Extracorporeal Shock Wave Therapy (ESWT)

Policy Number:	**M100201761**
Effective Date:	**2/1/2010**
Sponsoring Department:	**Health Care Services**
Impacted Department(s):	**Health Care Services**

Type of Policy: ☐ Internal ☒ External

Data Classification: ☐Confidential ☐Restricted ☒Public

Applies to (Line of Business):

☐ Corporate (All)
☒ State Products, if yes which plan(s): ☒MediSource; ☒ MediSource Connect; ☒Child Health Plus; ☒Essential Plan
☒ Medicare, if yes, which plan(s): ☒MAPD; ☐PDP; ☒ISNP; ☒CSNP
☒ Commercial, if yes, which type: ☒Large Group; ☒Small Group; ☒Individual
☒ Self-Funded Services *(Refer to specific Summary Plan Descriptions (SPDs) to determine any pre-authorization or pre-certification requirements and coverage limitations. In the event of any conflict between this policy and the SPD of a Self-Funded Plan, the SPD shall supersede the policy.)*

Excluded Products within the Selected Lines of Business (LOB)

N/A

Applicable to Vendors? Yes ☐ No☒

Purpose and Applicability:

To set forth the coverage and medical necessity for extracorporeal shock wave therapy (ESWT).

Policy:

Commercial, Medicare Advantage and Self-Funded:
Based upon our criteria and the assessment of peer-reviewed literature, ESWT for the treatment of musculoskeletal conditions, including, but not limited to, chronic plantar fasciitis, tendonitis of the shoulder and elbow, and non-union of fractures, has not been medically proven to be effective and therefore is considered investigational. This includes high-dose, low-dose and radial forms of ESWT.

MediSource, MediSource Connect, Child Health Plus, and Essential Plan:
MediSource, MediSource Connect, Child Health Plus and Essential Plan do not cover ESWT.

Background:
Extracorporeal shock wave therapy (ESWT) is intended as a non-invasive treatment option for musculoskeletal conditions that have failed to respond to conservative treatment. ESWT uses technology similar to lithotripsy in an attempt to relieve musculoskeletal symptoms of the specified affected area. There are two theories for the therapeutic effects of the shock waves. One theory is that the shock waves alleviate pain by increasing blood flow and decreasing inflammation in the affected area. Another theory is that the shock waves damage cell membranes thus interfering with the transmission of pain signals.

There is insufficient data published in the peer-reviewed literature to draw conclusions about the effectiveness of either focused ESWT or rESWT for treatment of musculoskeletal conditions. Outcomes of trials on clinically relevant measures are inconsistent, and interpretation is complicated by variations in treatment protocols.

An evaluation of the peer-reviewed scientific literature, including but not limited to subscription materials, has provided Independent Health the basis for its medical necessity coverage outlined above.

Pre-Authorization Required? Yes ☒ No☐

Pre-authorization is required for this service.

Definitions

High-Dose Extracorporeal Shock Wave Therapy protocol consists of a single treatment of high-energy shock waves (1300mJ/mm2). This painful procedure requires anesthesia.

Low-Dose Extracorporeal Shock Wave Therapy protocol consists of multiple treatments of a lower energy spaced 1 week to 1 month apart.

Plantar fascia is the deep fascia of the sole of the foot. Chronic plantar fasciitis is an irritation/inflammation to the tough, fibrous tissue that forms the arch of the foot. Patients with plantar fasciitis complain of pain under the heel with lengthy walks and prolonged standing.

Radial Extracorporeal Shock Wave Therapy (rESWT) is a pneumatic type of low dose extracorporeal shock wave therapy (ESWT) that received pre-market approval (PMA) in May 2007. The FDA-approved device is the Doloclast (spelled Dolorclast in the PMA summary) from EMS Electro Medical Systems, Nyon, Switzerland.

References

Related Policies, Processes and Other Documents

N/A

Non-Regulatory references

Buchbinder R. Plantar Fasciitis. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (accessed January5, 2024)

California Technology Assessment Forum (CTAF). Extracorporeal Shockwave Therapy (ESWT) for Plantar Fasciitis Not Responding to Conservative Therapy; October 28, 2009.

Cosentino R, et al. Extracorporeal shock wave therapy for chronic calcified tendonitis of the shoulder: single blind study. Ann Rheumat Dis 2003 Mar; 62(3):248-50.

Hayes, Inc. Health Technology Assessment Focused Extracorporeal Shock Wave Therapy for Chronic Plantar Fasciitis; Lansdale, PA:October 2016.

Jayanthi N. Elbow tendinopathy (tennis and golf elbow) In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on January 5, 2024)

Kudo P, Dainty K, Clarfield M, et al. Randomized, placebo-controlled, double-blind clinical trial evaluating the treatment of plantar fasciitis with an extracorporeal shockwave therapy (ESWT) device: A North American confirmatory study. J Orthop Res. 2006 Feb;24(2):115-23.

Martin RL, Davenport TE, Reischl SF. Heel pain-plantar fasciitis: revision 2014. J Orthop Sports Phys Ther. 2014 Nov;44(11): A1-33.

National Institute for Clinical Excellence (NICE) [web site]. Extracorporeal shockwave therapy for refractory plantar fasciitis; August 2009. Available at: https://www.nice.org.uk/guidance/ipg311/resources/extracorporeal-shockwave-therapy-for-refractory-plantar-fasciitis-1899867386790853. Accessed January 19, 2024.

Scott A, Purdam CR. Overview of the management of overuse (chronic) tendinopathy. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on January 5, 2024)

Regulatory References

New York State Department of Health, Division of Managed Care Response to Coverage Question (CovQuest); MA – 00333. October 27, 2005.

United States Food and Drug Administration Center for Devices and Radiological Health [web site]. Premarket Approval (PMA) P000048. Available at:

http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMA/pma.cfm?id=P000048. Accessed January 5, 2024.

This policy contains medical necessity criteria that apply for this service. Please note that payment for covered services is subject to eligibility criteria, contract exclusions and the limitations noted in the member's contract at the time the services are rendered.

Version Control

Signature / Approval on File? Yes ☒ No☐

Revision Date	Owner	Notes
3/1/2024	Health Care Services	Revised
1/1/2024	Health Care Services	Revised
3/1/2023	Health Care Services	Reviewed
3/1/2022	Health Care Services	Reviewed
4/1/2021	Health Care Services	Revised
4/1/2020	Medical Management	Revised
5/1/2019	Medical Management	Reviewed
5/1/2018	Medical Management	Reviewed
6/1/2017	Medical Management	Revised
7/1/2016	Medical Management	Revised
8/15/2015	Medical Management	Revised
3/1/2014	Medical Management	Revised
2/1/2013	Medical Management	Revised
3/1/2012	Medical Management	Revised
3/1/2011	Medical Management	Revised