Intraoperative Neurophysiological Monitoring

LOB(s):	State(s):
☒ *Commercial* ☒ *Medicare*	☒ *Idaho* ☒ *Montana* ☒ *Oregon* ☒ *Washington* ☐ *Other:*
☒ *Medicaid*	☒ *Oregon* ☐ *Washington*

Enterprise Policy

PacificSource is committed to assessing and applying current regulatory standards, widely-used treatment guidelines, and evidenced-based clinical literature when developing clinical criteria for coverage determination. Each policy contains a list of sources (references) that serves as the summary of evidence used in the development and adoption of the criteria. The evidence was considered to ensure the criteria provide clinical benefits that promote patient safety and/or access to appropriate care. Each clinical policy is reviewed, updated as needed, and readopted, at least annually, to reflect changes in regulation, new evidence, and advancements in healthcare.

*Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determination**s** are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.*

Background

Intraoperative neurophysiological monitoring (IONM) and testing are medical procedures that allow monitoring of neurophysiologic signals during a surgical procedure. The purpose of Intraoperative neurophysiological monitoring is to reduce the risk of damage to the patient's nervous system and to provide functional guidance to the surgeon and anesthesiologist.

Intraoperative neurophysiological monitoring includes evoked potential (EP) testing (also called evoked response testing) which refers to measurements of nerve function following artificial sensory stimuli as recorded by electroencephalogram (EEG) electrodes. Peripheral, subcortical, or cortical regions may be examined with EPs depending on placement of electrodes and type of stimulus applied. EP testing includes the following studies:

- Central auditory testing (also called brainstem auditory-evoked potentials
- Sensory evoked potential testing (include somatosensory-evoked potentials
- Central motor evoked potential study (transcranial motor stimulation)
- Motor-evoked potentials
- Evoked response audiometry
- Visual evoked potential

Criteria

Commercial

Prior authorization is required

Intraoperative neurophysiological monitoring (IONM) must be requested by the operating surgeon, and the monitoring must be performed by a physician other than the operating surgeon, the technical/surgical assistant, or the anesthesiologist rendering the anesthesia.

PacificSource may consider Intraoperative neurophysiological monitoring to be medically necessary for **ANY** of the following::

1. Cerebral vascular aneurysms
2. Deep brain stimulation
3. Resection of brain tissue close to the primary motor cortex and requiring brain mapping **OR** resection of epileptogenic brain tissue or tumor
4. Surgical treatment of a traumatic brain or spinal cord injury
5. Protection of cranial nerves: during procedure near or related to any of the following
    - Tumors that are optic, trigeminal, facial, auditory nerves
    - Cavernous sinus tumors
    - Oval or round window graft
    - Endolymphatic shunt for Meniere's disease
    - Vestibular section for vertigo
    - Microvascular decompression of cranial nerves
6. Anterior cervical spine surgery associated with ANY of the following increased risk situations:
    - Prior anterior cervical surgery, particularly (e.g., revision anterior cervical discectomy and fusion, revision surgery through a scarred surgical field, reoperation for pseudarthrosis or revision for failed fusion)
    - Multilevel anterior cervical discectomy and fusion
    - Time consuming anterior cervical discectomy and fusion (e.g., tumor) with anticipated extended surgical time needed to due to additional surgical complexities (e.g. tumor removal)
7. Arteriography, during which there is a test occlusion of the carotid artery
8. Aortic surgical procedures
9. Circulatory arrest with hypothermia
10. Intracranial or spinal cord arteriovenous malformations
11. Correction of scoliosis or deformity of spinal cord involving traction on the cord
12. Resection of:
    - Spinal cord tumors

- Neuromas of peripheral nerves or brachial plexus, when there is risk to major sensory or motor nerves

13. Leg lengthening procedures with traction on nerve tracks

14. Surgery for movement disorders (e.g., Parkinson's, basil ganglia surgeries)

Medicaid

PacificSource Community Solutions (PCS) follows to the general coverage, limitations, and exclusions outlined in OARs 410-141-3820, 410-141-3825, and 410-120-1200 (refer to the Covered Services policy for information regarding general coverage, limitations, and exclusions) for non-EPSDT beneficiaries. For EPSDT beneficiaries, PCS follows EPSDT coverage requirements in OAR 410-151-0002. For Intraoperative Neurophysiological Monitoring (IONM), any determination of non-coverage (full or in part) requires a case-by-case review for EPSDT Medical Necessity and EPSDT Medical Appropriateness defined in OAR 410-151-0001.

Some of the procedure codes defined as IONM below have specific coverage rules; these rules are as follows:

- 95925, 95926, and 95927 are considered diagnostic in nature and are automatically covered when billed for Medicaid beneficiaries.
- 95928 and 95929 are defined as "conditions for which certain interventions are unproven, have no clinically important benefit or have harms that outweigh benefits". As a result, PacificSource does not cover these codes for non-EPSDT beneficiaries.
- 95999 is defined as an unlisted code and would be subject to the coverage criteria listed in the Unlisted and Unspecified Procedure Code policy.

Medicare

PacificSource Medicare follows Local Coverage Determination (LCD) L34623 Intraoperative Neurophysiological Testing.

Reimbursement Criteria

Facility: Intraoperative neurophysiological testing, supplies, and technician services cannot be billed by the facility since it is included in the more comprehensive surgical procedure.

Continuous intraoperative neurophysiology monitoring (IONM) in the operating room is considered incidental to the surgeon's or anesthesiologist's primary service.

- IONM services billed by a facility are not eligible for separate reimbursement.
- Professional services are only eligible for separate reimbursement when performed and billed by an eligible provider other than the surgeon, technical/surgical assistant or anesthesiologist rendering the anesthesia.

Provider:

- Intraoperative neurophysiological monitoring must be performed by a physician, MD or DO who is trained in clinical neurophysiology (e.g., neurologist, physiatrist).
- The monitoring provider must be solely dedicated to monitoring the neurophysiological tests (either on-site or at a remote location), and available to intervene if necessary.
- The monitoring physician cannot bill for the professional component of monitoring performed by O.R. technicians, nurses, or other professionals employed by the hospital.
- The monitoring physician cannot bill for the technical component of intraoperative neurophysiological monitoring performed by O.R. technicians, nurses, or other professionals whether employed by the hospital, physician, or an intraoperative neurophysiological monitoring vendor.
- Claim must be supported by attached documentation.
- The monitoring physician services are billed with codes 95940 and 95941, and include supervision, interpretation, analysis, and a detailed signed written report of the results.
- The primary physician/surgeon cannot bill for intraoperative neurophysiological monitoring as it is included in the global package.
- Incident-to billing is not allowed

Coding Information

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

95925 Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper limbs

95926 Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in lower limbs

95927 Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in the trunk or head

95928 Central motor evoked potential study (transcranial motor stimulation); upper limbs

95929 Central motor evoked potential study (transcranial motor stimulation); lower limbs

95937 Neuromuscular Junction Test, Each Nerve, Any One Method

95938 Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper and lower limbs

95939 Central Motor Evoked Potential Study (Transcranial Motor Stimulation); Upper And Lower Limbs

95940 Continuous Intraop Neurophysiology Monitoring in the operating Room, One On One Requiring Personal Attendance, each 15 Min

95941 Continuous intraoperative neurophysiological monitoring, from outside the operating room (remote or nearby) or for monitoring of more than one case while in the operating room, per hour

95999 Unlisted Neurological/Neuromuscular Diagnosis procedure

G0453 Continuous intraoperative neurophysiological monitoring, from outside the operating room (remote or nearby), per patient, (attention directed exclusively to one patient) each 15 minutes

References

American Academy of Neurology. Principles of Coding for Intraoperative Neurophysiologic Monitoring (IOM) and Testing Model Coverage Policy. https://www.aan.com/siteassets/home-page/tools-and-resources/practicing-neurologist--administrators/billing-and-coding/model-coverage-policies/18iommodelpolicy_tr.pdf

American Clinical Neurophysiology Society. (Revised September 2023). Guideline 11A. Recommended Standards for Neurophysiologic Intraoperative Monitoring – Principles. Accessed, November 2023. http://www.acns.org/practice/guidelines

Centers for Medicare and Medicaid Services (CMS). (Revised February 1, 2024). Article A57604, Billing and Coding: Intraoperative Neurophysiological Testing.

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The Health Evidence Review Commission (HERC) Prioritized List of Health Services https://www.oregon.gov/oha/HSD/OHP/Pages/Prioritized-List.aspx

Oregon Administrative Rules (OARs). Oregon Health Authority. Health Systems: Medical Assistance Programs – Chapter 410 https://secure.sos.state.or.us/oard/displayChapterRules.action?selectedChapter=87

Oregon Open Data Portal. Health & Human Services. (Accessed July 24, 2024) Group 1119: Diagnostic Procedure Codes. https://data.oregon.gov/Health-Human-Services/Group-1119-Diagnostic-Procedure-Codes/74vi-r5ii/data_preview

Appendix

Policy Number:

Effective: 11/1/2020 **Next review:** 1/1/2026

Policy type: Enterprise

Author(s):

Depts: Health Services, Claims, Provider Network

Applicable regulation(s): CMS Article A57604 and Local Coverage Determinations (LCD) L34623;; Guideline Note 173 of the HERC Prioritized List of Health Services; Oregon Administrative Rules (OAR) 410-120-1200,410-141-3820, 410-141-3825, 410-141-3830, 410-151-0001, and 410-151-0002.

Commercial Ops: 2/2025

Government Ops: 1/2025