

Origination 9/12/2022

Last 7/25/2022

**Approved** 

Effective 9/12/2022

Last Revised 7/25/2022

Next Review 9/1/2022

# **Intraoperative Neurophysiological Testing**

# **PURPOSE:**

This policy is designed to discuss the medical necessity for Continuous intraoperative neurophysiology monitoring (IONM), both in the operating room, and from remote locations.

## **DEFINTIONS:**

**Intraoperative neurophysiological monitoring (IONM):** Helps to assess the integrity of neural structures and consciousness during surgical procedures. It includes both continuous monitoring of neural tissue as well as the localization of vital neural structures.

Somatosensory Evoked Potential (SSEP): SSEP monitors the dorsal column—medial lemniscus pathway, which mediates tactile discrimination, vibration, and proprioception. Stimulation of sensory receptors in the skin initiates peripheral sensory nerves, which extend through the nerve root to the ipsilateral dorsal root ganglia at spinal levels. The projections from these first-order neurons form fasciculi gracilis and cuneatus, which carry impulse from the lower and upper extremities, respectively. The first synapse occurs in the lower medulla, then the impulses cross over at the level of the brainstem and form medial lemniscus. The impulse then ascends to the contralateral thalamus and relay information to the primary sensory cortex in the parietal lobe. In the upper extremities, the median and ulnar nerve are monitored, whereas, in the lower extremities, the posterior tibial and peroneal nerve are monitored.

**Motor Evoked Potential (MEP):** MEP monitor motor pathways, transcranial electrical stimulation elicits excitation of corticospinal projections at multiple levels. Depending on the intensity of stimulation and the placement of electrode, motor evoked potentials are generated at different levels of the brain, including superficial white mater just underneath the motor cortex, the deep white matter of the internal capsule, and pyramidal decussation. The electrical potential is recorded at the spinal cord or muscles. MEP is generated and transported via the pyramidal tract.

Visual Evoked Potential (VEP): VEP measures the functional integrity of the optic pathways from the retina to the brain's visual cortex in response to light stimulus. Visual stimulus is converted into nerve signals in the retina. These signals are transmitted via the optic pathway to the brain, from the retina to the optic nerve, optic chiasma, optic tract, lateral geniculate body, optic radiation, and visual cortex occipital lobe.

**Brainstem Auditory Evoked Potential (BAEP):** BAEP monitors the function of the auditory nerve and auditory pathways in the brainstem. The auditory signal travels from the cochlear hair cell to the primary auditory cortex via the vestibulocochlear nerve, superior olivary complex, lateral lemniscus, inferior colliculus, and medial geniculate body.

**Electromyography (EMG):** EMG monitors somatic efferent nerve activity and evaluates the functional integrity of individual nerves. EMG monitors intracranial, spinal, and peripheral nerves during surgeries. Depolarization of a motor nerve produces electrical potential within the muscles innervated by that specific nerve, and the generated electrical activity is monitored using subdermal or intramuscular electrodes.

**Electroencephalography (EEG):** The electrical activity measured by EEG is generated by groups of pyramidal neurons, which has cell bodies in the 3rd and 5th layer of the cerebral cortex

### **PROCEDURE:**

- Intraoperative neurophysiological testing may be considered medically necessary in any of the following:
  - Surgery of the aortic arch, its branch vessels, or thoracic aorta, including carotid artery surgery, when there is risk of cerebral or spinal cord ischemia
  - · Resection of epileptogenic brain tissue or tumor
  - Resection of brain tissue close to the primary motor cortex which requires brain mapping
  - Resection of tumors involving cranial nerves
  - Protection of cranial nerves:
    - tumors that are optic, trigeminal, facial, auditory nerves
    - Cavernous sinus tumors
    - Microvascular decompression of cranial nerves
    - Oval or round window graft
    - Endolymphatic shunt for Meniere's disease
    - Skull base surgery in the vicinity of the cranial nerves
    - Vestibular section for vertigo
  - Surgeries involving the foramen magnum
  - Correction of scoliosis or deformity of spinal cord involving traction of the cord
  - Protection of spinal cord where work is performed in close proximity to cord as in the placement or removal of old hardware or where there have been numerous

interventions

- Spinal instrumentation requiring pedicle screws or distraction
- Decompressive procedures on the spinal cord or cauda equina carried out for myelopathy or claudication where function of spinal cord or spinal nerves is at risk
- Resection of:
  - Spinal cord tumors
  - Neuromas of peripheral nerves of brachial plexus, when there is risk to major sensory or motor nerves
- Surgery for:
  - Intracranial AV malformations
  - Arteriovenous malformation of spinal cord
  - Cerebral vascular aneurysms
  - Surgery for intractable movement disorders
- · Arteriography, during which there is a test occlusion of the carotid artery
- Circulatory arrest with hypothermia [does not include surgeries performed under circulatory bypass (e.g., CABG, ventricular aneurysms)]
- Distal aortic procedures, where there is risk of ischemia to spinal cord
- Leg lengthening procedures, where there is traction on the sciatic nerve or other nerve trunks
- Basal ganglia movement disorders
- Surgery as a result of traumatic injury to the spinal cord and/or brain
- Deep brain stimulation

### **Limitations of Coverage and Requirements**

This test must be ordered by the operating surgeon and the monitoring must be performed by a physician who is other than:

- · The operating surgeon
- · The technical/surgical assistant; or
- · The anesthesiologist rendering the anesthesia

The benefits of intraoperative neurophysiologic testing are attainable under optimal recording and interpreting conditions. The beneficial results of monitoring demonstrated by the 1995 multicenter study of this technique were realized under the following conditions in a hospital setting:

- A well trained, experienced technologist was present at the operating site recording and monitoring a single surgical case.
- A physician who is a trained clinical neurophysiologist (MD/DO) supervised the technologist.
- The surgical team and the monitoring staff were always in immediate contact.

Due to the nature of these services and the potential for significant morbidity in some procedures

requiring intraoperative monitoring, these services are considered reasonable and necessary in the inpatient setting only.

As the level of anesthesia may significantly impact the ability to interpret intraoperative studies, continuous communication between the anesthesiologist and the monitoring physician is expected when medically indicated.

**Note:** The Health Plan complies with all Medicare National Coverage Determinations (NCDs), applicable Local Coverage Determinations (LCDs), and WV Bureau for Medical Services guidelines for all therapies, items, services, and/or procedures that are covered benefits under Medicare. If the coverage criteria in this policy conflicts with any NCDs, relevant LCD, or WV BMS guidelines, the relevant document controls the application of services regardless of the version of the NCD, LCD, or WV BMS guidelines listed in the reference section.

## **CODING:**

#### **Covered 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)
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)

#### **Non-covered Code:**

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)

### **Diagnosis Codes:**

ICD-10 Code	Description
A18.01	Tuberculosis of spine
C41.2	Malignant neoplasm of vertebral column
C70.0	Malignant neoplasm of cerebral meninges
C70.1	Malignant neoplasm of spinal meninges
C72.0	Malignant neoplasm of spinal cord
C72.1	Malignant neoplasm of cauda equina

C72.21	Malignant neoplasm of right olfactory nerve
C72.22	Malignant neoplasm of left olfactory nerve
C72.31	Malignant neoplasm of right optic nerve
C72.32	Malignant neoplasm of left optic nerve
C72.41	Malignant neoplasm of right acoustic nerve
C72.42	Malignant neoplasm of left acoustic nerve
C72.50	Malignant neoplasm of unspecified cranial nerve
C72.59	Malignant neoplasm of other cranial nerves
C72.9	Malignant neoplasm of central nervous system, unspecified
C73	Malignant neoplasm of thyroid gland
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
D21.0	Benign neoplasm of connective and other soft tissue of head, face and neck
D32.0	Benign neoplasm of cerebral meninges
D32.1	Benign neoplasm of spinal meninges
D33.0	Benign neoplasm of brain, supratentorial
D33.1	Benign neoplasm of brain, infratentorial
D33.2	Benign neoplasm of brain, unspecified
D33.3	Benign neoplasm of cranial nerves
D33.4	Benign neoplasm of spinal cord
D33.7	Benign neoplasm of other specified parts of central nervous system
D33.9	Benign neoplasm of central nervous system, unspecified
D42.0	Neoplasm of uncertain behavior of cerebral meninges
D42.1	Neoplasm of uncertain behavior of spinal meninges
D42.9	Neoplasm of uncertain behavior of meninges, unspecified
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
D43.3	Neoplasm of uncertain behavior of cranial nerves
D43.4	Neoplasm of uncertain behavior of spinal cord
D43.8	Neoplasm of uncertain behavior of other specified parts of central nervous system

D44.3	Neoplasm of uncertain behavior of pituitary gland
D44.4	Neoplasm of uncertain behavior of craniopharyngeal duct
D44.5	Neoplasm of uncertain behavior of pineal gland
D44.6	Neoplasm of uncertain behavior of carotid body
D44.7	Neoplasm of uncertain behavior of aortic body and other paraganglia
D49.6	Neoplasm of unspecified behavior of brain
G06.1	Intraspinal abscess and granuloma
G40.011	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, with status epilepticus
G40.019	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, without status epilepticus
G40.111	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, with status epilepticus
G40.119	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, without status epilepticus
G40.211	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, with status epilepticus
G40.219	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, without status epilepticus
G45.0	Vertebro-basilar artery syndrome
G45.1	Carotid artery syndrome (hemispheric)
G45.2	Multiple and bilateral precerebral artery syndromes
G45.8	Other transient cerebral ischemic attacks and related syndromes
G45.9	Transient cerebral ischemic attack, unspecified
G46.0	Middle cerebral artery syndrome
G46.1	Anterior cerebral artery syndrome
G46.2	Posterior cerebral artery syndrome
G50.0	Trigeminal neuralgia
G50.1	Atypical facial pain
G52.9	Cranial nerve disorder, unspecified
G53	Cranial nerve disorders in diseases classified elsewhere
G54.0	Brachial plexus disorders
G54.1	Lumbosacral plexus disorders
G54.2	Cervical root disorders, not elsewhere classified

G54.3	Thoracic root disorders, not elsewhere classified
G54.4	Lumbosacral root disorders, not elsewhere classified
G56.11	Other lesions of median nerve, right upper limb
G56.12	Other lesions of median nerve, left upper limb
G56.13	Other lesions of median nerve, bilateral upper limbs
G56.21	Lesion of ulnar nerve, right upper limb
G56.22	Lesion of ulnar nerve, left upper limb
G56.23	Lesion of ulnar nerve, bilateral upper limbs
G56.31	Lesion of radial nerve, right upper limb
G56.32	Lesion of radial nerve, left upper limb
G56.33	Lesion of radial nerve, bilateral upper limbs
G57.01	Lesion of sciatic nerve, right lower limb
G57.02	Lesion of sciatic nerve, left lower limb
G57.03	Lesion of sciatic nerve, bilateral lower limbs
G80.4	Ataxic cerebral palsy
G80.8	Other cerebral palsy
G80.9	Cerebral palsy, unspecified
G93.5	Compression of brain
G95.0	Syringomyelia and syringobulbia
H71.01	Cholesteatoma of attic, right ear
H71.02	Cholesteatoma of attic, left ear
H71.03	Cholesteatoma of attic, bilateral
H71.11	Cholesteatoma of tympanum, right ear
H71.12	Cholesteatoma of tympanum, left ear
H71.13	Cholesteatoma of tympanum, bilateral
H71.21	Cholesteatoma of mastoid, right ear
H71.22	Cholesteatoma of mastoid, left ear
H71.23	Cholesteatoma of mastoid, bilateral
H71.31	Diffuse cholesteatosis, right ear
H71.32	Diffuse cholesteatosis, left ear
H71.33	Diffuse cholesteatosis, bilateral
H71.91	Unspecified cholesteatoma, right ear

H71.92	Unspecified cholesteatoma, left ear
H71.93	Unspecified cholesteatoma, bilateral
H74.41	Polyp of right middle ear
H74.42	Polyp of left middle ear
H74.43	Polyp of middle ear, bilateral
H83.11	Labyrinthine fistula, right ear
H83.12	Labyrinthine fistula, left ear
H83.13	Labyrinthine fistula, bilateral
160.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation
160.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation
160.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation
160.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
160.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
160.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery
160.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery
160.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery
160.4	Nontraumatic subarachnoid hemorrhage from basilar artery
160.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery
160.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery
160.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries
160.8	Other nontraumatic subarachnoid hemorrhage
160.9	Nontraumatic subarachnoid hemorrhage, unspecified
161.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
161.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical
161.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified
161.3	Nontraumatic intracerebral hemorrhage in brain stem
161.4	Nontraumatic intracerebral hemorrhage in cerebellum
161.5	Nontraumatic intracerebral hemorrhage, intraventricular
161.6	Nontraumatic intracerebral hemorrhage, multiple localized
161.8	Other nontraumatic intracerebral hemorrhage
161.9	Nontraumatic intracerebral hemorrhage, unspecified
162.00	Nontraumatic subdural hemorrhage, unspecified

162.01	Nontraumatic acute subdural hemorrhage
162.02	Nontraumatic subacute subdural hemorrhage
162.03	Nontraumatic chronic subdural hemorrhage
162.1	Nontraumatic extradural hemorrhage
162.9	Nontraumatic intracranial hemorrhage, unspecified
163.00	Cerebral infarction due to thrombosis of unspecified precerebral artery
163.011	Cerebral infarction due to thrombosis of right vertebral artery
163.012	Cerebral infarction due to thrombosis of left vertebral artery
163.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries
163.02	Cerebral infarction due to thrombosis of basilar artery
163.031	Cerebral infarction due to thrombosis of right carotid artery
163.032	Cerebral infarction due to thrombosis of left carotid artery
163.033	Cerebral infarction due to thrombosis of bilateral carotid arteries
163.09	Cerebral infarction due to thrombosis of other precerebral artery
163.10	Cerebral infarction due to embolism of unspecified precerebral artery
163.111	Cerebral infarction due to embolism of right vertebral artery
163.112	Cerebral infarction due to embolism of left vertebral artery
163.113	Cerebral infarction due to embolism of bilateral vertebral arteries
163.12	Cerebral infarction due to embolism of basilar artery
163.131	Cerebral infarction due to embolism of right carotid artery
163.132	Cerebral infarction due to embolism of left carotid artery
163.133	Cerebral infarction due to embolism of bilateral carotid arteries
163.19	Cerebral infarction due to embolism of other precerebral artery
163.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries
163.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery
163.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery
163.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries
163.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery
163.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries
163.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries
163.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries

163.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries
163.30	Cerebral infarction due to thrombosis of unspecified cerebral artery
163.311	Cerebral infarction due to thrombosis of right middle cerebral artery
163.312	Cerebral infarction due to thrombosis of left middle cerebral artery
163.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries
163.321	Cerebral infarction due to thrombosis of right anterior cerebral artery
163.322	Cerebral infarction due to thrombosis of left anterior cerebral artery
163.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries
163.331	Cerebral infarction due to thrombosis of right posterior cerebral artery
163.332	Cerebral infarction due to thrombosis of left posterior cerebral artery
163.333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries
163.341	Cerebral infarction due to thrombosis of right cerebellar artery
163.342	Cerebral infarction due to thrombosis of left cerebellar artery
163.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries
163.39	Cerebral infarction due to thrombosis of other cerebral artery
163.40	Cerebral infarction due to embolism of unspecified cerebral artery
163.411	Cerebral infarction due to embolism of right middle cerebral artery
163.412	Cerebral infarction due to embolism of left middle cerebral artery
163.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries
163.421	Cerebral infarction due to embolism of right anterior cerebral artery
163.422	Cerebral infarction due to embolism of left anterior cerebral artery
163.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries
163.431	Cerebral infarction due to embolism of right posterior cerebral artery
163.432	Cerebral infarction due to embolism of left posterior cerebral artery
163.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries
163.441	Cerebral infarction due to embolism of right cerebellar artery
163.442	Cerebral infarction due to embolism of left cerebellar artery
163.443	Cerebral infarction due to embolism of bilateral cerebellar arteries
163.449	Cerebral infarction due to embolism of unspecified cerebellar artery
163.49	Cerebral infarction due to embolism of other cerebral artery
163.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery

163.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery
163.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery
163.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries
163.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery
163.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery
163.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries
163.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery
163.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery
163.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries
163.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery
163.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery
163.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries
163.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery
163.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
163.81	Other cerebral infarction due to occlusion or stenosis of small artery
163.89	Other cerebral infarction
163.9	Cerebral infarction, unspecified
165.01	Occlusion and stenosis of right vertebral artery
165.02	Occlusion and stenosis of left vertebral artery
165.03	Occlusion and stenosis of bilateral vertebral arteries
165.1	Occlusion and stenosis of basilar artery
165.21	Occlusion and stenosis of right carotid artery
165.22	Occlusion and stenosis of left carotid artery
165.23	Occlusion and stenosis of bilateral carotid arteries
165.8	Occlusion and stenosis of other precerebral arteries

166.01	Occlusion and stenosis of right middle cerebral artery
166.02	Occlusion and stenosis of left middle cerebral artery
166.03	Occlusion and stenosis of bilateral middle cerebral arteries
166.11	Occlusion and stenosis of right anterior cerebral artery
166.12	Occlusion and stenosis of left anterior cerebral artery
166.13	Occlusion and stenosis of bilateral anterior cerebral arteries
166.21	Occlusion and stenosis of right posterior cerebral artery
166.22	Occlusion and stenosis of left posterior cerebral artery
166.23	Occlusion and stenosis of bilateral posterior cerebral arteries
166.3	Occlusion and stenosis of cerebellar arteries
166.8	Occlusion and stenosis of other cerebral arteries
166.9	Occlusion and stenosis of unspecified cerebral artery
167.0	Dissection of cerebral arteries, nonruptured
167.1	Cerebral aneurysm, nonruptured
167.5	Moyamoya disease
167.841	Reversible cerebrovascular vasoconstriction syndrome
167.848	Other cerebrovascular vasospasm and vasoconstriction
171.01	Dissection of thoracic aorta
171.02	Dissection of abdominal aorta
171.03	Dissection of thoracoabdominal aorta
171.1	Thoracic aortic aneurysm, ruptured
171.2	Thoracic aortic aneurysm, without rupture
171.3	Abdominal aortic aneurysm, ruptured
171.4	Abdominal aortic aneurysm, without rupture
171.5	Thoracoabdominal aortic aneurysm, ruptured
171.6	Thoracoabdominal aortic aneurysm, without rupture
177.71	Dissection of carotid artery
177.74	Dissection of vertebral artery
177.79	Dissection of other specified artery
179.0	Aneurysm of aorta in diseases classified elsewhere
M40.03	Postural kyphosis, cervicothoracic region
M40.04	Postural kyphosis, thoracic region

M40.05	Postural kyphosis, thoracolumbar region
M40.12	Other secondary kyphosis, cervical region
M40.13	Other secondary kyphosis, cervicothoracic region
M40.14	Other secondary kyphosis, thoracic region
M40.15	Other secondary kyphosis, thoracolumbar region
M40.202	Unspecified kyphosis, cervical region
M40.203	Unspecified kyphosis, cervicothoracic region
M40.204	Unspecified kyphosis, thoracic region
M40.205	Unspecified kyphosis, thoracolumbar region
M40.292	Other kyphosis, cervical region
M40.293	Other kyphosis, cervicothoracic region
M40.294	Other kyphosis, thoracic region
M40.295	Other kyphosis, thoracolumbar region
M40.35	Flatback syndrome, thoracolumbar region
M40.36	Flatback syndrome, lumbar region
M40.37	Flatback syndrome, lumbosacral region
M40.45	Postural lordosis, thoracolumbar region
M40.46	Postural lordosis, lumbar region
M40.47	Postural lordosis, lumbosacral region
M40.55	Lordosis, unspecified, thoracolumbar region
M40.56	Lordosis, unspecified, lumbar region
M40.57	Lordosis, unspecified, lumbosacral region
M41.02	Infantile idiopathic scoliosis, cervical region
M41.03	Infantile idiopathic scoliosis, cervicothoracic region
M41.04	Infantile idiopathic scoliosis, thoracic region
M41.05	Infantile idiopathic scoliosis, thoracolumbar region
M41.06	Infantile idiopathic scoliosis, lumbar region
M41.07	Infantile idiopathic scoliosis, lumbosacral region
M41.08	Infantile idiopathic scoliosis, sacral and sacrococcygeal region
M41.112	Juvenile idiopathic scoliosis, cervical region
M41.113	Juvenile idiopathic scoliosis, cervicothoracic region
M41.114	Juvenile idiopathic scoliosis, thoracic region

M41.115	Juvenile idiopathic scoliosis, thoracolumbar region
M41.116	Juvenile idiopathic scoliosis, lumbar region
M41.117	Juvenile idiopathic scoliosis, lumbosacral region
M41.122	Adolescent idiopathic scoliosis, cervical region
M41.123	Adolescent idiopathic scoliosis, cervicothoracic region
M41.124	Adolescent idiopathic scoliosis, thoracic region
M41.125	Adolescent idiopathic scoliosis, thoracolumbar region
M41.126	Adolescent idiopathic scoliosis, lumbar region
M41.127	Adolescent idiopathic scoliosis, lumbosacral region
M41.22	Other idiopathic scoliosis, cervical region
M41.23	Other idiopathic scoliosis, cervicothoracic region
M41.24	Other idiopathic scoliosis, thoracic region
M41.25	Other idiopathic scoliosis, thoracolumbar region
M41.26	Other idiopathic scoliosis, lumbar region
M41.27	Other idiopathic scoliosis, lumbosacral region
M41.34	Thoracogenic scoliosis, thoracic region
M41.35	Thoracogenic scoliosis, thoracolumbar region
M41.41	Neuromuscular scoliosis, occipito-atlanto-axial region
M41.42	Neuromuscular scoliosis, cervical region
M41.43	Neuromuscular scoliosis, cervicothoracic region
M41.44	Neuromuscular scoliosis, thoracic region
M41.45	Neuromuscular scoliosis, thoracolumbar region
M41.46	Neuromuscular scoliosis, lumbar region
M41.47	Neuromuscular scoliosis, lumbosacral region
M41.52	Other secondary scoliosis, cervical region
M41.53	Other secondary scoliosis, cervicothoracic region
M41.54	Other secondary scoliosis, thoracic region
M41.55	Other secondary scoliosis, thoracolumbar region
M41.56	Other secondary scoliosis, lumbar region
M41.57	Other secondary scoliosis, lumbosacral region
M41.82	Other forms of scoliosis, cervical region
M41.83	Other forms of scoliosis, cervicothoracic region

M41.84	Other forms of scoliosis, thoracic region
M41.85	Other forms of scoliosis, thoracolumbar region
M41.86	Other forms of scoliosis, lumbar region
M41.87	Other forms of scoliosis, lumbosacral region
M43.8X1	Other specified deforming dorsopathies, occipito-atlanto-axial region
M43.8X2	Other specified deforming dorsopathies, cervical region
M43.8X3	Other specified deforming dorsopathies, cervicothoracic region
M43.8X4	Other specified deforming dorsopathies, thoracic region
M43.8X5	Other specified deforming dorsopathies, thoracolumbar region
M43.8X6	Other specified deforming dorsopathies, lumbar region
M43.8X7	Other specified deforming dorsopathies, lumbosacral region
M43.8X8	Other specified deforming dorsopathies, sacral and sacrococcygeal region
M47.011	Anterior spinal artery compression syndromes, occipito-atlanto-axial region
M47.012	Anterior spinal artery compression syndromes, cervical region
M47.013	Anterior spinal artery compression syndromes, cervicothoracic region
M47.014	Anterior spinal artery compression syndromes, thoracic region
M47.015	Anterior spinal artery compression syndromes, thoracolumbar region
M47.016	Anterior spinal artery compression syndromes, lumbar region
M47.021	Vertebral artery compression syndromes, occipito-atlanto-axial region
M47.022	Vertebral artery compression syndromes, cervical region
M47.11	Other spondylosis with myelopathy, occipito-atlanto-axial region
M47.12	Other spondylosis with myelopathy, cervical region
M47.13	Other spondylosis with myelopathy, cervicothoracic region
M47.14	Other spondylosis with myelopathy, thoracic region
M47.15	Other spondylosis with myelopathy, thoracolumbar region
M47.16	Other spondylosis with myelopathy, lumbar region
M50.01	Cervical disc disorder with myelopathy, high cervical region
M50.020	Cervical disc disorder with myelopathy, mid-cervical region, unspecified level
M50.021	Cervical disc disorder at C4-C5 level with myelopathy
M50.022	Cervical disc disorder at C5-C6 level with myelopathy
M50.023	Cervical disc disorder at C6-C7 level with myelopathy
M50.03	Cervical disc disorder with myelopathy, cervicothoracic region

M51.04	Intervertebral disc disorders with myelopathy, thoracic region
M51.05	Intervertebral disc disorders with myelopathy, thoracolumbar region
M51.06	Intervertebral disc disorders with myelopathy, lumbar region
M51.9	Unspecified thoracic, thoracolumbar and lumbosacral intervertebral disc disorder
M96.2	Postradiation kyphosis
M96.3	Postlaminectomy kyphosis
M96.4	Postsurgical lordosis
M96.5	Postradiation scoliosis
P11.3	Birth injury to facial nerve
P11.4	Birth injury to other cranial nerves
P11.5	Birth injury to spine and spinal cord
P14.0	Erb's paralysis due to birth injury
P14.1	Klumpke's paralysis due to birth injury
P14.2	Phrenic nerve paralysis due to birth injury
P14.3	Other brachial plexus birth injuries
P14.8	Birth injuries to other parts of peripheral nervous system
Q05.0	Cervical spina bifida with hydrocephalus
Q05.1	Thoracic spina bifida with hydrocephalus
Q05.2	Lumbar spina bifida with hydrocephalus
Q05.3	Sacral spina bifida with hydrocephalus
Q05.5	Cervical spina bifida without hydrocephalus
Q05.6	Thoracic spina bifida without hydrocephalus
Q05.7	Lumbar spina bifida without hydrocephalus
Q05.8	Sacral spina bifida without hydrocephalus
Q07.00	Arnold-Chiari syndrome without spina bifida or hydrocephalus
Q07.01	Arnold-Chiari syndrome with spina bifida
Q07.02	Arnold-Chiari syndrome with hydrocephalus
Q07.03	Arnold-Chiari syndrome with spina bifida and hydrocephalus
Q27.9	Congenital malformation of peripheral vascular system, unspecified
Q28.2	Arteriovenous malformation of cerebral vessels
Q28.3	Other malformations of cerebral vessels
Q85.00	Neurofibromatosis, unspecified

Q85.01	Neurofibromatosis, type 1
Q85.02	Neurofibromatosis, type 2
Q85.03	Schwannomatosis
Q85.09	Other neurofibromatosis

Coverage for this group of codes includes any of the 7th digits that apply to these codes; A, B, D, G, K, P, or S.

ICD-10 Code	Description
M48.41XA	Fatigue fracture of vertebra, occipito-atlanto-axial region, initial encounter for fracture
M48.42XA	Fatigue fracture of vertebra, cervical region, initial encounter for fracture
M48.43XA	Fatigue fracture of vertebra, cervicothoracic region, initial encounter for fracture
M48.44XA	Fatigue fracture of vertebra, thoracic region, initial encounter for fracture
M48.45XA	Fatigue fracture of vertebra, thoracolumbar region, initial encounter for fracture
M48.46XA	Fatigue fracture of vertebra, lumbar region, initial encounter for fracture
M48.47XA	Fatigue fracture of vertebra, lumbosacral region, initial encounter for fracture
M48.48XA	Fatigue fracture of vertebra, sacral and sacrococcygeal region, initial encounter for fracture
M48.51XA	Collapsed vertebra, not elsewhere classified, occipito-atlanto-axial region, initial encounter for fracture
M48.52XA	Collapsed vertebra, not elsewhere classified, cervical region, initial encounter for fracture
M48.53XA	Collapsed vertebra, not elsewhere classified, cervicothoracic region, initial encounter for fracture
M48.54XA	Collapsed vertebra, not elsewhere classified, thoracic region, initial encounter for fracture
M48.55XA	Collapsed vertebra, not elsewhere classified, thoracolumbar region, initial encounter for fracture
M48.56XA	Collapsed vertebra, not elsewhere classified, lumbar region, initial encounter for fracture
M48.57XA	Collapsed vertebra, not elsewhere classified, lumbosacral region, initial encounter for fracture
M48.58XA	Collapsed vertebra, not elsewhere classified, sacral and sacrococcygeal region, initial encounter for fracture
M80.08XA	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture

M80.88XA	Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture
M84.58XA	Pathological fracture in neoplastic disease, other specified site, initial encounter for fracture
M84.68XA	Pathological fracture in other disease, other site, initial encounter for fracture
S12.000A	Unspecified displaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.001A	Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.01XA	Stable burst fracture of first cervical vertebra, initial encounter for closed fracture
S12.02XA	Unstable burst fracture of first cervical vertebra, initial encounter for closed fracture
S12.030A	Displaced posterior arch fracture of first cervical vertebra, initial encounter for closed fracture
S12.031A	Nondisplaced posterior arch fracture of first cervical vertebra, initial encounter for closed fracture
S12.040A	Displaced lateral mass fracture of first cervical vertebra, initial encounter for closed fracture
S12.041A	Nondisplaced lateral mass fracture of first cervical vertebra, initial encounter for closed fracture
S12.090A	Other displaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.091A	Other nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.100A	Unspecified displaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.101A	Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.110A	Anterior displaced Type II dens fracture, initial encounter for closed fracture
S12.111A	Posterior displaced Type II dens fracture, initial encounter for closed fracture
S12.112A	Nondisplaced Type II dens fracture, initial encounter for closed fracture
S12.120A	Other displaced dens fracture, initial encounter for closed fracture
S12.121A	Other nondisplaced dens fracture, initial encounter for closed fracture
S12.130A	Unspecified traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.131A	Unspecified traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.14XA	Type III traumatic spondylolisthesis of second cervical vertebra, initial encounter for

	closed fracture
S12.150A	Other traumatic displaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.151A	Other traumatic nondisplaced spondylolisthesis of second cervical vertebra, initial encounter for closed fracture
S12.190A	Other displaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.191A	Other nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture
S12.200A	Unspecified displaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.201A	Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.230A	Unspecified traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.231A	Unspecified traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.24XA	Type III traumatic spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.250A	Other traumatic displaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.251A	Other traumatic nondisplaced spondylolisthesis of third cervical vertebra, initial encounter for closed fracture
S12.290A	Other displaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.291A	Other nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture
S12.300A	Unspecified displaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.301A	Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.330A	Unspecified traumatic displaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.331A	Unspecified traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.34XA	Type III traumatic spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.350A	Other traumatic displaced spondylolisthesis of fourth cervical vertebra, initial

	<del>-</del>
	encounter for closed fracture
S12.351A	Other traumatic nondisplaced spondylolisthesis of fourth cervical vertebra, initial encounter for closed fracture
S12.390A	Other displaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.391A	Other nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.400A	Unspecified displaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.401A	Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.430A	Unspecified traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.431A	Unspecified traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.44XA	Type III traumatic spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.450A	Other traumatic displaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.451A	Other traumatic nondisplaced spondylolisthesis of fifth cervical vertebra, initial encounter for closed fracture
S12.490A	Other displaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.491A	Other nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.500A	Unspecified displaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.501A	Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.530A	Unspecified traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.531A	Unspecified traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.54XA	Type III traumatic spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.550A	Other traumatic displaced spondylolisthesis of sixth cervical vertebra, initial encounter for closed fracture
S12.551A	Other traumatic nondisplaced spondylolisthesis of sixth cervical vertebra, initial

	encounter for closed fracture
S12.590A	Other displaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.591A	Other nondisplaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.600A	Unspecified displaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.601A	Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.630A	Unspecified traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.631A	Unspecified traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.64XA	Type III traumatic spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.650A	Other traumatic displaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.651A	Other traumatic nondisplaced spondylolisthesis of seventh cervical vertebra, initial encounter for closed fracture
S12.690A	Other displaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.691A	Other nondisplaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S14.2XXA	Injury of nerve root of cervical spine, initial encounter
S14.3XXA	Injury of brachial plexus, initial encounter
S22.010A	Wedge compression fracture of first thoracic vertebra, initial encounter for closed fracture
S22.011A	Stable burst fracture of first thoracic vertebra, initial encounter for closed fracture
S22.012A	Unstable burst fracture of first thoracic vertebra, initial encounter for closed fracture
S22.018A	Other fracture of first thoracic vertebra, initial encounter for closed fracture
S22.019A	Unspecified fracture of first thoracic vertebra, initial encounter for closed fracture
S22.020A	Wedge compression fracture of second thoracic vertebra, initial encounter for closed fracture
S22.021A	Stable burst fracture of second thoracic vertebra, initial encounter for closed fracture
S22.022A	Unstable burst fracture of second thoracic vertebra, initial encounter for closed fracture
S22.028A	Other fracture of second thoracic vertebra, initial encounter for closed fracture

S22.029A	Unspecified fracture of second thoracic vertebra, initial encounter for closed fracture
S22.030A	Wedge compression fracture of third thoracic vertebra, initial encounter for closed fracture
S22.031A	Stable burst fracture of third thoracic vertebra, initial encounter for closed fracture
S22.032A	Unstable burst fracture of third thoracic vertebra, initial encounter for closed fracture
S22.038A	Other fracture of third thoracic vertebra, initial encounter for closed fracture
S22.039A	Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture
S22.040A	Wedge compression fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.041A	Stable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.042A	Unstable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.048A	Other fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.049A	Unspecified fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.050A	Wedge compression fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.051A	Stable burst fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.052A	Unstable burst fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.058A	Other fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.059A	Unspecified fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.060A	Wedge compression fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.061A	Stable burst fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.062A	Unstable burst fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.068A	Other fracture of T7-T8 thoracic vertebra, initial encounter for closed fracture
S22.069A	Unspecified fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.070A	Wedge compression fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.071A	Stable burst fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.072A	Unstable burst fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.078A	Other fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.079A	Unspecified fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.080A	Wedge compression fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.081A	Stable burst fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.082A	Unstable burst fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.088A	Other fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.089A	Unspecified fracture of T11-T12 vertebra, initial encounter for closed fracture
-	

S24.2XXA	Injury of nerve root of thoracic spine, initial encounter
S32.010A	Wedge compression fracture of first lumbar vertebra, initial encounter for closed fracture
S32.011A	Stable burst fracture of first lumbar vertebra, initial encounter for closed fracture
S32.012A	Unstable burst fracture of first lumbar vertebra, initial encounter for closed fracture
S32.018A	Other fracture of first lumbar vertebra, initial encounter for closed fracture
S32.019A	Unspecified fracture of first lumbar vertebra, initial encounter for closed fracture
S32.020A	Wedge compression fracture of second lumbar vertebra, initial encounter for closed fracture
S32.021A	Stable burst fracture of second lumbar vertebra, initial encounter for closed fracture
S32.022A	Unstable burst fracture of second lumbar vertebra, initial encounter for closed fracture
S32.028A	Other fracture of second lumbar vertebra, initial encounter for closed fracture
S32.029A	Unspecified fracture of second lumbar vertebra, initial encounter for closed fracture
S32.030A	Wedge compression fracture of third lumbar vertebra, initial encounter for closed fracture
S32.031A	Stable burst fracture of third lumbar vertebra, initial encounter for closed fracture
S32.032A	Unstable burst fracture of third lumbar vertebra, initial encounter for closed fracture
S32.038A	Other fracture of third lumbar vertebra, initial encounter for closed fracture
S32.039A	Unspecified fracture of third lumbar vertebra, initial encounter for closed fracture
S32.040A	Wedge compression fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.041A	Stable burst fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.042A	Unstable burst fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.048A	Other fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.049A	Unspecified fracture of fourth lumbar vertebra, initial encounter for closed fracture
S32.050A	Wedge compression fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.051A	Stable burst fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.052A	Unstable burst fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.058A	Other fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.059A	Unspecified fracture of fifth lumbar vertebra, initial encounter for closed fracture
S32.10XA	Unspecified fracture of sacrum, initial encounter for closed fracture
S32.110A	Nondisplaced Zone I fracture of sacrum, initial encounter for closed fracture
S32.111A	Minimally displaced Zone I fracture of sacrum, initial encounter for closed fracture

S32.112A	Severely displaced Zone I fracture of sacrum, initial encounter for closed fracture
S32.119A	Unspecified Zone I fracture of sacrum, initial encounter for closed fracture
S32.120A	Nondisplaced Zone II fracture of sacrum, initial encounter for closed fracture
S32.121A	Minimally displaced Zone II fracture of sacrum, initial encounter for closed fracture
S32.122A	Severely displaced Zone II fracture of sacrum, initial encounter for closed fracture
S32.129A	Unspecified Zone II fracture of sacrum, initial encounter for closed fracture
S32.130A	Nondisplaced Zone III fracture of sacrum, initial encounter for closed fracture
S32.131A	Minimally displaced Zone III fracture of sacrum, initial encounter for closed fracture
S32.132A	Severely displaced Zone III fracture of sacrum, initial encounter for closed fracture
S32.139A	Unspecified Zone III fracture of sacrum, initial encounter for closed fracture
S32.14XA	Type 1 fracture of sacrum, initial encounter for closed fracture
S32.15XA	Type 2 fracture of sacrum, initial encounter for closed fracture
S32.16XA	Type 3 fracture of sacrum, initial encounter for closed fracture
S32.17XA	Type 4 fracture of sacrum, initial encounter for closed fracture
S32.19XA	Other fracture of sacrum, initial encounter for closed fracture
S32.2XXA	Fracture of coccyx, initial encounter for closed fracture
S34.21XA	Injury of nerve root of lumbar spine, initial encounter
S34.22XA	Injury of nerve root of sacral spine, initial encounter
S34.4XXA	Injury of lumbosacral plexus, initial encounter

### **REFERENCES:**

Wisconsin Physician Services Cooperation. Local Coverage Determination (LCD) L34623. Intraoperative Neurophysiological Testing. Original effective date October 1, 2015, revision effective July 30, 2020. Accessed June 7, 2022. <a href="https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdld=34623&ver=32">https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdld=34623&ver=32</a>

Wisconsin Physician Services Cooperation. Local Coverage Article (LCA) A57604. Billing and Coding: Intraoperative Neurophysiological Testing. Original effective date November 1, 2019, revision effective October 1, 2020. Accessed June 7, 2022. <a href="https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleld=57604&ver=6">https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleld=57604&ver=6</a>

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*. 2012;78(8):585-589. doi:10.1212/WNL.0b013e318247fa0e. Accessed June 7, 2022. <a href="https://www.aan.com/Guidelines/Home/GuidelineDetail/519">https://www.aan.com/Guidelines/Home/GuidelineDetail/519</a>

Gertsch JH, Moreira JJ, Lee GR, et al. Practice guidelines for the supervising professional: intraoperative neurophysiological monitoring. *J Clin Monit Comput*. 2019;33(2):175-183. doi:10.1007/s10877-018-0201-9. Accessed June 7, 2022. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6420431/

Ghatol D, Widrich J. Intraoperative Neurophysiological Monitoring. [Updated 2022 May 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Accessed June 7, 2022. https://www.ncbi.nlm.nih.gov/books/NBK563203/

## **POLICY HISTORY:**

Date	Description
6/7/ 2022	This policy was transitioned from a THP Transplant and New Technology (T&T) policy. In transitioning it to a medical policy, edits were made to the formatting. References and a coding section were also added. The previous version of this policy is available upon request.

## **POST-PAYMENT AUDIT STATEMENT:**

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by THP at any time pursuant to the terms of your provider agreement.

## **DISCLAIMER:**

This policy is intended to serve as a guideline only and does not constitute medical advice, any guarantee of payment, plan pre-authorization, an explanation of benefits, or a contract. This policy is intended to address medical necessity guidelines that are suitable for most individuals. Each individual's unique clinical situation may warrant individual consideration based on medical records. Individual claims may be affected by other factors, including but not necessarily limited to state and federal laws and regulations, legislative mandates, provider contract terms, and THP's professional judgment. Reimbursement for any services shall be subject to member benefits and eligibility on the date of service, medical necessity, adherence to plan policies and procedures, claims editing logic, provider contractual agreement, and applicable referral, authorization, notification, and utilization management guidelines. Unless otherwise noted within the policy, THP's policies apply to both participating and non-participating providers and facilities. THP reserves the right to review and revise these policies periodically as it deems necessary in its discretion, and it is subject to change or termination at any time by THP. THP has full and final discretionary authority for its interpretation and application. Accordingly, THP may use reasonable discretion in interpreting and applying this policy to health care services provided in any particular case.

No part of this policy may be reproduced, stored in a retrieval system, or transmitted, in any shape or form or by any means, whether electronic, mechanical, photocopying or otherwise, without express written permission from THP. When printed, this version becomes uncontrolled. For the most current information, refer to the following website: healthplan.org.