Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing

BACKGROUND

Intraoperative neurophysiologic monitoring (IOM) and testing are medical procedures that have been in standard practice for almost 30 years. The procedures allow monitoring of neurophysiologic signals during a surgical procedure whenever the neuroaxis is at risk as a consequence of either the surgical manipulation or the surgical environment. IOM is an umbrella monitoring term and includes electroencephalography (EEG), cranial nerve evoked potentials (EPs), brain-stem auditory EPs (BAEPs), motor EPs (MEP), somatosensory EPs (SEP), nerve conduction, and electromyography (EMG) signals. Much like the other instrumental clinical monitoring technologies, such as cardiac or capnic monitoring, randomized controlled trials establishing efficacy of IOM have not been done. Current best data, accumulated over the past two decades, have been derived through comparisons with historical controls and in the number of complications avoided through IOM. Difficulties in procedural blinding would impede accumulation of randomized controlled data. This status is not unlike that of intraoperative transthoracic echocardiography (TEE) or perioperative echocardiography (POE), two other widely-endorsed monitoring technologies (Memtsoudis et al., 2006, Ng 2009). Both neurophysiologic IOM and TEE/POE are recognized medical practice standards reliant on experience, case series and retrospective analyses.

IOM is of value in surgeries at diverse locations. The types of diseases for which monitoring is helpful also vary. For instance IOM may be necessary for carotid endarterectomies, removal of cortical-hemispheric lesions, extirpation of epileptic foci, brain stem surgeries, spinal corrections and peripheral nerve repairs to name some examples. IOM is used in neurosurgery, orthopedic, vascular, cardiothoracic and other surgical specialties. A compilation of recent reviews for these various areas is available (Nuwer, 2008). This policy addresses only surgical intraoperative monitoring and does not address monitoring performed in radiologic suites. The quality, extent and type of monitoring are dependent on the nature and location of the lesions. The utility of monitoring is exquisitely reliant on the rigors of the monitoring procedure and protocols, and the clinical expertise of the monitoring physician. We list below several significant instances each of which has independently demonstrated the value of IOM in averting neural injuries during surgery.

1. Value of EEG Monitoring in Carotid Surgery

Carotid occlusion, incident to carotid endarterectomies, poses a high risk for cerebral hemispheric injury. EEG monitoring is capable of detecting cerebral ischemia, a serious prelude to injury. Studies of continuous monitoring established the ability of EEG to correctly predict risks of postoperative deficits after a deliberate, but necessary, carotid occlusion as part of the surgical procedure (Redekop & Ferguson, 1992; Cloughesy et al., 1993; Woodworth et al., 2007). The surgeon can respond to adverse EEG events by raising blood pressure, implanting a shunt, adjusting a poorly functioning shunt, or performing other interventions.

2. Multicenter Data in Spinal Surgeries

An extensive multicenter study conducted in 1995 demonstrated that IOM using SEP reduced the risk of paraplegia by 60% in spinal surgeries (Nuwer et al., 1995). The incidence of false negative cases, wherein an operative complication occurred without having been detected by the monitoring procedure, was small: 0.06% (Nuwer et al., 1995).

3. Technology Assessment of Monitoring in Spinal Surgeries

A technology assessment by the McGill University Health Center (Erickson et al., 2005) reviewed 11 studies and concluded that spinal IOM is capable of substantially reducing injury in surgeries that pose a risk to spinal cord integrity. It recommended combined SEP/MEP monitoring, under the presence or constant availability of a monitoring physician, for all cases of spinal surgery for which there is a risk of spinal cord injury.

4. Value of Combined Motor and Sensory Monitoring

Numerous studies of post-surgical paraparesis and quadripareis have shown that both SEP and MEP monitoring had predicted adverse outcomes in a timely fashion (Schwartz et al., 2007; Lee et al., 2006; Nuwer
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et al., 1995; Jones et al., 2003; Meyer et al., 1988; Pelosi et al., 2002; Hilibrand et al., 2004; Langeloo et al. 2003; Mostegl et al. 1988; Eggspuehler et al 2007; Leung et al. 2005; Khan et al., 2006; Sutter et al., 2007; Weinzierl et al., 2007). The timing of the predictions allowed the surgeons the opportunity to intervene and prevent adverse outcomes. The two different techniques (SEP and MEP) monitor different spinal cord tracts. Sometimes, one of the techniques cannot be used for practical purposes, for anesthetic reasons, or because of pre-operative absence of signals in those pathways. Thus, the decision about which of these techniques to use needs to be tailored to the individual patient’s circumstances.

5. Protecting the Spinal Cord from Ischemia during Aortic Procedures

Studies have shown that IOM accurately predicts risks for spinal cord ischemia associated with clamping the aorta or ligating segmental spinal arteries (MacDonald & Janusz, 2002; Jacobs et al., 2000; Cunningham et al., 1987; Kaplan et al., 1986; Leung et al., 2005). IOM can assess whether the spinal cord is tolerating the degree of relative ischemia in these procedures. The surgeon can then respond by raising blood pressure, implanting a shunt, re-implanting segmental vessels, draining spinal fluid, or through other interventions.

6. Common Types of Alerting Events Observed During Monitoring

Another recent study (Lee et al., 2006) described types of neurophysiologic alerts and correlated them with postoperative neurological deficits that occurred during the course of 267 procedures involving anterior cervical spine surgery utilizing EMG, transcranial electrical motor and somatosensory evoked potential monitoring. In this study, 18.4 % of cases resulted in at least one intraoperative neurophysiologic alert; and major alerts believed to be related to specific intraoperative surgical maneuvers were identified in 4.6% of the patients monitored. In 88% of the patients with relevant amplitude loss that was thought to be related to the surgical procedure, the signal response returned once appropriate intraoperative corrective measures were taken.

7. Value of EMG Monitoring

Selective posterior rhizotomy in cerebral palsy significantly reduces spasticity, increases range of motion, and improves functional skills (Staudt et al., 1995). Electromyography during this procedure can assist in selecting specific dorsal roots to transect. EMG can also be used in peripheral nerve procedures that pose a risk of injuries to nerves (Nuwer, 2008).

8. Futility of Monitoring Inappropriate Pathways

In order to be useful, monitoring should assess the appropriate sensory or motor pathways. Incorrect pathway monitoring could miss detection of neural compromise. Examples of “wrong pathway” monitoring have been shown to have resulted in adverse outcomes (Lesser et al., 1986).

9. Value of Spinal Monitoring using SSEP and MEPs

According to a recent review of spinal monitoring using SSEP and MEPs by the Therapeutics and Technology Assessment Subcommittee of the AAN and the American Clinical Neurophysiology Society, IOM is established as effective to predict an increased risk of the adverse outcomes of paraparesis, paraplegia, and quadriplegia in spinal surgery (4 Class I and 7 Class II studies) (Nuwer et al., 2012). Surgeons and other members of the operating team should be alerted to the increased risk of severe adverse neurologic outcomes in patients with important IOM changes (Level A).

NEUROPHYSIOLOGIC TECHNIQUES USED IN IOM

Several neurophysiologic testing modalities are useful during IOM. The location and type of surgery determine the chosen testing modality. The tests and codes listed here may be used individually or in combination.

- Electroencephalography (EEG);
  - With direct physician supervision, use codes 95822 plus 95940 and/or 95941
  - With general physician supervision, use code 95955
- Electrocorticography (ECoG);
  - Use code 95829
- Direct cortical stimulation to localize function;
  - Use codes 95961, 95962
- Deep brain stimulation electrode placement
  - Use codes 95961, 95962
- Pallidotomy site testing;
  - Use codes 95961, 95962
- Somatosensory evoked potential (SEP) monitoring
  - Use codes 95925, 95926, 95927, or 95938 plus 95940 and/or 95941
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- Intraoperative SEP identification of the sensorimotor cortex
  - Use codes 95961, 95962
- Motor evoked potentials (MEP)
  - Use codes 95928, 95929, or 95939 plus 95940 and/or 95941
- Mapping the descending corticospinal tract
  - Use codes 95928, 95929, or 95939 plus 95940 and/or 95941
- Brainstem auditory evoked potentials
  - Use code 92585 plus 95940 and/or 95941
- Peripheral nerve stimulation and recording
  - Use one code from among codes 95907-95913, plus 95940 and/or 95941
- Oculomotor, facial, trigeminal and lower cranial nerve monitoring
  - Use codes 95867, 95868 and/or 95933 plus 95940 and/or 95941
- EMG monitoring and testing of peripheral limb pathways
  - Use codes 95861, 95862 or 95870 plus 95940 and/or 95941
- Pedicle screw stimulation
  - Use codes 95861, 95862 or 95870 plus 95940 and/or 95941
- Selective dorsal rhizotomy rootlet testing;
  - Use codes 95861, 95862 or 95870 plus 95940 and/or 95941
- Transcranial electrical MEPs (tcMEPs) for external anal and urethral sphincter muscles monitoring.
  - Use code 95870 plus 95940 and/or 95941

LIMITATIONS ON COVERAGE

To derive optimal benefits from this technology it is incumbent on the IOM team to understand the limits of the technology, listed below.

1. Use of Qualified Personnel

IOM must be furnished by qualified personnel. For instance, the beneficial results of monitoring with SSEPs demonstrated by the 1995 multicenter study (Nuwer et al., 1995) showed fewer neurological deficits with experienced monitoring teams. While false positive events were significant in only 1% of cases, the negative predictive value for this technique was over 99%. Thus, absence of events during monitoring signifies and assures safety of the procedure. In general it is recommended that the monitoring team strive to optimize recording and interpreting conditions such that:

- A well-trained, experienced technologist, present at the operating site, is recording and monitoring a single surgical case; and
- A monitoring clinical neurophysiologist supervises the technologist.

2. Effects of the Depth of Anesthesia and Muscle Relaxation

The level of anesthesia may also significantly impact on the ability to interpret intraoperative studies; therefore, preoperative planning and continuous communication between the anesthesiologist and the monitoring team is expected.

3. Recording Conditions

It is also 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 capability for real-time communication with the supervising physician.

4. Monitoring Necessity

Intraoperative monitoring is not medically necessary in situations where historical data and current practices reveal no potential for damage to neural integrity during surgery. Monitoring under these circumstances will exceed the patient’s medical need (Social Security Act (Title XVIII); Medicare Benefit Policy Manual).

5. Communications

Monitoring may be performed from a remote site, as long as a well-trained technologist (see detail above) is in continuous attendance in the operating room, with either the physical or electronic ability for prompt real-time communication with the supervising monitoring physician.

6. Supervision Requirements

Different levels of physician supervision apply to different kinds of IOM procedures. Code 95940 supervision require continuous physician monitoring in the operating room (OR). Code 95941 supervision require continuous physician monitoring which can be provided online or in the operating room (OR). Codes 95961-95962 (Functional cortical localization with brain stimulation) require personal physician supervision in the OR.
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**USE OF CODES 95940, 95941 AND THEIR BASE PROCEDURE CODES**

1. IOM is a procedure that describes ongoing electrophysiologic testing, and monitoring performed during surgical procedures. It includes only the time spent during an ongoing, concurrent, real-time electrophysiologic monitoring.

2. Time spent in clinical activities, other than those above, should not be billed under 95940 and/or 95941. The time spent performing or interpreting the baseline electrophysiologic studies must not be counted as intraoperative monitoring, but represents separately reportable procedures.

   For example, 95940 and 95941 are distinct from performance of specific types of pre-procedural baseline electrophysiologic studies (95860, 95861, 95867, 95868, 95907-95913, 95933, 95937) or other interpretation of specific types of baseline electrophysiologic studies (95985, 95922, 95925-95930, 95938, 95939).

   The supervising physician time spent in the operating room includes the time from entering until leaving the operating room, except for the time spent interpreting the baseline testing. For remote monitoring, it includes time from initiating to discontinuing monitoring except for the time spent interpreting the baseline testing.

3. Note that the supervision requirements for each underlying test or primary test modality vary, and must be met (Medicare Benefit Policy Manual). For example, cortical mapping during monitoring requires personal supervision.

4. Codes 95940 and 95941 may not be reported by the surgeon or anesthesiologist performing an operative procedure, since it is included in the global package if they serve as the IOM supervising physician. The surgeon performing an operative procedure may not bill other 90000 series neurophysiology testing codes for intraoperative neurophysiology testing (e.g., 92585, 95822, 95860, 95861, 95867, 95868, 95870, 95907-95913, 95925-95939) since they are also included in the global package (Medicare Benefit Policy Manual). However, when IOM or baseline procedures are performed by a different, monitoring physician during the procedure, it is separately reportable by the monitoring supervising physician.

5. Codes 95940 and 95941 is performed in the hospital setting. Monitoring of a patient with codes 95940 and 95941 should use hospital site of service (site 21), or hospital outpatient surgery center (site 22), even if the monitoring physician is located in an office. When supervising and interpreting IOM on a hospitalized patient, the supervising physician codes uses modifier -26.

6. Code 95940 requires one-on-one monitoring. Simultaneous cases cannot be coded with 95940. Code 94941 allows for reporting simultaneous cases without division of time between them. The number of cases monitored at any one time will vary, but should not exceed the requirements for providing adequate attention to each. For example, a 2010 AAN survey of IOM practitioners shows that on average 90% of monitoring hours are spent monitoring three (3) or fewer simultaneous cases and that practitioners rarely monitor more than six (6) cases simultaneously (2010 AAN Survey of IOM Practitioners – unpublished).

**CPT/HCPCS CODES**

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Codes 95940, 95941 describe ongoing neurophysiologic monitoring, testing, and data interpretation distinct from performance of specific type(s) of baseline neurophysiologic study(s) performed during surgical procedures. When the service is performed by the surgeon or anesthesiologist, the professional services are included in the surgeon’s or anesthesiologist’s primary services code(s) for the procedure and are not reported separately. Do not report these codes for automated monitoring devices that do not require continuous attendance by a professional qualified to interpret the testing and monitoring.

Recording and testing are performed either personally or by a technologist who is physically present with the patient during the service. Supervision is performed either in the operating room or by real time connection outside the operating room. The monitoring professional must be solely dedicated to performing the intraoperative neurophysiologic monitoring...
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and must be available to intervene at all times during the service as necessary, for the reported time period(s). For any given period of time spent providing these services, the service takes full attention and, therefore, other clinical activities beyond providing and interpreting of monitoring cannot be provided during the same period of time.

Throughout the monitoring, there must be provisions for continuous and immediate communication directly with the operating room team in the surgical suite. One or more simultaneous cases may be reported (95941). When monitoring more than one procedure, there must be the immediate ability to transfer patient monitoring to another monitoring professional during the surgical procedure should that individual’s exclusive attention be required for another procedure. Report 95941 for all remote or non-one-on-one monitoring time connected to each case regardless of overlap with other cases.

Codes 95940, 95941 include only the ongoing neurophysiologic monitoring time distinct from performance of specific type(s) of baseline neurophysiologic study(s), or other services such as intraoperative functional cortical or subcortical mapping. Codes 95940 and 95941 are reported based upon the time spent monitoring only, and not the number of baseline tests performed or parameters monitored. The time spent performing or interpreting the baseline neurophysiologic study(ies) should not be counted as intraoperative monitoring, but represents separately reportable procedures. When reporting 95940 and 95941, the same neurophysiologic study(ies) performed at baseline should be reported not more than once per operative session. Baseline study reporting is based upon the total unique studies performed. For example, if during the course of baseline testing and one-on-one monitoring, two separate nerves have motor testing performed in conjunction with limited single extremity EMG, then 95885 and 95907 would be reported in addition to 95940. For procedures that last beyond midnight, report services using the day on which the monitoring began and using the total time monitored.

Code 95940 is reported per 15 minutes of service. Code 95940 requires reporting only the portion of time the monitoring professional was physically present in the operating room providing one-on-one patient monitoring and no other cases may be monitored at the same time. Report continuous intraoperative neurophysiologic monitoring in the operating room (95940) in addition to the services related to monitoring from outside the operating room (95941).

Code 95941 should be used once per hour even if multiple methods of neurophysiologic monitoring are used during the time. Code 95941 requires the monitoring of neurophysiological data that is collected from the operating room continuously on-line in real time via a secure data link. When reporting 95941, real-time ability must be available through sufficient data bandwidth transfer rates to view and interrogate the neurophysiologic data contemporaneously.

Report 95941 for all cases in which there was no physical presence by the monitoring professional in the operating room during the monitoring time or when monitoring more than one case in an operating room. It is also used to report the time of monitoring physically performed outside of the operating room in those cases where monitoring occurred both within and outside the operating room. Do not report 95941 if the monitoring lasted 30 minutes or less.

Intraoperative neurophysiology monitoring codes 95940 and 95941 are each used to report the total duration of respective time spent providing each service, even if that time is not in a single continuous block.

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 neurophysiologic 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)

(Use 95940 & 95941 in conjunction with the study performed, 92585, 95822, 95860-95870, 95907-95913, 95925-95939)

(For time spent waiting on standby before monitoring, use 99360) (For electrocorticography, use 95829)

(For intraoperative EEG during nonintracranial surgery, use 95955)

(For intraoperative functional cortical or subcortical mapping, see 95961-95962)

(For intraoperative neurostimulator programming and analysis, see 95970-95979)
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**CODES FOR PRIMARY PROCEDURES USED AS BASE CODES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>92585</td>
<td>Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; comprehensive</td>
</tr>
<tr>
<td>95822</td>
<td>Electroencephalogram (EEG); recording in coma or sleep only</td>
</tr>
<tr>
<td>95860</td>
<td>Needle electromyography; one extremity with or without related paraspinal areas</td>
</tr>
<tr>
<td>95861</td>
<td>Needle electromyography; two extremities with or without related paraspinal areas</td>
</tr>
<tr>
<td>95867</td>
<td>Needle electromyography; cranial nerve supplied muscle(s), unilateral</td>
</tr>
<tr>
<td>95868</td>
<td>Needle electromyography; cranial nerve supplied muscles, bilateral</td>
</tr>
<tr>
<td>95870</td>
<td>Needle electromyography; limited study of muscles in one extremity or non-limb (axial) muscles (unilateral or bilateral), other than thoracic paraspinal, cranial nerve supplied muscles, or sphincters</td>
</tr>
<tr>
<td>95907</td>
<td>Nerve conduction studies; 1-2 studies</td>
</tr>
<tr>
<td>95908</td>
<td>3-4 studies</td>
</tr>
<tr>
<td>95909</td>
<td>5-6 studies</td>
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<tr>
<td>95910</td>
<td>7-8 studies</td>
</tr>
<tr>
<td>95911</td>
<td>9-10 studies</td>
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<tr>
<td>95912</td>
<td>11-12 studies</td>
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<tr>
<td>95913</td>
<td>13 or more studies</td>
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<tr>
<td>95925</td>
<td>Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper limbs</td>
</tr>
<tr>
<td>95926</td>
<td>Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in lower limbs</td>
</tr>
<tr>
<td>95927</td>
<td>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</td>
</tr>
<tr>
<td>95928</td>
<td>Central motor evoked potential study (transcranial motor stimulation); upper limbs</td>
</tr>
<tr>
<td>95929</td>
<td>Central motor evoked potential study (transcranial motor stimulation); lower limbs</td>
</tr>
<tr>
<td>95930</td>
<td>Visual evoked potential</td>
</tr>
<tr>
<td>95933</td>
<td>Orbicularis oculi (blink) reflex, by electrodiagnostic testing</td>
</tr>
<tr>
<td>95937</td>
<td>Neuromuscular junction testing (repetitive stimulation, paired stimuli), each nerve, any one method</td>
</tr>
<tr>
<td>95938</td>
<td>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</td>
</tr>
<tr>
<td>95939</td>
<td>Central motor evoked potential study (transcranial motor stimulation); in upper and lower limbs</td>
</tr>
</tbody>
</table>

**USE OF OTHER PROCEDURE CODES FOR INTRAOPERATIVE MONITORING AND/OR TESTING**

**Implanted Device Neurophysiology Codes**

Codes for use with implanted devices (95961, 96962, 95970-95979) Two series of codes are used to locate the proper sites for deep brain or spinal cord implanted devices and to test the device’s integrity.

Codes 96961 (first hour) and 96962 (additional hours) are used for intraoperative testing of electrode placement. Code 95970 is used to check a device’s integrity. Rarely, the devices are also programmed while in the operating room, and when done those services are coded using 95971 through 95979. These codes are:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>95970</td>
<td>Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple or complex brain, spinal cord, or peripheral (ie, cranial nerve, peripheral nerve, autonomic nerve, neuromuscular) neurostimulator pulse generator/ transmitter, without reprogramming</td>
</tr>
<tr>
<td>95971</td>
<td>Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form,</td>
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battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple spinal cord, or peripheral (ie, peripheral nerve, autonomic nerve, neuromuscular) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming

95972 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex spinal cord, or peripheral (except cranial nerve) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, first hour

95973 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex spinal cord, or peripheral (except cranial nerve) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)

95974 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour

95975 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)

95978 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programming; first hour

95979 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programming; each additional 30 minutes after first hour (List separately in addition to code for primary procedure)

Functional Cortical Mapping Codes

95829 Electrocorticogram at surgery (separate procedure)

95961 Functional cortical and subcortical mapping by stimulation and/or recording of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital brain structures; initial hour of physician attendance

95962 Functional cortical and subcortical mapping by stimulation and/or recording of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital brain structures; each additional hour of physician attendance (List separately in addition to code for primary procedure)

Three codes are used in the operating room to locate abnormal regions or regions that serve key brain functions. This includes the electrocorticography (ECoG) code 95829, which is used to record EEG directly from the exposed brain. This is used to find areas of cortex that are damaged or that may be the source of epileptic seizures. This also includes the functional cortical stimulation codes 95961 (first hour) and 95962 (additional hours). Most often those codes are used when the brain is stimulated electrically and the results are monitored behaviorally in a patient who is awake during neurosurgery. These guide the surgeon as to which portions of the exposed brain could or should be removed or which should be preserved.
APPENDIX A – DIAGNOSES THAT SUPPORT MEDICAL NECESSITY

Note: All ICD-10-CM codes listed below may be viewed as medically necessary; however, there may be other diagnostic codes not included in this list that are deserving of consideration for coverage. Such instances may require individual consideration.

I71.3 Abdominal aortic aneurysm, ruptured
I71.4 Abdominal aortic aneurysm, without rupture
G95.11 Acute infarction of spinal cord (embolic) (nonembolic)
H70.009 Acute mastoiditis without complications, unspecified ear
M41.122 Adolescent idiopathic scoliosis, cervical region
M41.123 Adolescent idiopathic scoliosis, cervicothoracic region
M41.126 Adolescent idiopathic scoliosis, lumbar region
M41.127 Adolescent idiopathic scoliosis, lumbosacral region
M41.129 Adolescent idiopathic scoliosis, site unspecified
M41.124 Adolescent idiopathic scoliosis, thoracic region
M41.125 Adolescent idiopathic scoliosis, thoracolumbar region
M80.08XA Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture
I79.0 Aneurysm of aorta in diseases classified elsewhere
G46.1 Anterior cerebral artery syndrome
S14.131A Anterior cord syndrome at C1 level of cervical spinal cord, initial encounter
S14.131A Anterior cord syndrome at C1 level of cervical spinal cord, initial encounter
S14.132A Anterior cord syndrome at C2 level of cervical spinal cord, initial encounter
S14.132A Anterior cord syndrome at C2 level of cervical spinal cord, initial encounter
S14.133A Anterior cord syndrome at C3 level of cervical spinal cord, initial encounter
S14.133A Anterior cord syndrome at C3 level of cervical spinal cord, initial encounter
S14.134A Anterior cord syndrome at C4 level of cervical spinal cord, initial encounter

S14.134A Anterior cord syndrome at C4 level of cervical spinal cord, initial encounter
S14.135A Anterior cord syndrome at C5 level of cervical spinal cord, initial encounter
S14.136A Anterior cord syndrome at C6 level of cervical spinal cord, initial encounter
S14.137A Anterior cord syndrome at C7 level of cervical spinal cord, initial encounter
S24.131A Anterior cord syndrome at T1 level of thoracic spinal cord, initial encounter
S24.131A Anterior cord syndrome at T1 level of thoracic spinal cord, initial encounter
S24.134A Anterior cord syndrome at T11-T12 level of thoracic spinal cord, initial encounter
S24.134A Anterior cord syndrome at T11-T12 level of thoracic spinal cord, initial encounter
S24.132A Anterior cord syndrome at T2-T6 level of thoracic spinal cord, initial encounter
S24.132A Anterior cord syndrome at T2-T6 level of thoracic spinal cord, initial encounter
S24.133A Anterior cord syndrome at T7-T10 level of thoracic spinal cord, initial encounter
S24.133A Anterior cord syndrome at T7-T10 level of thoracic spinal cord, initial encounter
M47.012 Anterior spinal artery compression syndromes, cervical region
M47.013 Anterior spinal artery compression syndromes, cervicothoracic region
M47.016 Anterior spinal artery compression syndromes, lumbar region
M47.011 Anterior spinal artery compression syndromes, occipito-atlanto-axial region
M47.019 Anterior spinal artery compression syndromes, site unspecified
M47.014 Anterior spinal artery compression syndromes, thoracic region
M47.015 Anterior spinal artery compression syndromes, thoracolumbar region
I71.8 Aortic aneurysm of unspecified site, ruptured
I71.9 Aortic aneurysm of unspecified site, without rupture
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Q07.02 Arnold-Chiari syndrome with hydrocephalus
Q07.01 Arnold-Chiari syndrome with spina bifida
Q07.03 Arnold-Chiari syndrome with spina bifida and hydrocephalus
Q07.00 Arnold-Chiari syndrome without spina bifida or hydrocephalus
Q28.2 Arteriovenous malformation of cerebral vessels
G80.4 Ataxic cerebral palsy
G50.1 Atypical facial pain
B16.4 Benign neoplasm of bones of skull and face
D33.1 Benign neoplasm of brain, infratentorial
D33.0 Benign neoplasm of brain, supratentorial
D33.2 Benign neoplasm of brain, unspecified
D33.9 Benign neoplasm of central nervous system, unspecified
D32.0 Benign neoplasm of cerebral meninges
D33.3 Benign neoplasm of cranial nerves
D32.9 Benign neoplasm of meninges, unspecified
D32.9 Benign neoplasm of meninges, unspecified
D33.7 Benign neoplasm of other specified parts of central nervous system
D33.4 Benign neoplasm of spinal cord
D32.1 Benign neoplasm of spinal meninges
D16.6 Benign neoplasm of vertebral column
P14.8 Birth injuries to other parts of peripheral nervous system
P11.3 Birth injury to facial nerve
P11.4 Birth injury to other cranial nerves
P14.9 Birth injury to peripheral nervous system, unspecified
P11.5 Birth injury to spine and spinal cord
G54.0 Brachial plexus disorders
G45.1 Carotid artery syndrome (hemispheric)
S14.121A Central cord syndrome at C1 level of cervical spinal cord, initial encounter
S14.122A Central cord syndrome at C2 level of cervical spinal cord, initial encounter
S14.123A Central cord syndrome at C3 level of cervical spinal cord, initial encounter
S14.124A Central cord syndrome at C4 level of cervical spinal cord, initial encounter
S14.125A Central cord syndrome at C5 level of cervical spinal cord, initial encounter
S14.125A Central cord syndrome at C5 level of cervical spinal cord, initial encounter
S14.126A Central cord syndrome at C6 level of cervical spinal cord, initial encounter
S14.126A Central cord syndrome at C6 level of cervical spinal cord, initial encounter
S14.127A Central cord syndrome at C7 level of cervical spinal cord, initial encounter
S14.127A Central cord syndrome at C7 level of cervical spinal cord, initial encounter
I67.1 Cerebral aneurysm, nonruptured
I63.6 Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
I63.12 Cerebral infarction due to embolism of basilar artery
I63.4 Cerebral infarction due to embolism of cerebral arteries
I63.422 Cerebral infarction due to embolism of left anterior cerebral artery
I63.132 Cerebral infarction due to embolism of left carotid artery
I63.442 Cerebral infarction due to embolism of left cerebellar artery
I63.412 Cerebral infarction due to embolism of left middle cerebral artery
I63.432 Cerebral infarction due to embolism of left posterior cerebral artery
I63.112 Cerebral infarction due to embolism of left vertebral artery
I63.49 Cerebral infarction due to embolism of other cerebral artery
I63.19 Cerebral infarction due to embolism of other precerebral artery
I63.421 Cerebral infarction due to embolism of right anterior cerebral artery
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<th>Code</th>
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<tr>
<td>I63.131</td>
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<td>Cerebral infarction due to embolism of unspecified carotid artery</td>
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<td>Cerebral infarction due to embolism of right cerebellar artery</td>
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<td>I63.111</td>
<td>Cerebral infarction due to embolism of right vertebrobasilar artery</td>
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<td>Cerebral infarction due to embolism of right middle cerebral artery</td>
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<td>I63.419</td>
<td>Cerebral infarction due to embolism of unspecified middle cerebral artery</td>
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<td>I63.429</td>
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<td>Cerebral infarction due to embolism of unspecified vertebrobasilar artery</td>
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<td>Cerebral infarction due to thrombosis of basilar artery</td>
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<td>Cerebral infarction due to thrombosis of cerebral arteries</td>
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<td>I63.039</td>
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<td>I63.019</td>
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<td>I63.22</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of basilar arteries</td>
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<tr>
<td>I63.522</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery</td>
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<td>I63.232</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries</td>
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<td>I63.542</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery</td>
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<td>I63.532</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery</td>
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<td>I63.29</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries</td>
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<tr>
<td>I63.521</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery</td>
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<td>I63.231</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries</td>
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<td>I63.541</td>
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<td>I63.511</td>
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<td>I63.531</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery</td>
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<td>I63.211</td>
<td>Cerebral infarction due to unspecified occlusion or stenosis of right vertebral arteries</td>
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<td>I63.529</td>
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<td>I63.239</td>
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<td>I63.219</td>
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<tr>
<td>I63.9</td>
<td>Cerebral infarction, unspecified</td>
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</tbody>
</table>
Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing Model Coverage Policy

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
M48.51XA Collapsed vertebra, not elsewhere classified, occipito-atlanto-axial region, initial encounter for fracture
M48.58XA Collapsed vertebra, not elsewhere classified, sacral and sacroccocygeal region, initial encounter for fracture
M48.50XA Collapsed vertebra, not elsewhere classified, site unspecified, 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
S14.111A Complete lesion at C1 level of cervical spinal cord, initial encounter
S14.112A Complete lesion at C2 level of cervical spinal cord, initial encounter
S14.113A Complete lesion at C3 level of cervical spinal cord, initial encounter
S14.114A Complete lesion at C4 level of cervical spinal cord, initial encounter
S14.115A Complete lesion at C5 level of cervical spinal cord, initial encounter
S14.116A Complete lesion at C6 level of cervical spinal cord, initial encounter
S14.117A Complete lesion at C7 level of cervical spinal cord, initial encounter
S24.111A Complete lesion at T1 level of thoracic spinal cord, initial encounter
S24.111A Complete lesion at T1 level of thoracic spinal cord, initial encounter
S24.114A Complete lesion at T11-T12 level of thoracic spinal cord, initial encounter
S24.114A Complete lesion at T11-T12 level of thoracic spinal cord, initial encounter
S24.112A Complete lesion at T2-T6 level of thoracic spinal cord, initial encounter
S24.112A Complete lesion at T2-T6 level of thoracic spinal cord, initial encounter
S24.113A Complete lesion at T7-T10 level of thoracic spinal cord, initial encounter
S24.113A Complete lesion at T7-T10 level of thoracic spinal cord, initial encounter
S34.111A Complete lesion of L1 level of lumbar spinal cord, initial encounter
S34.111A Complete lesion of L1 level of lumbar spinal cord, initial encounter
S34.112A Complete lesion of L2 level of lumbar spinal cord, initial encounter
S34.112A Complete lesion of L2 level of lumbar spinal cord, initial encounter
S34.113A Complete lesion of L3 level of lumbar spinal cord, initial encounter
S34.113A Complete lesion of L3 level of lumbar spinal cord, initial encounter
S34.114A Complete lesion of L4 level of lumbar spinal cord, initial encounter
S34.114A Complete lesion of L4 level of lumbar spinal cord, initial encounter
S34.115A Complete lesion of L5 level of lumbar spinal cord, initial encounter
S34.115A Complete lesion of L5 level of lumbar spinal cord, initial encounter
S34.116A Complete lesion of sacral spinal cord, initial encounter
S34.119A Complete lesion of unspecified level of lumbar spinal cord, initial encounter
S34.119A Complete lesion of unspecified level of lumbar spinal cord, initial encounter
G93.5 Compression of brain
S06.0X6A Concussion with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
Q27.9 Congenital malformation of peripheral vascular system, unspecified
Q76.2 Congenital spondylolisthesis
Q76.2 Congenital spondylolisthesis
M99.79 Connective tissue and disc stenosis of intervertebral foramina of abdomen and other regions
Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing

Model Coverage Policy

- M99.76 Connective tissue and disc stenosis of intervertebral foramina of lower extremity
- M99.73 Connective tissue and disc stenosis of intervertebral foramina of lumbar region
- M99.75 Connective tissue and disc stenosis of intervertebral foramina of pelvic region
- M99.78 Connective tissue and disc stenosis of intervertebral foramina of rib cage
- M99.74 Connective tissue and disc stenosis of intervertebral foramina of sacral region
- M99.72 Connective tissue and disc stenosis of intervertebral foramina of thoracic region
- M99.77 Connective tissue and disc stenosis of intervertebral foramina of upper extremity
- M99.49 Connective tissue stenosis of neural canal of abdomen and other regions
- M99.46 Connective tissue stenosis of neural canal of lower extremity
- M99.43 Connective tissue stenosis of neural canal of lumbar region
- M99.45 Connective tissue stenosis of neural canal of pelvic region
- M99.48 Connective tissue stenosis of neural canal of rib cage
- M99.44 Connective tissue stenosis of neural canal of sacral region
- M99.42 Connective tissue stenosis of neural canal of thoracic region
- M99.47 Connective tissue stenosis of neural canal of upper extremity
- M99.41 Discitis, unspecified, occipito-atlanto-axial region
- M99.40 Discitis, unspecified, site unspecified
- M99.39 Discitis, unspecified, thoracic region
- M99.45 Discitis, unspecified, thoracolumbar region
- G95.9 Disease of spinal cord, unspecified
- I71.02 Dissection of abdominal aorta
- I77.71 Dissection of carotid artery
- I67.0 Dissection of cerebral arteries, nonruptured
- I77.79 Dissection of other artery
- I71.01 Dissection of thoracic aorta
- I71.03 Dissection of thoracoabdominal aorta
- I71.00 Dissection of unspecified site of aorta
- I77.74 Dissection of vertebral artery
- Q01.8 Encephalocele of other sites
- Q01.9 Encephalocele, unspecified
- P14.0 Erb’s paralysis due to birth injury
- G06.2 Extradural and subdural abscess, unspecified
- G51.4 Facial myokymia
- M40.36 Flatback syndrome, lumbar region
- M40.37 Flatback syndrome, lumbosacral region
- M40.30 Flatback syndrome, site unspecified
- M40.35 Flatback syndrome, thoracolumbar region
- S32.2XXB Fracture of coccyx, initial encounter for open fracture
- S32.2XXB Fracture of coccyx, initial encounter for open fracture
- S32.2XXB Fracture of coccyx, initial encounter for open fracture
- S32.2XXB Fracture of coccyx, initial encounter for open fracture
- S12.9XXA Fracture of neck, unspecified, initial encounter
- S12.9XXA Fracture of neck, unspecified, initial encounter
- Q01.0 Frontal encephalocele
- D18.02 Hemangioma of intracranial structures
- S34.121A Incomplete lesion of L1 level of lumbar spinal cord, initial encounter
Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing Model Coverage Policy

S34.121A Incomplete lesion of L1 level of lumbar spinal cord, initial encounter
S34.122A Incomplete lesion of L2 level of lumbar spinal cord, initial encounter
S34.122A Incomplete lesion of L2 level of lumbar spinal cord, initial encounter
S34.123A Incomplete lesion of L3 level of lumbar spinal cord, initial encounter
S34.123A Incomplete lesion of L3 level of lumbar spinal cord, initial encounter
S34.124A Incomplete lesion of L4 level of lumbar spinal cord, initial encounter
S34.124A Incomplete lesion of L4 level of lumbar spinal cord, initial encounter
S34.125A Incomplete lesion of L5 level of lumbar spinal cord, initial encounter
S34.125A Incomplete lesion of L5 level of lumbar spinal cord, initial encounter
S34.132A Incomplete lesion of sacral spinal cord, initial encounter
S34.129A Incomplete lesion of unspecified level of lumbar spinal cord, initial encounter
S34.129A Incomplete lesion of unspecified level of lumbar spinal cord, initial encounter
M41.02 Infantile idiopathic scoliosis, cervical region
M41.02 Infantile idiopathic scoliosis, cervical region
M41.03 Infantile idiopathic scoliosis, cervicothoracic region
M41.03 Infantile idiopathic scoliosis, cervicothoracic region
M41.06 Infantile idiopathic scoliosis, lumbar region
M41.06 Infantile idiopathic scoliosis, lumbar region
M41.07 Infantile idiopathic scoliosis, lumbosacral region
M41.07 Infantile idiopathic scoliosis, lumbosacral region
M41.08 Infantile idiopathic scoliosis, sacral and sacroccocygeal region
M41.08 Infantile idiopathic scoliosis, sacral and sacroccocygeal region
M41.00 Infantile idiopathic scoliosis, site unspecified
M41.00 Infantile idiopathic scoliosis, site unspecified
M41.04 Infantile idiopathic scoliosis, thoracic region
M41.04 Infantile idiopathic scoliosis, thoracic region
M41.05 Infantile idiopathic scoliosis, thoracolumbar region
M41.05 Infantile idiopathic scoliosis, thoracolumbar region
S44.32XA Injury of axillary nerve, left arm, initial encounter
S44.31XA Injury of axillary nerve, right arm, initial encounter
S44.30XA Injury of axillary nerve, unspecified arm, initial encounter
S14.3XXA Injury of brachial plexus, initial encounter
S34.3XXA Injury of cauda equina, initial encounter
S34.3XXA Injury of cauda equina, initial encounter
S94.32XA Injury of cutaneous sensory nerve at ankle and foot level, left leg, initial encounter
S94.31XA Injury of cutaneous sensory nerve at ankle and foot level, right leg, initial encounter
S94.30XA Injury of cutaneous sensory nerve at ankle and foot level, unspecified leg, initial encounter
S54.32XA Injury of cutaneous sensory nerve at forearm level, left arm, initial encounter
S54.31XA Injury of cutaneous sensory nerve at forearm level, right arm, initial encounter
S54.30XA Injury of cutaneous sensory nerve at forearm level, unspecified arm, initial encounter
S74.21XA Injury of cutaneous sensory nerve at hip and high level, right leg, initial encounter
S74.22XA Injury of cutaneous sensory nerve at hip and thigh level, left leg, initial encounter
S74.20XA Injury of cutaneous sensory nerve at hip and thigh level, unspecified leg, initial encounter
S84.22XA Injury of cutaneous sensory nerve at lower leg level, left leg, initial encounter
S84.21XA Injury of cutaneous sensory nerve at lower leg level, right leg, initial encounter
S84.20XA Injury of cutaneous sensory nerve at lower leg level, unspecified leg, initial encounter
S44.52XA Injury of cutaneous sensory nerve at shoulder and upper arm level, left arm, initial encounter
S44.51XA Injury of cutaneous sensory nerve at shoulder and upper arm level, right arm, initial encounter
S44.50XA Injury of cutaneous sensory nerve at shoulder and upper arm level, unspecified arm, initial encounter
S94.22XA Injury of deep peroneal nerve at ankle and foot level, left leg, initial encounter
S94.21XA Injury of deep peroneal nerve at ankle and foot level, right leg, initial encounter
S94.20XA Injury of deep peroneal nerve at ankle and foot level, unspecified leg, initial encounter
S64.491A Injury of digital nerve of left index finger, initial encounter
S64.497A Injury of digital nerve of left little finger, initial encounter
S64.493A Injury of digital nerve of left middle finger, initial encounter
S64.495A Injury of digital nerve of left ring finger, initial encounter
S64.32XA Injury of digital nerve of left thumb, initial encounter
S64.498A Injury of digital nerve of other finger, initial encounter
S64.490A Injury of digital nerve of right index finger, initial encounter
S64.496A Injury of digital nerve of right little finger, initial encounter
S64.492A Injury of digital nerve of right middle finger, initial encounter
S64.494A Injury of digital nerve of right ring finger, initial encounter
S64.31XA Injury of digital nerve of right thumb, initial encounter
S64.40XA Injury of digital nerve of unspecified finger, initial encounter
S64.30XA Injury of digital nerve of unspecified thumb, initial encounter
S74.12XA Injury of femoral nerve at hip and thigh level, left leg, initial encounter
S74.11XA Injury of femoral nerve at hip and thigh level, right leg, initial encounter
S74.10XA Injury of femoral nerve at hip and thigh level, unspecified leg, initial encounter
S94.02XA Injury of lateral plantar nerve, left leg, initial encounter
S94.01XA Injury of lateral plantar nerve, right leg, initial encounter
S94.00XA Injury of lateral plantar nerve, unspecified leg, initial encounter
S34.4XXA Injury of lumbosacral plexus, initial encounter
S34.4XXA Injury of lumbosacral plexus, initial encounter
S34.4XXA Injury of lumbosacral plexus, initial encounter
S94.12XA Injury of medial plantar nerve, left leg, initial encounter
S94.11XA Injury of medial plantar nerve, right leg, initial encounter
S94.10XA Injury of medial plantar nerve, unspecified leg, initial encounter
S54.12XA Injury of median nerve at forearm level, left arm, initial encounter
S54.11XA Injury of median nerve at forearm level, right arm, initial encounter
S54.10XA Injury of median nerve at forearm level, unspecified arm, initial encounter
S44.12XA Injury of median nerve at upper arm level, left arm, initial encounter
S44.11XA Injury of median nerve at upper arm level, right arm, initial encounter
S44.10XA Injury of median nerve at upper arm level, unspecified arm, initial encounter
S64.12XA Injury of median nerve at wrist and hand level of left arm, initial encounter
S64.11XA Injury of median nerve at wrist and hand level of right arm, initial encounter
S64.10XA Injury of median nerve at wrist and hand level of unspecified arm, initial encounter
S44.42XA Injury of musculocutaneous nerve, left arm, initial encounter
S44.41XA Injury of musculocutaneous nerve, right arm, initial encounter
S44.40XA Injury of musculocutaneous nerve, unspecified arm, initial encounter
S14.2XXA Injury of nerve root of cervical spine, initial encounter
S14.2XXA Injury of nerve root of cervical spine, initial encounter
S14.2XXA Injury of nerve root of cervical spine, initial encounter
Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing Model Coverage Policy

S34.21XA Injury of nerve root of lumbar spine, initial encounter
S34.21XA Injury of nerve root of lumbar spine, initial encounter
S34.21XA Injury of nerve root of lumbar spine, initial encounter
S34.22XA Injury of nerve root of sacral spine, initial encounter
S34.22XA Injury of nerve root of sacral spine, initial encounter
S34.22XA Injury of nerve root of sacral spine, initial encounter
S24.2XXA Injury of nerve root of thoracic spine, initial encounter
S24.2XXA Injury of nerve root of thoracic spine, initial encounter
S24.2XXA Injury of nerve root of thoracic spine, initial encounter
S94.8X2A Injury of other nerves at ankle and foot level, left leg, initial encounter
S94.8X2A Injury of other nerves at ankle and foot level, left leg, initial encounter
S94.8X1A Injury of other nerves at ankle and foot level, right leg, initial encounter
S94.8X1A Injury of other nerves at ankle and foot level, right leg, initial encounter
S94.8X9A Injury of other nerves at ankle and foot level, unspecified leg, initial encounter
S94.8X9A Injury of other nerves at ankle and foot level, unspecified leg, initial encounter
S84.802A Injury of other nerves at lower leg level, left leg, initial encounter
S84.802A Injury of other nerves at lower leg level, left leg, initial encounter
S84.801A Injury of other nerves at lower leg level, right leg, initial encounter
S84.801A Injury of other nerves at lower leg level, right leg, initial encounter
S84.809A Injury of other nerves at lower leg level, unspecified leg, initial encounter
S84.809A Injury of other nerves at lower leg level, unspecified leg, initial encounter
S44.8X2A Injury of other nerves at shoulder and upper arm level, left arm, initial encounter
S44.8X2A Injury of other nerves at shoulder and upper arm level, left arm, initial encounter
S44.8X1A Injury of other nerves at shoulder and upper arm level, right arm, initial encounter
S44.8X1A Injury of other nerves at shoulder and upper arm level, right arm, initial encounter
S44.8X9A Injury of other nerves at shoulder and upper arm level, unspecified arm, initial encounter
S44.8X9A Injury of other nerves at shoulder and upper arm level, unspecified arm, initial encounter
S64.8X2A Injury of other nerves at wrist and hand level of left arm, initial encounter
S64.8X2A Injury of other nerves at wrist and hand level of left arm, initial encounter
S64.8X1A Injury of other nerves at wrist and hand level of right arm, initial encounter
S64.8X1A Injury of other nerves at wrist and hand level of right arm, initial encounter
S64.8X9A Injury of other nerves at wrist and hand level of unspecified arm, initial encounter
S64.8X9A Injury of other nerves at wrist and hand level of unspecified arm, initial encounter
S84.12XA Injury of peroneal nerve at lower leg level, left leg, initial encounter
S84.12XA Injury of peroneal nerve at lower leg level, left leg, initial encounter
S84.11XA Injury of peroneal nerve at lower leg level, right leg, initial encounter
S84.10XA Injury of peroneal nerve at lower leg level, unspecified leg, initial encounter
Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing Model Coverage Policy

S54.22XA Injury of radial nerve at forearm level, left arm, initial encounter
S54.21XA Injury of radial nerve at forearm level, right arm, initial encounter
S54.20XA Injury of radial nerve at forearm level, unspecified arm, initial encounter
S44.22XA Injury of radial nerve at upper arm level, left arm, initial encounter
S44.21XA Injury of radial nerve at upper arm level, right arm, initial encounter
S44.20XA Injury of radial nerve at upper arm level, unspecified arm, initial encounter
S44.02XA Injury of ulnar nerve at forearm level, left arm, initial encounter
S44.01XA Injury of ulnar nerve at forearm level, right arm, initial encounter
S44.00XA Injury of ulnar nerve at forearm level, unspecified arm, initial encounter
S44.02XA Injury of ulnar nerve at upper arm level, left arm, initial encounter
S44.01XA Injury of ulnar nerve at upper arm level, right arm, initial encounter
S44.00XA Injury of ulnar nerve at upper arm level, unspecified arm, initial encounter
S64.02XA Injury of ulnar nerve at wrist and hand level of left arm, initial encounter
S64.01XA Injury of ulnar nerve at wrist and hand level of right arm, initial encounter
S64.00XA Injury of ulnar nerve at wrist and hand level of unspecified arm, initial encounter
S04.9XXS Injury of unspecified cranial nerve, sequela
S04.9XXA Injury of unspecified cranial nerve, initial encounter
S04.9XXD Injury of unspecified cranial nerve, subsequent encounter
S94.92XA Injury of unspecified nerve at ankle and foot level, left leg, initial encounter
S94.91XA Injury of unspecified nerve at ankle and foot level, right leg, initial encounter
S94.90XA Injury of unspecified nerve at ankle and foot level, unspecified leg, initial encounter
S54.92XA Injury of unspecified nerve at forearm level, left arm, initial encounter
S54.91XA Injury of unspecified nerve at forearm level, right arm, initial encounter
S54.90XA Injury of unspecified nerve at forearm level, unspecified arm, initial encounter
S74.02XA Injury of sciatic nerve at hip and thigh level, left leg, initial encounter
S74.01XA Injury of sciatic nerve at hip and thigh level, right leg, initial encounter
S74.00XA Injury of sciatic nerve at hip and thigh level, unspecified leg, initial encounter
S84.02XA Injury of tibial nerve at lower leg level, left leg, initial encounter
S84.01XA Injury of tibial nerve at lower leg level, right leg, initial encounter
S84.00XA Injury of tibial nerve at lower leg level, unspecified leg, initial encounter
S84.02XA Injury of unspecified nerve at lower leg level, left leg, initial encounter
S84.01XA Injury of unspecified nerve at lower leg level, right leg, initial encounter
S84.00XA Injury of unspecified nerve at lower leg level, unspecified leg, initial encounter
S84.92XA Injury of unspecified nerve at lower leg level, left leg, initial encounter
S84.91XA Injury of unspecified nerve at lower leg level, right leg, initial encounter
S84.90XA Injury of unspecified nerve at lower leg level, unspecified leg, initial encounter
S44.92XA Injury of unspecified nerve at shoulder and upper arm level, left arm, initial encounter
S44.91XA Injury of unspecified nerve at shoulder and upper arm level, right arm, initial encounter
S44.90XA Injury of unspecified nerve at shoulder and upper arm level, unspecified arm, initial encounter
Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing Model Coverage Policy

- S64.92XA Injury of unspecified nerve at wrist and hand level of left arm, initial encounter
- S64.91XA Injury of unspecified nerve at wrist and hand level of right arm, initial encounter
- S64.90XA Injury of unspecified nerve at wrist and hand level of unspecified arm, initial encounter
- S14.9XXA Injury of unspecified nerves of neck, initial encounter
- M51.06 Intervertebral disc disorders with myelopathy, lumbar region
- M51.04 Intervertebral disc disorders with myelopathy, thoracic region
- M51.05 Intervertebral disc disorders with myelopathy, thoracolumbar region
- M99.59 Intervertebral disc stenosis of neural canal of abdomen and other regions
- M99.56 Intervertebral disc stenosis of neural canal of lower extremity
- M99.53 Intervertebral disc stenosis of neural canal of lumbar region
- M99.55 Intervertebral disc stenosis of neural canal of pelvic region
- M99.58 Intervertebral disc stenosis of neural canal of rib cage
- M99.54 Intervertebral disc stenosis of neural canal of sacral region
- M99.52 Intervertebral disc stenosis of neural canal of thoracic region
- M99.57 Intervertebral disc stenosis of neural canal of upper extremity
- G06.0 Intracranial abscess and granuloma
- G07 Intracranial and intraspinal abscess and granuloma in diseases classified elsewhere
- G06.1 Intraspinal abscess and granuloma
- M41.112 Juvenile idiopathic scoliosis, cervical region
- M41.113 Juvenile idiopathic scoliosis, cervicothoracic region
- M41.116 Juvenile idiopathic scoliosis, lumbar region
- M41.117 Juvenile idiopathic scoliosis, lumbosacral region
- M41.119 Juvenile idiopathic scoliosis, site unspecified
- M41.114 Juvenile idiopathic scoliosis, thoracic region
- M41.115 Juvenile idiopathic scoliosis, thoracolumbar region
- P14.1 Klumpke’s paralysis due to birth injury
- H83.1 Labyrinthine fistula
- G40.001 Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, with status epilepticus
- G40.009 Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, without status epilepticus
- M40.56 Lordosis, unspecified, lumbar region
- M40.57 Lordosis, unspecified, lumbosacral region
- M40.50 Lordosis, unspecified, site unspecified
- M40.55 Lordosis, unspecified, thoracolumbar region
- Q05.2 Lumbar spina bifida with hydrocephalus
- Q05.7 Lumbar spina bifida without hydrocephalus
- G54.1 Lumbosacral plexus disorders
- G54.4 Lumbosacral root disorders, not elsewhere classified
- C41.0 Malignant neoplasm of bones of skull and face
- C71.9 Malignant neoplasm of brain, unspecified
- C72.1 Malignant neoplasm of cauda equina
- C72.9 Malignant neoplasm of central nervous system, unspecified
- C72.9 Malignant neoplasm of central nervous system, unspecified
- C70.0 Malignant neoplasm of cerebral meninges
- C72.42 Malignant neoplasm of left acoustic nerve
- C72.22 Malignant neoplasm of left olfactory nerve
- C72.32 Malignant neoplasm of left optic nerve
- C70.9 Malignant neoplasm of meninges, unspecified
- C72.59 Malignant neoplasm of other cranial nerves
- C72.41 Malignant neoplasm of right acoustic nerve
- C72.21 Malignant neoplasm of right olfactory nerve
- C72.31 Malignant neoplasm of right optic nerve
- C72.0 Malignant neoplasm of spinal cord
C70.1 Malignant neoplasm of spinal meninges
C72.40 Malignant neoplasm of unspecified acoustic nerve
C72.50 Malignant neoplasm of unspecified cranial nerve
C72.20 Malignant neoplasm of unspecified olfactory nerve
C72.30 Malignant neoplasm of unspecified optic nerve
C41.2 Malignant neoplasm of vertebral column
G51.2 Meikersson’s syndrome
H81.03 Meniere’s disease, bilateral
H81.03 Meniere’s disease, bilateral
H81.03 Meniere’s disease, bilateral
H81.02 Meniere’s disease, left ear
H81.02 Meniere’s disease, left ear
H81.02 Meniere’s disease, left ear
H81.01 Meniere’s disease, right ear
H81.01 Meniere’s disease, right ear
H81.01 Meniere’s disease, right ear
H81.09 Meniere’s disease, unspecified ear
H81.09 Meniere’s disease, unspecified ear
H81.09 Meniere’s disease, unspecified ear
G46.0 Middle cerebral artery syndrome
I67.5 Moyamoya disease
G45.2 Multiple and bilateral precerebral artery syndromes
G99.2 Myelopathy in diseases classified elsewhere
Q01.1 Nasofrontal encephalocele
D44.7 Neoplasm of uncertain behavior of aortic body and other paraganglia
D43.1 Neoplasm of uncertain behavior of brain, infratentorial
D43.0 Neoplasm of uncertain behavior of brain, supratentorial
D43.2 Neoplasm of uncertain behavior of brain, unspecified
D44.6 Neoplasm of uncertain behavior of carotid body
D43.9 Neoplasm of uncertain behavior of central nervous system, unspecified
D42.0 Neoplasm of uncertain behavior of cerebral meninges
D43.3 Neoplasm of uncertain behavior of cranial nerves
D44.4 Neoplasm of uncertain behavior of craniopharyngeal duct
D42.9 Neoplasm of uncertain behavior of meninges, unspecified
D43.8 Neoplasm of uncertain behavior of other specified parts of central nervous system
D44.5 Neoplasm of uncertain behavior of pineal gland
D44.3 Neoplasm of uncertain behavior of pituitary gland
D43.4 Neoplasm of uncertain behavior of spinal cord
D42.1 Neoplasm of uncertain behavior of spinal meninges
D49.6 Neoplasm of unspecified behavior of brain
Q85.01 Neurofibromatosis, type 1
Q85.02 Neurofibromatosis, type 2
Q85.00 Neurofibromatosis, unspecified
M41.42 Neuromuscular scoliosis, cervical region
M41.43 Neuromuscular scoliosis, cervicothoracic region
M41.46 Neuromuscular scoliosis, lumbar region
M41.47 Neuromuscular scoliosis, lumbosacral region
M41.41 Neuromuscular scoliosis, occipito-atlanto-axial region
M41.40 Neuromuscular scoliosis, site unspecified
M41.44 Neuromuscular scoliosis, thoracic region
M41.45 Neuromuscular scoliosis, thoracolumbar region
I62.01 Nontraumatic acute subdural hemorrhage
I62.03 Nontraumatic chronic subdural hemorrhage
I62.1 Nontraumatic extradural hemorrhage
I61.3 Nontraumatic intracerebral hemorrhage in brain stem
I61.4 Nontraumatic intracerebral hemorrhage in cerebellum
I61.1 Nontraumatic intracerebral hemorrhage in hemisphere, cortical
I61.0 Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
I61.2 Nontraumatic intracerebral hemorrhage in hemisphere, unspecified
I61.5 Nontraumatic intracerebral hemorrhage, intraventricular
I61.6 Nontraumatic intracerebral hemorrhage, multiple localized
I61.9 Nontraumatic intracerebral hemorrhage, unspecified
I62.9 Nontraumatic intracranial hemorrhage, unspecified
I62.02 Nontraumatic subacute subdural hemorrhage
I60.4 Nontraumatic subarachnoid hemorrhage from basilar artery
I60.22 Nontraumatic subarachnoid hemorrhage from left anterior communicating artery
I60.02 Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation
I60.12 Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
I60.32 Nontraumatic subarachnoid hemorrhage from left posterior communicating artery
I60.52 Nontraumatic subarachnoid hemorrhage from left vertebral artery
I60.6 Nontraumatic subarachnoid hemorrhage from other intracranial arteries
I60.21 Nontraumatic subarachnoid hemorrhage from right anterior communicating artery
I60.01 Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation
I60.11 Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
I60.31 Nontraumatic subarachnoid hemorrhage from right posterior communicating artery
I60.51 Nontraumatic subarachnoid hemorrhage from right vertebral artery
I60.20 Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery
I60.00 Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation
I60.7 Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery

I60.10 Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery
I60.30 Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery
I60.50 Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery
I60.9 Nontraumatic subarachnoid hemorrhage, unspecified
I62.00 Nontraumatic subdural hemorrhage, unspecified
Q01.2 Occipital encephalocele
I65.1 Occlusion and stenosis of basilar artery
I66.13 Occlusion and stenosis of bilateral anterior cerebral arteries
I65.23 Occlusion and stenosis of bilateral carotid arteries
I66.03 Occlusion and stenosis of bilateral middle cerebral arteries
I66.23 Occlusion and stenosis of bilateral posterior cerebral arteries
I65.03 Occlusion and stenosis of bilateral vertebral arteries
I66.3 Occlusion and stenosis of cerebellar arteries
I66.12 Occlusion and stenosis of left anterior cerebral artery
I65.22 Occlusion and stenosis of left carotid artery
I66.02 Occlusion and stenosis of left middle cerebral artery
I66.22 Occlusion and stenosis of left posterior cerebral artery
I65.02 Occlusion and stenosis of left vertebral artery
I66.8 Occlusion and stenosis of other cerebral arteries
I65.8 Occlusion and stenosis of other precerebral arteries
I65.8 Occlusion and stenosis of other precerebral arteries
I66.11 Occlusion and stenosis of right anterior cerebral artery
I65.21 Occlusion and stenosis of right carotid artery
I66.01 Occlusion and stenosis of right middle cerebral artery
I66.21 Occlusion and stenosis of right posterior cerebral artery
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M51.84 Other intervertebral disc disorders, thoracic region
M51.85 Other intervertebral disc disorders, thoracolumbar region
M40.292 Other kyphosis, cervical region
M40.293 Other kyphosis, cervicothoracic region
M40.299 Other kyphosis, site unspecified
M40.294 Other kyphosis, thoracic region
M40.295 Other kyphosis, thoracolumbar region
Q28.3 Other malformations of cerebral vessels
I61.8 Other nontraumatic intracerebral hemorrhage
I60.8 Other nontraumatic subarachnoid hemorrhage
M80.88XA Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture
M40.12 Other secondary kyphosis, cervical region
M40.13 Other secondary kyphosis, cervicothoracic region
M40.10 Other secondary kyphosis, site unspecified
M40.14 Other secondary kyphosis, thoracic region
M40.15 Other secondary kyphosis, thoracolumbar region
M41.52 Other secondary scoliosis, cervical region
M41.53 Other secondary scoliosis, cervicothoracic region
M41.56 Other secondary scoliosis, lumbar region
M41.57 Other secondary scoliosis, lumbosacral region
M41.50 Other secondary scoliosis, site unspecified
M41.54 Other secondary scoliosis, thoracic region
M41.55 Other secondary scoliosis, thoracolumbar region
Q06.8 Other specified congenital malformations of spinal cord
M43.8X2 Other specified deformings dorsopathies, cervical region
M43.8X3 Other specified deformings dorsopathies, cervicothoracic region
M43.8X6 Other specified deformings dorsopathies, lumbar region
M43.8X7 Other specified deformings dorsopathies, lumbosacral region
M43.8X1 Other specified deformings dorsopathies, occipito-atlanto-axial region
M43.8X8 Other specified deformings dorsopathies, sacral and sacroccocygeal region
M43.8X9 Other specified deformings dorsopathies, site unspecified
M43.8X9 Other specified deformings dorsopathies, site unspecified
M43.8X4 Other specified deformings dorsopathies, thoracic region
M43.8X5 Other specified deformings dorsopathies, thoracolumbar region
G95.89 Other specified diseases of spinal cord
M47.12 Other spondylosis with myelopathy, cervical region
M47.13 Other spondylosis with myelopathy, cervicothoracic region
M47.16 Other spondylosis with myelopathy, lumbar region
M47.11 Other spondylosis with myelopathy, occipito-atlanto-axial region
M47.10 Other spondylosis with myelopathy, site unspecified
M47.14 Other spondylosis with myelopathy, thoracic region
M47.15 Other spondylosis with myelopathy, thoracolumbar region
M47.22 Other spondylosis with radiculopathy, cervical region
M47.23 Other spondylosis with radiculopathy, cervicothoracic region
M47.21 Other spondylosis with radiculopathy, occipito-atlanto-axial region
M47.24 Other spondylosis with radiculopathy, thoracic region
M47.25 Other spondylosis with radiculopathy, thoracolumbar region
M47.892 Other spondylosis, cervical region
M47.893 Other spondylosis, cervicothoracic region
M47.891 Other spondylosis, occipito-atlanto-axial region
M47.894 Other spondylosis, thoracic region
M47.895 Other spondylosis, thoracolumbar region
G45.8 Other transient cerebral ischemic attacks and related syndromes
G45.8 Other transient cerebral ischemic attacks and related syndromes
G45.8 Other transient cerebral ischemic attacks and related syndromes
G95.19 Other vascular myelopathies
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
M84.48XA Pathological fracture, other site, initial encounter for fracture
P14.2 Phrenic nerve paralysis due to birth injury
G46.2 Posterior cerebral artery syndrome
M96.3 Post laminectomy kyphosis
M96.2 Post radiation kyphosis
M96.5 Post radiation scoliosis
M96.4 Postsurgical lordosis
M40.03 Postural kyphosis, cervicothoracic region
M40.00 Postural kyphosis, site unspecified
M40.04 Postural kyphosis, thoracic region
M40.05 Postural kyphosis, thoracolumbar region
M40.46 Postural lordosis, lumbar region
M40.47 Postural lordosis, lumbosacral region
M40.40 Postural lordosis, site unspecified
M40.45 Postural lordosis, thoracolumbar region
H95.03 Recurrent cholesteatoma of post mastoidectomy cavity, bilateral ears
H95.02 Recurrent cholesteatoma of post mastoidectomy cavity, left ear
H95.01 Recurrent cholesteatoma of post mastoidectomy cavity, right ear
H95.00 Recurrent cholesteatoma of post mastoidectomy cavity, unspecified ear
I67.841 Reversible cerebrovascular vasoconstriction syndrome
Q05.3 Sacral spina bifida with hydrocephalus
Q05.8 Sacral spina bifida without hydrocephalus
M41.9 Scoliosis, unspecified

C79.51 Secondary malignant neoplasm of bone
C79.52 Secondary malignant neoplasm of bone marrow
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
C79.40 Secondary malignant neoplasm of unspecified part of nervous system
Q05.9 Spina bifida, unspecified
M48.02 Spinal stenosis, cervical region
M48.06 Spinal stenosis, lumbar region
M48.07 Spinal stenosis, lumbosacral region
M48.08 Spinal stenosis, sacral and sacrococcygeal region
M48.00 Spinal stenosis, site unspecified
M48.04 Spinal stenosis, thoracic region
M48.05 Spinal stenosis, thoracolumbar region
M43.12 Spondylolisthesis, cervical region
M43.13 Spondylolisthesis, cervicothoracic region
M43.16 Spondylolisthesis, lumbar region
M43.17 Spondylolisthesis, lumbosacral region
M43.19 Spondylolisthesis, multiple sites in spine
M43.11 Spondylolisthesis, occipito-atlanto-axial region
M43.18 Spondylolisthesis, sacral and sacrococcygeal region
M43.10 Spondylolisthesis, site unspecified
M43.14 Spondylolisthesis, thoracic region
M43.15 Spondylolisthesis, thoracolumbar region
M43.02 Spondylolysis, cervical region
M43.03 Spondylolysis, cervicothoracic region
M43.06 Spondylolysis, lumbar region
M43.07 Spondylolysis, lumbosacral region
M43.09 Spondylolysis, multiple sites in spine
M43.01 Spondylolysis, occipito-atlanto-axial region
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<td>S22.011A</td>
<td>Stable burst fracture of first thoracic vertebra, initial encounter for closed fracture</td>
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<td>Stable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture</td>
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<td>Stable burst fracture of T7-T8 vertebra, initial encounter for closed fracture</td>
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<td>Subacute combined degeneration of spinal cord in diseases classified elsewhere</td>
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<td>Subluxation and dislocation of thoracic vertebra</td>
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<td>Subluxation and dislocation of thoracic vertebra, sequela</td>
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<td>Subluxation and dislocation of thoracic vertebra, subsequent encounter</td>
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<td>Subluxation stenosis of neural canal of abdomen and other regions</td>
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<td>Subluxation stenosis of neural canal of lower extremity</td>
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<td>Syringomyelia and syringobulbia</td>
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<td>M48.31</td>
<td>Traumatic spondylopathy, occipito-atlanto-axial region</td>
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M48.38 Traumatic spondylopathy, sacral and sacrococcygeal region
M48.30 Traumatic spondylopathy, site unspecified
M48.34 Traumatic spondylopathy, thoracic region
M48.35 Traumatic spondylopathy, thoracolumbar region
G50.0 Trigeminal neuralgia
A18.01 Tuberculosis of spine
H71.93 Unspecified cholesteatoma, bilateral
H71.92 Unspecified cholesteatoma, left ear
H71.91 Unspecified cholesteatoma, right ear
H71.90 Unspecified cholesteatoma, unspecified ear
G95.20 Unspecified cord compression
S12.000A Unspecified displaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.000B Unspecified displaced fracture of first cervical vertebra, initial encounter for open fracture
S12.300A Unspecified displaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.300B Unspecified displaced fracture of fourth cervical vertebra, initial encounter for open fracture
S12.600A Unspecified displaced fracture of seventh cervical vertebra, initial encounter for closed fracture
S12.600B Unspecified displaced fracture of seventh cervical vertebra, initial encounter for open fracture
S12.500A Unspecified displaced fracture of sixth cervical vertebra, initial encounter for closed fracture
S12.500B Unspecified displaced fracture of sixth cervical vertebra, initial encounter for open fracture
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S22.069A Unspecified fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.069B Unspecified fracture of T7-T8 vertebra, initial encounter for open fracture
S22.069B Unspecified fracture of T7-T8 vertebra, initial encounter for open fracture
S22.069B Unspecified fracture of T7-T8 vertebra, initial encounter for open fracture
S22.069B Unspecified fracture of T7-T8 vertebra, initial encounter for open fracture
S22.039A Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture
S22.039A Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture
S22.039A Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture
S22.039A Unspecified fracture of third thoracic vertebra, initial encounter for closed fracture
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S22.009B Unspecified fracture of unspecified thoracic vertebra, initial encounter for open fracture
S22.009B Unspecified fracture of unspecified thoracic vertebra, initial encounter for open fracture
S22.009B Unspecified fracture of unspecified thoracic vertebra, initial encounter for open fracture
S14.101A Unspecified injury at C1 level of cervical spinal cord, initial encounter
S14.101A Unspecified injury at C1 level of cervical spinal cord, initial encounter
S14.101S Unspecified injury at C1 level of cervical spinal cord, sequela
S14.101D Unspecified injury at C1 level of cervical spinal cord, subsequent encounter
S14.102A Unspecified injury at C2 level of cervical spinal cord, initial encounter
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<td>Unspecified injury at C2 level of cervical spinal cord, sequela</td>
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<td>Unspecified injury at C2 level of cervical spinal cord, subsequent encounter</td>
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<td>S14.105S</td>
<td>Unspecified injury at C5 level of cervical spinal cord, sequela</td>
</tr>
<tr>
<td>S14.105D</td>
<td>Unspecified injury at C5 level of cervical spinal cord, subsequent encounter</td>
</tr>
<tr>
<td>S14.106A</td>
<td>Unspecified injury at C6 level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S14.106A</td>
<td>Unspecified injury at C6 level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S14.106S</td>
<td>Unspecified injury at C6 level of cervical spinal cord, sequela</td>
</tr>
<tr>
<td>S14.106D</td>
<td>Unspecified injury at C6 level of cervical spinal cord, subsequent encounter</td>
</tr>
<tr>
<td>S14.107A</td>
<td>Unspecified injury at C7 level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S14.107A</td>
<td>Unspecified injury at C7 level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S14.107S</td>
<td>Unspecified injury at C7 level of cervical spinal cord, sequela</td>
</tr>
<tr>
<td>S14.107D</td>
<td>Unspecified injury at C7 level of cervical spinal cord, subsequent encounter</td>
</tr>
<tr>
<td>S14.107D</td>
<td>Unspecified injury at C7 level of cervical spinal cord, initial encounter</td>
</tr>
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<td>S14.107S</td>
<td>Unspecified injury at C7 level of cervical spinal cord, sequela</td>
</tr>
<tr>
<td>S14.107D</td>
<td>Unspecified injury at C7 level of cervical spinal cord, subsequent encounter</td>
</tr>
<tr>
<td>S14.108A</td>
<td>Unspecified injury at C8 level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S14.108A</td>
<td>Unspecified injury at C8 level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S14.108S</td>
<td>Unspecified injury at C8 level of cervical spinal cord, sequela</td>
</tr>
<tr>
<td>S14.108D</td>
<td>Unspecified injury at C8 level of cervical spinal cord, subsequent encounter</td>
</tr>
<tr>
<td>S24.101A</td>
<td>Unspecified injury at T1 level of thoracic spinal cord, initial encounter</td>
</tr>
<tr>
<td>S24.101A</td>
<td>Unspecified injury at T1 level of thoracic spinal cord, initial encounter</td>
</tr>
<tr>
<td>S24.102A</td>
<td>Unspecified injury at T2-T6 level of thoracic spinal cord, initial encounter</td>
</tr>
<tr>
<td>S24.102A</td>
<td>Unspecified injury at T2-T6 level of thoracic spinal cord, initial encounter</td>
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<tr>
<td>S24.103A</td>
<td>Unspecified injury at T7-T10 level of thoracic spinal cord, initial encounter</td>
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<td>S24.103A</td>
<td>Unspecified injury at T7-T10 level of thoracic spinal cord, initial encounter</td>
</tr>
<tr>
<td>S24.109A</td>
<td>Unspecified injury at unspecified level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S24.109A</td>
<td>Unspecified injury at unspecified level of cervical spinal cord, initial encounter</td>
</tr>
<tr>
<td>S24.109S</td>
<td>Unspecified injury at unspecified level of cervical spinal cord, sequela</td>
</tr>
<tr>
<td>S24.109D</td>
<td>Unspecified injury at unspecified level of cervical spinal cord, subsequent encounter</td>
</tr>
<tr>
<td>S24.109A</td>
<td>Unspecified injury at unspecified level of thoracic spinal cord, initial encounter</td>
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<tr>
<td>S24.109A</td>
<td>Unspecified injury at unspecified level of thoracic spinal cord, initial encounter</td>
</tr>
<tr>
<td>S54.8X2A</td>
<td>Unspecified injury of other nerves at forearm level, left arm, initial encounter</td>
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</table>
Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing Model Coverage Policy

S54.8X2A Unspecified injury of other nerves at forearm level, left arm, initial encounter
S54.8X1A Unspecified injury of other nerves at forearm level, right arm, initial encounter
S54.8X1A Unspecified injury of other nerves at forearm level, right arm, initial encounter
S54.8X9A Unspecified injury of other nerves at forearm level, unspecified arm, initial encounter
S54.8X9A Unspecified injury of other nerves at forearm level, unspecified arm, initial encounter
S34.101A Unspecified injury to L1 level of lumbar spinal cord, initial encounter
S34.101A Unspecified injury to L1 level of lumbar spinal cord, initial encounter
S34.102A Unspecified injury to L2 level of lumbar spinal cord, initial encounter
S34.102A Unspecified injury to L2 level of lumbar spinal cord, initial encounter
S34.103A Unspecified injury to L3 level of lumbar spinal cord, initial encounter
S34.103A Unspecified injury to L3 level of lumbar spinal cord, initial encounter
S34.104A Unspecified injury to L4 level of lumbar spinal cord, initial encounter
S34.104A Unspecified injury to L4 level of lumbar spinal cord, initial encounter
S34.105A Unspecified injury to L5 level of lumbar spinal cord, initial encounter
S34.105A Unspecified injury to L5 level of lumbar spinal cord, initial encounter
S34.139A Unspecified injury to sacral spinal cord, initial encounter
S34.139A Unspecified injury to sacral spinal cord, initial encounter
S34.139A Unspecified injury to sacral spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
S34.109A Unspecified injury to unspecified level of lumbar spinal cord, initial encounter
M40.202 Unspecified kyphosis, cervical region
M40.203 Unspecified kyphosis, cervicothoracic region
M40.209 Unspecified kyphosis, site unspecified
M40.204 Unspecified kyphosis, thoracic region
M40.205 Unspecified kyphosis, thoracolumbar region
S12.401A Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.401A Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for closed fracture
S12.401B Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for open fracture
S12.401B Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for open fracture
S12.401B Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for open fracture
S12.401B Unspecified nondisplaced fracture of fifth cervical vertebra, initial encounter for open fracture
S12.001A Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for closed fracture
S12.001B Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for open fracture
S12.001B Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for open fracture
S12.001B Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for open fracture
S12.001B Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for open fracture
S12.001B Unspecified nondisplaced fracture of first cervical vertebra, initial encounter for open fracture
S12.301A Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for closed fracture
S12.301B Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture
S12.301B Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture
S12.301B Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture

S12.301B Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture

S12.301B Unspecified nondisplaced fracture of fourth cervical vertebra, initial encounter for open fracture

S12.101A Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for closed fracture

S12.101B Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for open fracture

S12.101B Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for open fracture

S12.101B Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for open fracture

S12.101B Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for open fracture

S12.101B Unspecified nondisplaced fracture of second cervical vertebra, initial encounter for open fracture

S12.601A Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture

S12.601A Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture

S12.601B Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture

S12.601B Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture

S12.601B Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture

S12.601B Unspecified nondisplaced fracture of seventh cervical vertebra, initial encounter for open fracture

S12.501B Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for open fracture

S12.501B Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for open fracture

S12.201A Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S22.012A Unstable burst fracture of first thoracic vertebra, initial encounter for closed fracture

S22.042A Unstable burst fracture of fourth thoracic vertebra, initial encounter for closed fracture

S22.022A Unstable burst fracture of second thoracic vertebra, initial encounter for closed fracture

S22.082A Unstable burst fracture of T11-T12 vertebra, initial encounter for closed fracture

S22.052A Unstable burst fracture of T5-T6 vertebra, initial encounter for closed fracture

S22.062A Unstable burst fracture of T7-T8 vertebra, initial encounter for closed fracture

S22.072A Unstable burst fracture of T9-T10 vertebra, initial encounter for closed fracture

S22.032A Unstable burst fracture of third thoracic vertebra, initial encounter for closed fracture

S22.002A Unstable burst fracture of unspecified thoracic vertebra, initial encounter for closed fracture

M47.022 Vertebral artery compression syndromes, cervical region

Q05.4 Unspecified spina bifida with hydrocephalus

M51.9 Unspecified thoracic, thoracolumbar and lumbosacral intervertebral disc disorder

M51.9 Unspecified thoracic, thoracolumbar and lumbosacral intervertebral disc disorder

S12.501B Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for open fracture

S12.501B Unspecified nondisplaced fracture of sixth cervical vertebra, initial encounter for open fracture

S12.201A Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for closed fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S12.201B Unspecified nondisplaced fracture of third cervical vertebra, initial encounter for open fracture

S22.022A Unstable burst fracture of second thoracic vertebra, initial encounter for closed fracture

S22.082A Unstable burst fracture of T11-T12 vertebra, initial encounter for closed fracture

S22.052A Unstable burst fracture of T5-T6 vertebra, initial encounter for closed fracture

S22.062A Unstable burst fracture of T7-T8 vertebra, initial encounter for closed fracture

S22.072A Unstable burst fracture of T9-T10 vertebra, initial encounter for closed fracture

S22.032A Unstable burst fracture of third thoracic vertebra, initial encounter for closed fracture

S22.002A Unstable burst fracture of unspecified thoracic vertebra, initial encounter for closed fracture

M47.022 Vertebral artery compression syndromes, cervical region
M47.021 Vertebral artery compression syndromes, occipito-atlanto-axial region
M47.029 Vertebral artery compression syndromes, site unspecified
G45.0 Vertebro-basilar artery syndrome
G45.0 Vertebro-basilar artery syndrome
G45.0 Vertebro-basilar artery syndrome
S22.010A Wedge compression fracture of first thoracic vertebra, initial encounter for closed fracture
S22.040A Wedge compression fracture of fourth thoracic vertebra, initial encounter for closed fracture
S22.020A Wedge compression fracture of second thoracic vertebra, initial encounter for closed fracture
S22.080A Wedge compression fracture of T11-T12 vertebra, initial encounter for closed fracture
S22.050A Wedge compression fracture of T5-T6 vertebra, initial encounter for closed fracture
S22.060A Wedge compression fracture of T7-T8 vertebra, initial encounter for closed fracture
S22.070A Wedge compression fracture of T9-T10 vertebra, initial encounter for closed fracture
S22.030A Wedge compression fracture of third thoracic vertebra, initial encounter for closed fracture
S22.000A Wedge compression fracture of unspecified thoracic vertebra, initial encounter for closed fracture
The following overall criteria must be met:

1. Diagnosis must at least reflect a reason (or need) for surgery
2. Diagnosis should imply a monitorable structure is at risk
3. Current practice includes monitoring the at risk structure
4. There is peer reviewed published literature describing the monitoring of the at risk structure
5. A reasonable monitorist would not question why the surgeon wanted the monitoring

When cranial and/or facial nerves are involved or at risk:

- **D11.0** Benign neoplasm of parotid gland
- **D11.9** Benign neoplasm of major salivary gland, unspecified
- **D11.7** Benign neoplasm of other major salivary glands
- **D11.0** Benign neoplasm of parotid gland
- **H71.03** Cholesteatoma of attic, bilateral
- **H71.02** Cholesteatoma of attic, left ear
- **H71.01** Cholesteatoma of attic, right ear
- **H71.00** Cholesteatoma of attic, unspecified ear
- **H71.13** Cholesteatoma of tympanum, bilateral
- **H71.12** Cholesteatoma of tympanum, left ear
- **H71.11** Cholesteatoma of tympanum, right ear
- **H71.10** Cholesteatoma of tympanum, unspecified ear
- **H70.223** Chronic petrositis, bilateral
- **H70.222** Chronic petrositis, left ear
- **H70.221** Chronic petrositis, right ear
- **H70.229** Chronic petrositis, unspecified ear
- **H71.33** Diffuse cholesteatosis, bilateral
- **H71.32** Diffuse cholesteatosis, left ear
- **H71.31** Diffuse cholesteatosis, right ear
- **H71.30** Diffuse cholesteatosis, unspecified ear
- **R90.0** Intracranial space-occupying lesion found on diagnostic imaging of central nervous system
- **E01.2** Iodine-deficiency related (endemic) goiter, unspecified
- **E01.0** Iodine-deficiency related diffuse (endemic) goiter
- **R22.0** Localized swelling, mass and lump, head
- **R22.1** Localized swelling, mass and lump, neck
- **C08.9** Malignant neoplasm of major salivary gland, unspecified
- **C07** Malignant neoplasm of parotid gland
- **C73** Malignant neoplasm of thyroid gland
- **D22.22** Melanocytic nevi of left ear and external auricular canal
- **D22.21** Melanocytic nevi of right ear and external auricular canal
- **D22.20** Melanocytic nevi of unspecified ear and external auricular canal
- **H83.3X9** Noise effects on inner ear, unspecified ear
- **E04.9** Nontoxic goiter, unspecified
- **D23.22** Other benign neoplasm of skin of left ear and external auricular canal
- **D23.21** Other benign neoplasm of skin of right ear and external auricular canal
- **D23.20** Other benign neoplasm of skin of unspecified ear and external auricular canal
- **H91.8X3** Other specified hearing loss, bilateral
- **H91.8X2** Other specified hearing loss, left ear
- **H91.8X1** Other specified hearing loss, right ear
- **H91.8X9** Other specified hearing loss, unspecified ear
- **H74.42** Polyp of left middle ear
- **H74.43** Polyp of middle ear, bilateral
- **H74.40** Polyp of middle ear, unspecified ear
- **H74.41** Polyp of right middle ear
- **E05.01** Thyrotoxicosis with diffuse goiter, with thyrotoxic crisis or storm
- **E05.00** Thyrotoxicosis with diffuse goiter, without thyrotoxic crisis or storm
- **E05.21** Thyrotoxicosis with toxic multinodular goiter, with thyrotoxic crisis or storm
- **E05.20** Thyrotoxicosis with toxic multinodular goiter, without thyrotoxic crisis or storm
**When in conjunction with superior canal dehiscence and/or when pulsatile tinnitus is a symptom:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>H83.2X9</td>
<td>Labyrinthine dysfunction, unspecified ear</td>
</tr>
<tr>
<td>H83.2X1</td>
<td>Labyrinthine dysfunction, right ear</td>
</tr>
<tr>
<td>H83.2X2</td>
<td>Labyrinthine dysfunction, left ear</td>
</tr>
<tr>
<td>H83.2X9</td>
<td>Labyrinthine dysfunction, unspecified ear</td>
</tr>
<tr>
<td>H83.2X3</td>
<td>Labyrinthine dysfunction, bilateral</td>
</tr>
</tbody>
</table>

**When root and/or cord are felt to be at risk and/or pedicular screw thresholding is warranted:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M50.33</td>
<td>Other cervical disc degeneration, cervicothoracic region</td>
</tr>
<tr>
<td>M50.31</td>
<td>Other cervical disc degeneration, high cervical region</td>
</tr>
<tr>
<td>M50.32</td>
<td>Other cervical disc degeneration, mid-cervical region</td>
</tr>
<tr>
<td>M50.30</td>
<td>Other cervical disc degeneration, unspecified cervical region</td>
</tr>
<tr>
<td>M50.23</td>
<td>Other cervical disc displacement, cervicothoracic region</td>
</tr>
<tr>
<td>M50.21</td>
<td>Other cervical disc displacement, high cervical region</td>
</tr>
<tr>
<td>M50.22</td>
<td>Other cervical disc displacement, mid-cervical region</td>
</tr>
<tr>
<td>M50.20</td>
<td>Other cervical disc displacement, unspecified cervical region</td>
</tr>
<tr>
<td>M51.36</td>
<td>Other intervertebral disc degeneration, lumbar region</td>
</tr>
<tr>
<td>M51.37</td>
<td>Other intervertebral disc degeneration, lumbosacral region</td>
</tr>
<tr>
<td>M51.26</td>
<td>Other intervertebral disc displacement, lumbar region</td>
</tr>
</tbody>
</table>

**When in conjunction with superior canal dehiscence and when indicates significant carotid stenosis:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>M47.26</td>
<td>Other spondylosis with radiculopathy, lumbar region</td>
</tr>
<tr>
<td>M47.27</td>
<td>Other spondylosis with radiculopathy, lumbosacral region</td>
</tr>
<tr>
<td>M47.28</td>
<td>Other spondylosis with radiculopathy, sacral and sacrococcygeal region</td>
</tr>
<tr>
<td>M47.896</td>
<td>Other spondylosis, lumbar region</td>
</tr>
<tr>
<td>M47.897</td>
<td>Other spondylosis, lumbosacral region</td>
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<tr>
<td>M47.898</td>
<td>Other spondylosis, sacral and sacrococcygeal region</td>
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<td>M96.1</td>
<td>Postlaminectomy syndrome, not elsewhere classified</td>
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<tr>
<td>M48.9</td>
<td>Spondylopithy, unspecified</td>
</tr>
<tr>
<td>M47.816</td>
<td>Spondylosis without myelopathy or radiculopathy, lumbar region</td>
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<tr>
<td>M47.817</td>
<td>Spondylosis without myelopathy or radiculopathy, lumbosacral region</td>
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<td>M47.818</td>
<td>Spondylosis without myelopathy or radiculopathy, sacral and sacrococcygeal region</td>
</tr>
<tr>
<td>M51.9</td>
<td>Unspecified thoracic, thoracolumbar and lumbosacral intervertebral disc disorder</td>
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</tbody>
</table>

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>H93.19</td>
<td>Tinnitus, unspecified ear</td>
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<tr>
<td>H93.11</td>
<td>Tinnitus, right ear</td>
</tr>
<tr>
<td>H93.12</td>
<td>Tinnitus, left ear</td>
</tr>
<tr>
<td>H93.13</td>
<td>Tinnitus, bilateral</td>
</tr>
</tbody>
</table>
**APPlicable Social Security and Medicare Regulations**

1. **Social Security Act (Title XVIII) Standard References, Sections:**
   - Title XVIII of the Social Security Act, Section 1862(a)(1)(A). This section allows coverage and payment for only those services that are considered to be medically reasonable and necessary.
   - Title XVIII of the Social Security Act, Section 1833(e). This section prohibits Medicare payment for any claim which lacks the necessary information to process the claim. (Individual sections are available at [http://www.cms.hhs.gov/](http://www.cms.hhs.gov/))

   - (1). Pub. 100-08 Medicare Program Integrity.

3. **Medicare Benefit Policy Manual Chapter 15 – Covered Medical and Other Health Services, 80 80 - Requirements for Diagnostic X-Ray, Diagnostic Laboratory, and Other Diagnostic Tests.**
   - Section 410.32(b) of the Code of Federal Regulations (CFR) requires that diagnostic tests covered under §1861(s)(3) of the Act and payable under the physician fee schedule, with certain exceptions listed in the regulation, have to be performed under the supervision of an individual meeting the definition of a physician (§1861(r) of the Act) to be considered reasonable and necessary and, therefore, covered under Medicare.
   - Of the three levels of supervision, General, Direct and Personal, the add-on code 95940 and 95941 requires that this “Procedure may be performed by a technician with on-line real-time contact with physician.” (Medicare Benefit Policy Manual Chapter 15 – Covered Medical and Other Health Services, 80 80 - Requirements for Diagnostic X-Ray, Diagnostic Laboratory, and Other Diagnostic Tests., [http://www.cms.hhs.gov/manuals/Downloads/bp102c15.pdf](http://www.cms.hhs.gov/manuals/Downloads/bp102c15.pdf) [http://www.access.gpo.gov/nara/cfr/](http://www.access.gpo.gov/nara/cfr/)

**Policy History**

Approved February 2010, by the AANPA Board of Directors (AAN Policy 2010-12) Amended on February 10, 2012, by the AAN Board of Directors

This policy is updated annually to reflect changes in procedure codes.

**Sources of Information and Basis for Decision**


