injury to the brachial plexus
- brain (e.g., craniotomy for tumor removal, craniotomy for aneurysm repair, carotid endarterectomy, and localization of cortex during craniotomy)
- cerebrovascular surgery
- clipping of intracranial aneurysms
- interventional neuroradiology
- assessment of nerve root function (e.g., cauda equina tumor removal, release of tethered cord, spina bifida)
- pelvic fracture surgery
- peripheral nerve and plexus (e.g., peripheral nerve repair, position-related ulnar nerve and brachial plexus dysfunction, avoidance of neuropraxia during shoulder arthroscopy, and protection of sciatic nerve function during hip surgery)
- repair of coarctation of the aorta
- resection of fourth ventricular cyst
- resection of intracranial vascular lesions involving the sensory cortex
- resection of spinal cord tumor, cyst, or vascular lesion
- resection of thalamic tumor
- scoliosis correction with instrumentation
- spinal cord decompression and stabilization after acute spinal cord injury
- spinal cord, including cervical, and thoraco-lumbar (e.g., anterior and posterior cervical spinal fusions, scoliosis/kyphosis correction, abdominal aortic aneurysm, removal of spinal cord tumor, spinal fracture repair, and arteriovenous malformation repair)
- correction of surgical spondylosis
- stereotactic surgery of the brain stem, thalamus, and cerebral cortex
- surgical correction after spine fractures
- thalamotomy
- thalamus and brain stem (e.g., craniotomy for removal of C-P angle tumor, thalamotomy)
- thyroid surgery

Regarding spine surgery specifically, IOM is indicated in select spine surgeries when there is risk for additional spinal cord injury. Intraoperative monitoring of SSEPs has not been shown to be of clinical benefit for routine lumbar or cervical nerve root decompression (AANEM, 2004), routine lumbar or cervical laminectomy or fusion (AANEM, 1999a). Resnick et al. (2005) reported in guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine that based on the medical literature reviewed by the authors there does not appear to be support for the hypothesis that any form of intraoperative monitoring improves patient outcomes following lumbar decompression or fusion procedures for degenerative spinal disease. Changes to DSEP and SSEP monitoring appear to be sensitive to nerve root injury, however there is a high false-positive rate; changes are frequently not related to nerve injury. In 2014 an update to the 2005 guideline was published (Sharan, et al., 2014). The authors again reviewed the literature to determine if the use of IOM during lumbar or lumbosacral fusion was able to prevent nerve root injury and influence patient outcomes. Based on the results of their review, which included three new publications evaluating IOM of lumbar surgery since the 2005 review by Resnick et al., there is no evidence to support IOM during lumbar fusion impacts surgical outcomes (Sharan, et al., 2014). The evidence suggesting a correlation between SSEP signals and nerve root injury during lumbar surgery was graded as low quality; however the authors found no evidence to support intraoperative maneuvers lead to recovery of nerve function once a change occurred (Sharan, et al., 2014).

Some authors suggest multimodal IOM is more effective. Despite normal intraoperative SSEPs significant motor deficits have been seen in patients undergoing spinal surgery, consequently MEPs are used to assess motor pathways. MEPS in combination with SSEPs appear to improve the accuracy of spinal cord monitoring (Liem, 2010).

U.S. Food and Drug Administration (FDA): SSEP devices are evoked stimulator electrical devices used to apply an electrical stimulus through use of skin electrodes, to measure evoked potentials. Several evoked stimulator electrical devices have been approved by the FDA. Evoked response electrical stimulators are regulated by the FDA as Class II devices and are approved through the 510(k) process.

Use Outside of US: No relevant information found.

Summary
The published scientific literature demonstrates somatosensory evoked potential (SSEP) studies are useful when used to aid in the diagnosis of various neuromuscular disorders and have varying degrees of sensitivity and specificity. For many conditions, magnetic resonance imaging provides more specific information regarding structural abnormalities and is the preferred test. Evoked potential testing may be clinically useful when diagnostic tests such as MRI do not confirm a diagnosis. Intraoperative monitoring of SSEP is often performed during spinal, orthopedic, vascular, or other neurological surgery when spine or brain function is at risk. Intraoperative monitoring is used to ensure maintenance of neurologic integrity, for the early detection of injury to the sensory pathway and adjacent structures with resulting improved outcomes and decreased morbidity. It is the recommendation of the American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM) that electrodiagnostic testing/consultations, including those performed intraoperatively, are conducted by physicians who have a comprehensive knowledge of neurological and neuromusculoskeletal diseases, and in the application of neurophysiologic techniques for evaluation of those disorders.

Coding/Billing Information

Note: 1) This list of codes may not be all-inclusive.
2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement
3) ICD-10-CM Diagnosis Codes are for informational purposes only and are not effective until 10/01/2015.

Covered when medically necessary:

CPT®* Codes	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

ICD-9-CM Diagnosis Codes	Description
192.2	Malignant neoplasm of other and unspecified parts of nervous system, spinal cord
198.3	Secondary malignant neoplasm of brain and spinal cord
225.3	Benign neoplasm of brain and other parts of nervous system, spinal cord
237.5	Neoplasm of uncertain behavior of brain and spinal cord
277.86	Peroxisomal disorders
330.0	Leukodystrophy
333.2	Myoclonus
334.0 – 334.9	Spinocerebellar disease
336.0	Syringomyelia and syringobulbia
336.2	Subacute combined degeneration of spinal cord in diseases classified elsewhere
336.9	Unspecified disease of spinal cord
340	Multiple sclerosis
341.0 – 341.9	Other demyelinating diseases of central nervous system
344.1	Paraplegia
721.1	Cervical spondylosis with myelopathy
721.41	Thoracic spondylosis with myelopathy
721.42	Lumbar spondylosis with myelopathy
722.71	Interverterbal disc disorder with myelopathy, cervical
723.0	Spinal stenosis in cervical region
724.01	Spinal stenosis in thoracic region
724.03	Spinal stenosis of lumbar region with neurogenic claudication
742.59	Other specified anomalies of spinal cord, other
767.4	Birth trauma, injury to spine and spinal cord
780.01	Alteration of consciousness, coma
806.00 – 806.09	Fracture of vertebral column with spinal cord injury, cervical, closed
806.10-806.19	Fracture of vertebral column with spinal cord injury, cervical, open
806.20 – 806.29	Fracture of vertebral column with spinal cord injury, dorsal (thoracic), closed
806.30-806.39	Fracture of vertebral column with spinal cord injury, dorsal (thoracic), open
806.4	Fracture of vertebral column with spinal cord injury, lumbar closed
806.5	Fracture of vertebral column with spinal cord injury, lumbar, open
806.60-806.69	Fracture of vertebral column with spinal cord injury, sacrum and coccyx, closed
806.70-806.79	Fracture of vertebral column with spinal cord injury, sacrum and coccyx, open
806.8	Fracture of vertebral column with spinal cord injury, unspecified, closed
806.9	Fracture of vertebral column with spinal cord injury, unspecified , open
952.00-952.9	Spinal cord injury without evidence of spinal bone injury

ICD-10-CM Diagnosis	Description

Codes (Effective 10/01/2015)	
C72.0	Malignant neoplasm of spinal cord
C72.1	Malignant neoplasm of cauda equina
C79.31	Secondary malignant neoplasm of brain
C79.49	Secondary malignant neoplasm of other parts of nervous system
D33.4	Benign neoplasm of spinal cord
D43.0-D43.2	Neoplasm of uncertain behavior of brain
D43.4	Neoplasm of uncertain behavior of spinal cord
E03.5	Myxedema coma
E71.50-E71.548	Peroxisomal disorders
E75.23	Krabbe disease
E75.25	Metachromatic leukodystrophy
E75.29	Other sphingolipidosis
G04.1	Tropical spastic paraplegia
G11.0-G11.9	Hereditary ataxia
G25.3	Myoclonus
G32.0	Subacute combined degeneration of spinal cord in diseases classified elsewhere
G32.81	Cerebellar ataxia in diseases classified elsewhere
G35	Multiple sclerosis
G36.0-G36.9	Other acute disseminated demyelination
G37.0-G37.9	Other demyelinating diseases of the central nervous system
G82.20-G82.22	Paraplegia
G95.0	Syringomyelia and syringobulbia
G95.20-G95.29	Other and unspecified cord compression
G95.9	Disease of spinal cord, unspecified
M47.011-M47.019	Anterior spinal artery compression syndromes
M47.021-M47.029	Vertebral artery compression syndromes
M47.11-M47.18	Other spondylosis with myelopathy
M48.01	Spinal stenosis, occipito-atlanto-axial region
M48.02	Spinal stenosis, cervical region
M48.03	Spinal stenosis, cervicothoracic region
M48.04	Spinal stenosis, thoracic region
M48.05	Spinal stenosis, thoracolumbar region
M48.06	Spinal stenosis, lumbar region
M50.00-M50.03	Cervical disc disorder with myelopathy
M99.20	Subluxation stenosis of neural canal of head region
M99.21	Subluxation stenosis of neural canal of cervical region
M99.22	Subluxation stenosis of neural canal of thoracic region
M99.30	Osseous stenosis of neural canal of head region
M99.31	Osseous stenosis of neural canal of cervical region

M99.32	Osseous stenosis of neural canal of thoracic region
M99.40	Connective tissue stenosis of neural canal of head region
M99.41	Connective tissue stenosis of neural canal of cervical region
M99.42	Connective tissue stenosis of neural canal of thoracic region
M99.50	Intervertebral disc stenosis of neural canal of head region
M99.51	Intervertebral disc stenosis of neural canal of cervical region
M99.52	Intervertebral disc stenosis of neural canal of thoracic region
M99.60	Osseous and subluxation stenosis of intervertebral foramina of head region
M99.61	Osseous and subluxation stenosis of intervertebral foramina of cervical region
M99.62	Osseous and subluxation stenosis of intervertebral foramina of thoracic region
M99.70	Connective tissue and disc stenosis of intervertebral foramina of head region
M99.71	Connective tissue and disc stenosis of intervertebral foramina of cervical region
M99.72	Connective tissue and disc stenosis of intervertebral foramina of thoracic region
P11.5	Birth injury to spine and spinal cord
Q06.0	Amyelia
Q06.1	Hypoplasia and dysplasia of spinal cord
Q06.3	Other congenital cauda equina malformations
Q06.8	Other specified congenital malformations of spinal cord
Q06.9	Congenital malformation of spinal cord, unspecified
R40.20	Unspecified coma
R40.2110-R40.2114	Coma scale, eyes open never
R40.2120-R40.2124	Coma scale, eyes open, to pain
R40.2130-R40.2134	Coma scale, eyes open, to sound
R40.2140-R40.2144	Coma scale, eyes open, spontaneous
R40.2210-R40.2214	Coma scale, best verbal response, none
R40.2220-R40.2224	Coma scale, best verbal response, incomprehensible words
R40.2230-R40.2234	Coma scale, best verbal response, inappropriate words
R40.2240-R40.2244	Coma scale, best verbal response, confused conversation
R40.2310-R40.2314	Coma scale, best motor response, none
R40.2320-R40.2324	Coma scale, best motor response, extension
R40.2330-R40.2334	Coma scale, best motor response, abnormal
R40.2340-R40.2344	Coma scale, best motor response, flexion withdrawal
R40.2350-R40.2354	Coma scale, best motor response, localizes pain
R40.2360-R40.2364	Coma scale, best motor response, obeys commands
R40.242	Glasgow coma scale score 9-12
R40.243	Glasgow coma scale score 3-8
S14.0xxA-	Concussion and edema of cervical spinal cord

S14.0xxS	
S14.101A-S14.109S	Other and unspecified injury of cervical spinal cord
S14.111A-S14.119S	Complete lesion of cervical spinal cord
S14.121A-S14.129S	Central cord syndrome of cervical spinal cord
S14.131A-S14.139S	Anterior cord syndrome of cervical spinal cord
S14.141A-S14.149S	Brown-Sequard syndrome of cervical spinal cord
S14.151A-S14.159S	Other incomplete lesion of cervical spinal cord
S24.0xxA-S24.0xxS	Concussion and edema of thoracic spinal cord
S24.101A-S24.109S	Unspecified injury at level of thoracic spinal cord
S24.111A-S24.119S	Complete lesion at level of thoracic spinal cord
S24.131A-S24.139S	Anterior cord syndrome at level of thoracic spinal cord
S24.141A-S24.149S	Brown-Sequard syndrome at level of thoracic spinal cord
S24.151A-S24.159S	Other incomplete lesion at level of thoracic spinal cord
S34.01xA-S34.01xS	Concussion and edema of lumbar spinal cord
S34.02xA-S34.02xS	Concussion and edema of sacral spinal cord, initial encounter
S34.101A-S34.109S	Unspecified injury to lumbar spinal cord
S34.111A-S34.119S	Complete lesion of lumbar spinal cord
S34.121A-S34.129S	Incomplete lesion of lumbar spinal cord
S34.131A-S34.139S	Complete lesion of sacral spinal cord
S34.3xxA-S34.3xxS	Injury of cauda equina

<u>Intraoperative Monitoring of SSEPs</u>

Covered as medically necessary:

CPT®* Codes	**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)

HCPCS	**Description**

Codes	
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)

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