### MEDICAL POLICY

**Surface Electromyography (sEMG) Testing**

<table>
<thead>
<tr>
<th>Effective Date: 1/1/2020</th>
<th>Section: MED</th>
<th>Policy No: 349</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Technology Assessment Committee Approved Date: 10/10; 11/12; 12/13; 10/14; 10/15</td>
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<td>Medical Policy Committee Approved Date: 9/08; 10/16; 12/17; 11/18; 12/19</td>
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Medical Officer Date: 1/1/20

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**SCOPE:**

Providence Health Plan, Providence Health Assurance, Providence Plan Partners, and Ayin Health Solutions as applicable (referred to individually as “Company” and collectively as “Companies”).

**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) as the primary resource for coverage determinations. Medical policy criteria below may be applied when there are no criteria available in the OARs and the OHP Prioritized List.

**POLICY CRITERIA**

Surface electromyography testing, such as the MyoVision PhysioMonitoring Systems, is considered *investigational and is not covered* as a treatment of any condition.

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**CPT/HCPCS CODES**

<table>
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<tr>
<th>All Lines of Business</th>
<th>Not Covered</th>
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<tr>
<td>96002</td>
<td>Dynamic surface electromyography, during walking or other functional activities, 1-12 muscles</td>
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DESCRIPTION

Surface electromyography (sEMG) is marketed to be a surface electrophysiological technique that quantifies muscle contractions in specific muscle groups. Testing has been proposed to evaluate the performance of muscles and nerves in patients with a variety of neuromuscular disorders.

Dynamic sEMG testing and static sEMG testing are techniques where electrodes are used to measure muscle contractions.

REVIEW OF EVIDENCE

A review of the ECRI, Hayes, Cochrane, and PubMed databases was conducted regarding the use of sEMG testing for myopathic and neuropathic conditions such as low back pain, myofascial pain, paraspinal fatigue and other neuromuscular disorders.\(^{(1-7)}\) Below is a summary of the available evidence identified through October 2018.

Study results regarding the use of surface electromyography (sEMG) in the assessment neuropathic and myopathic conditions were inconsistent. There was variability of results dependent on which muscle groups were being studied. In addition, study results were mixed regarding the use of sEMG to distinguish between neuropathic and myopathic conditions or to diagnose specific neuromuscular diseases.

Most studies which evaluated the use of sEMG were limited by small sample size and were retrospective in nature, with 8-10 year follow-up. Large, well-designed, randomized controlled trials are needed to determine the accuracy and validity of sEMG testing for the diagnosis of neuropathic and myopathic pain.

CLINICAL PRACTICE GUIDELINES

The Council on Chiropractic Practice

In 2013, the Council on Chiropractic Practice published consensus guidelines indicating sEMG may be used for recording changes in the electrical activity muscle changes associated with subluxation.\(^{(8)}\)
used to support this recommendation contained similar limitations as noted above, such as a lack of randomized study design comparing sEMG to standard of care diagnostic techniques.\(^8\)

**CENTERS FOR MEDICARE & MEDICAID**

As of 10/26/18, three Centers for Medicare & Medicaid (CMS) coverage guidelines were identified. Two LCD’s (L36526\(^9\) and L34594\(^10\)) state that the necessity and reasonableness of surface and macro EMGs “have not been established.” An LCA (A54992) states that, in addition to reasons for denial stated in the LCD’s, “surface and/or macro EMG’s will not be paid.”\(^11\)

**INSTRUCTIONS FOR USE**

Company Medical Policies serve as guidance for the administration of plan benefits. Medical policies do not constitute medical advice nor a guarantee of coverage. Company 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. The Companies reserve the right to determine the application of Medical Policies and make revisions to 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 Company 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**