

# The Application of Passive Modalities for Neuromuscular Disorders

Optum Health Solutions Musculoskeletal (MSK) Utilization Management Policy Policy Number: 363

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# **Policy Statement**

Passive therapeutic modalities are considered clinically appropriate in the supervised/attended conservative management of common neuromusculoskeletal conditions when:

- There are no contraindications to the intervention
- Self-administration is implausible or places the patient at risk of harm
- Used mainly during the initial period of an episode of treatment
- Used to support an active care approach (i.e., therapeutic exercise, self-care)
- Used for a particular condition for which there is an evidence-basis of significant benefit

Passive therapeutic modalities are considered not clinically appropriate for the supervised/attended conservative management of common neuromusculoskeletal conditions when:

- Patient safety is jeopardized by the application of the modality
- The modality can be safely self-administered
- Used during a course of treatment, which is continuing beyond the initial period
- Greater than one passive modality is used to support an active care approach involving the same body region(s)
- Used largely for the comfort and convenience of the patient
- Used as part of the routine office protocol

## **Purpose**

To summarize the assessment of Optum on the evidence-based applications of passive therapeutic modalities in the clinical management of common neuromusculoskeletal conditions or complaints.

# Scope

All in and out of network programs involving all provider types, where utilization review (UR) determinations are performed.

## **Definitions**

#### Modality

Any physical agent applied to produce therapeutic changes to biologic tissues; includes but not limited to thermal, acoustic, light, mechanical or electric energy.

- Supervised (previously termed "unattended") modalities are those that do not require direct (one-on-one) patient contact by the provider.
- Constant Attendance (previously termed "attended") modalities require direct (one-on-one) patient
  contact by the provider. Constant attendant modalities are each performed in intervals of 15 minutes (CPT®,
  2023).

# **Background**

Passive physical modalities (PM) are commonly employed interventions in the treatment of a wide variety of neuromusculoskeletal conditions (Foster et al., 1999; Gracey et al., 2002; Ter Haar et al., 1988; van der Valk et al., 1995; Battie et al., 1994; Jette et al., 1994).

The appropriate application of passive physical modalities (PM) in the treatment of neuromusculoskeletal disorders can be viewed within the context of the generally accepted central goals of pain reduction and decreased activity restriction (disability). These patient-centered objectives are usually accompanied by physical performance goals (ROM, strength, etc.) and a long-term aim to reduce recurrence (Liebenson, 2006; Waddell, 2004).

Passive physical modalities are common, well-established interventions in the treatment of a wide variety of neuromuscular conditions. Other factors that are considered in the decision to utilize PM include: the physiologic effects of the modality in vivo, potential risk, patient preferences, and availability of the modality (Haldeman 2005; Prentice 2002).

The use of passive modalities in the treatment of neuromusculoskeletal conditions presents the inherent risk of negatively impacting a patient's ability to "cope" with the condition by promoting passive dependence (Liebenson,2006; Waddell, 2004; Haldeman, 2005). It is the responsibility of the treating clinician to judiciously apply PM and encourage active patient participation in the treatment plan. Accordingly, PM are generally viewed as appropriate, when used for a short period of time and in support of an active treatment approach (Haldeman, 2005; Prentice,2002).

### **Clinical Evidence**

The preponderance of evidence appears to support either a lack of efficacy or insufficient data to make a judgment on benefit for the modalities evaluated. When a positive outcome was described, the reported treatment effects were modest. Similarly, the duration of treatment effectiveness was typically reported as short (2 weeks to 2 months).

The limited investigations under therapeutic conditions do not support the frequently described biophysical effects of physical modalities. Baker, et al. (2001) asserted the putative biophysical effects of ultrasound do not actually occur. The authors found that the thermal effects of continuous ultrasound were counteracted in vivo by homeostatic mechanisms. The effects of increased cellular activity and collagen tissue extensibility reportedly lack an evidence-basis under therapeutic conditions.

There is no evidence of an optimal mode or duration of treatment for most, if not all, passive physical modalities (Bleakley et al., 2004; Stasinopolous et al., 2005). Most international guidelines recommend these interventions should only be used reservedly based upon individual circumstances, and not as a principal component of a treatment regime. Hot/cold packs were viewed as "home-based" therapies (French et al., 2006).

The preponderance of limited evidence does not appear to support the premise that combined (multiple) physical modalities result in better treatment outcomes (Philadelphia Panel, 2001; Bleakley et al., 2004; Hurwitz et al., 2002;2002). Haas et al. (2004) in a pilot study, however, has reported that the combined application of PM with spinal manipulation was more effective in achieving long-term results in patients with chronic LBP, when the treatment regime occurred at a frequency of 3 or 4 times per week. Alternatively, Hurley et al. (2004) found no benefit from the inclusion of interferential therapy along with spinal manipulation for patients presenting with acute low back pain.

# **Coding Information**

Note: The Current Procedural Terminology (CPT) codes listed in this policy may not be all inclusive and are for reference purposes only. The listing of a service code in this policy does not imply that the service described by the code is a covered or non-covered health service. Coverage is determined by the member's benefit document.

Code	Description
97010	Application of a modality to one or more areas; hot or cold packs
97012	Traction, mechanical
97014	Electrical stimulation (unattended)
97016	Vasopneumatic devices
97018	Paraffin bath
97022	Whirlpool
97024	Diathermy (e.g., microwave)
97026	Infrared
97028	Ultraviolet
97032	Application of modality to one or more areas; electrical stimulation (manual), each 15 minutes
97033	Iontophoresis, each 15 minutes
97034	Contrast bath, each 15 minutes
97035	Ultrasound, each 15 minutes
97036	Hubbard tank; each 15 minutes
97039	Unlisted modality (specify type and time if constant attendance)

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#### References

American Medical Association. CPT® 2023, Professional Edition.

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# **Review and Approval History**

Date	Description
3/07/2001	Original effective date
9/20/2002	Annual review completed
11/11/2003	Annual review completed
11/18/2004	Policy updated and Annual review completed
2/14/2006	Annual review completed
12/04/2006	Annual review completed
4/10/2008	Annual review completed
11/11/2008	Policy header rebranded, "OptumHealth Care Solutions – Physical Health
1/15/2009	Policy placed into new format
4/30/2009	Annual review completed
4/08/2010	Annual review completed
10/26/2010	Policy rebranded to "OptumHealth Care Solutions, Inc. (OptumHealth)"
4/07/2011	Annual review completed
4/19/2012	Annual review completed
4/18/2013	Annual review completed
4/17/2014	Annual review completed; Policy rebranded "Optum* by OptumHealth Care Solutions, Inc."
4/16/2015	Annual review completed
4/21/2016	Annual review completed
4/20/2017	Annual review and approval completed; Legal entity name changed from "OptumHealth Care Solutions, Inc." to "OptumHealth Care Solutions, LLC."
4/26/2018	Annual review completed
4/25/2019	Annual review completed
4/23/2020	Annual review completed
4/21/2021	Annual review completed
5/3/2022	Annual review completed
6/26/2022	Updated legal entity name "OptumHealth Care Solutions, LLC." to *Optum™ Physical Health ("Optum") includes OptumHealth Care Solutions, LLC; ACN Group IPA of New York, Inc.; ACN Group IPA of California, Inc. d/b/a OptumHealth Physical Health of California; Managed Physical Network, Inc.; and OrthoNet Holdings, Inc. which includes OrthoNet New York IPA, Inc., OrthoNet West, Inc., OrthoNet, LLC, OrthoNet of the South, Inc.

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4/27/2023	Annual review and approval completed; no significant changes made to the document. Updated contact email from <a href="mailto:policy.inquiry@optumhealth.com">policy.inquiry@optumhealth.com</a> to <a href="mailto:phpolicy_inquiry@optum.com">phpolicy_inquiry@optum.com</a> .
3/6/2024	Annual review; no substantive changes. Approved by Optum Clinical Guideline Advisory Committee.
4/25/2024	Annual review and approval completed. Document content transitioned to new policy template. No significant changes made to the document.