


<b>PROVIDENCE HEALTH PLANS AND PROVIDENCE HEALTH ASSURANCE MEDICAL POLICY</b>		<b>Intraoperative Neurophysiological Testing and Monitoring</b>	
<b>Effective Date: 1/1/2019</b>   1/1/19		Section: SUR	Policy No: 257
Medical Officer		Medical Policy Committee Approved Date: 2/13; 3/14; 8/15; 4/16; 5/17; 6/18; 12/18	
Date			

See Policy CPT CODE section below for any prior authorization requirements

## APPLIES TO:

All lines of business

## BENEFIT APPLICATION

### Medicaid Members

Oregon: Services requested for Oregon Health Plan (OHP) members follow the OHP Prioritized List and Oregon Administrative Rules (OARs) for coverage determinations.

For other lines of business, refer to the Policy Criteria section below:

## POLICY CRITERIA

Intraoperative neurophysiological testing/monitoring **may be covered** when the test is ordered by the operating surgeon, and the monitoring is performed by a physician, other than:

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

Due to the nature of these services and the potential for significant morbidity in some procedures requiring intraoperative monitoring, these services must be used in the hospital surgical setting only. It is expected that a specifically trained technician, preferably registered with one of the credentialing organizations will be in continuous attendance in the operating room, recording and monitoring a single surgical case, with either the physical or electronic capacity for real-time communication with the supervising neurologist or other physician trained in neurophysiology.

Intraoperative monitoring is not medically necessary in situations where historical data and current practices reveal no potential for damage to neural integrity during surgery.

Some high-risk patients may be candidates for a surgical procedure only if monitoring is available. To

establish medical necessity the following guidelines must be followed:

Intraoperative testing may be indicated with following types of surgery:

1. Surgery of the aortic arch, its branch vessels, or thoracic aorta, including internal carotid artery surgery, when there is risk of cerebral ischemia;
2. Resection of epileptogenic brain tissue or tumor;
3. Resection of brain tissue close to the primary motor cortex and requiring brain mapping.
4. Protection of cranial nerves:
  - a. Tumors that are optic, trigeminal, facial, auditory nerves
  - b. Cavernous sinus tumors
  - c. Oval or round window graft
  - d. Endolymphatic shunt for Meniere's disease
  - e. Vestibular section for vertigo
  - f. Microvascular decompression of cranial nerves
5. Correction of Scoliosis or deformity of spinal cord involving traction on the cord;
6. Protection of spinal cord where work is performed in close proximity to cord as in the removal of old hardware or where there have been nervous interventions
7. Spinal instrumentation requiring pedicle screws or distraction
8. Decompressive procedures on the spinal cord or cauda equine carried out for myelopathy or claudication where function of spinal cord or spinal nerves is at risk;
9. Resection of:
  - a. Spinal cord tumors
  - b. Neuromas of peripheral nerves or brachial plexus, when there is risk to major sensory or motor nerves;
10. Surgery for:
  - a. Intracranial AV malformations;
  - b. Arteriovenous malformation of spinal cord
  - c. Surgery for intractable movement disorders;
  - d. Cerebral vascular aneurysms
  - e. Surgery for intractable movement disorders
11. Arteriography, during which there is a test occlusion of the carotid artery;
12. Circulatory arrest with hypothermia;
13. Distal aortic procedures, where there is risk of ischemia to spinal cord; and
14. Leg lengthening procedures, where there is traction on sciatic nerve or other nerve trunks;
15. Basal ganglia movement disorders
16. Surgery as a result of traumatic injury to spinal cord/brain
17. Deep brain stimulation

## **CPT CODES**

**All Lines of Business**

<b>PROVIDENCE HEALTH PLANS AND PROVIDENCE HEALTH ASSURANCE MEDICAL POLICY</b>	<b>Intraoperative Neurophysiological Testing and Monitoring</b>
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No Prior Authorization Required	
95940	Continuous intraoperative neurophysiology monitoring in the operating room, one on one monitoring requiring personal attendance, each 15 minutes (List separately in addition to code for primary procedure)
95941	Continuous intraoperative neurophysiology monitoring, from outside the operating room (remote or nearby) or for monitoring of more than one case while in the operating room, per hour (List separately in addition to code for primary procedure)
G0453	Continuous intraoperative neurophysiology monitoring, from outside the operating room (remote or nearby), per patient, (attention directed exclusively to one patient) each 15 minutes (list in addition to primary procedure)

## DESCRIPTION

Intraoperative neurophysiological testing may be used to identify/prevent complications during surgery on the nervous system, its blood supply, or adjacent tissue.

Monitoring can identify new neurologic impairment; or identify separate nervous system structures (e.g. around or in a tumor); and can demonstrate which tracts of nerves are functional. Intraoperative neurophysiological testing may provide relative reassurance to the surgeon that no identifiable complication has been detected up to a certain point, allowing the surgeon to proceed further and provide a more thorough or careful surgical intervention than would have been provided in the absence of monitoring.

## INSTRUCTIONS FOR USE

Providence Health Plan (PHP) and Providence Health Assurance (PHA) Medical Policies serve as guidance for the administration of plan benefits. Medical policies do not constitute medical advice nor a guarantee of coverage. PHP and PHA Medical Policies are reviewed annually and are based upon published, peer-reviewed scientific evidence and evidence-based clinical practice guidelines that are available as of the last policy update. PHP and PHA reserve the right to determine the application of Medical Policies and make revisions to its Medical Policies at any time. Providers will be given at least 60-days' notice of policy changes that are restrictive in nature.

The scope and availability of all plan benefits are determined in accordance with the applicable coverage agreement. Any conflict or variance between the terms of the coverage agreement and PHP and PHA Medical Policy will be resolved in favor of the coverage agreement.

## REGULATORY STATUS

### Mental Health Parity Statement

Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case.

## **REFERENCES**

### **Hayes:**

Medical Technology Directory

Publication Date: February 18, 2016

Multimodality Intraoperative Monitoring (MIOM) During Corrective Surgery for Spinal Deformities

### **PubMed:**

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2. Clin Neurophysiol.2015Oct;126(10):2026-32.doi:10.1016/j.clinph.2014.12.019. Epub 2015 Jan14.  
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3. World Neurosurg .2015 Sep;84(3):786-94.doi: 10.1016/j.wneu. 2015.05.008. Epub 2015 May 16.  
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Intraoperative Neurophysiological Monitoring (IONM) for Cordotomy Procedures. Jahangiri FR.
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