MEDICAL POLICY

Surface Electromyography (sEMG) Testing

Effective Date: 07/01/2021

Medical Policy Number 136

Technology Assessment Committee Approved Date:
10/10; 11/12; 12/13; 10/14; 10/15
Medical Policy Committee Approved Date: 9/08;
10/16; 12/17; 11/18; 12/19; 04/2020; 6/2021

7/1/2021

Medical Officer

See Policy CPT/HCPCS CODE section below for any prior authorization requirements

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.

CPT/HCPCS CODES

<table>
<thead>
<tr>
<th>All Lines of Business</th>
<th>Not Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>96002</td>
<td>Dynamic surface electromyography, during walking or other functional activities, 1-12 muscles</td>
</tr>
<tr>
<td>S3900</td>
<td>Surface electromyography (emg)</td>
</tr>
</tbody>
</table>
Surface Electromyography (sEMG)
Testing

Unlisted Codes
All unlisted codes will be reviewed for medical necessity, correct coding, and pricing at the
claim level. If an unlisted code is billed related to services addressed in this policy then it
will be denied as not covered.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>95999</td>
<td>Unlisted neurological or neuromuscular diagnostic procedure</td>
</tr>
</tbody>
</table>

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. Below is a summary of the available evidence
identified through April 2021.

Study results regarding the use of surface electromyography (sEMG) in the assessment neuropathic and
myopathic conditions were inconsistent.1-7 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 Data
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.
CENTERS FOR MEDICARE & MEDICAID

As of 4/16/2021, two Centers for Medicare & Medicaid (CMS) coverage guidelines were identified. Local Coverage Determination L36526 states that the necessity and reasonableness of surface and macro EMGs “have not been established.”9 The accompanying Local Coverage Article, A54992 states that, in addition to reasons for denial stated in the LCD’s, “surface and/or macro EMG’s will not be paid.”10

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. In cases where medical necessity is not established by policy for specific treatment modalities, evidence not previously considered regarding the efficacy of the modality that is presented shall be given consideration to determine if the policy represents current standards of care.

REFERENCES

3. Meekins GD, So Y, Quan D. American Association of Neuromuscular & Electrodiagnostic Medicine evidenced-based review: use of surface electromyography in the diagnosis and study


9. Centers for Medicare & Medicaid Services Local Coverage Determination (LCD): Nerve Conduction Studies and Electromyography (L36526). Revision Effective Date: For services performed on or after 12/01/2019.  