

# Geisinger Health Plan Policies and Procedure Manual

Policy: MP345

**Section: Medical Policy** 

**Subject: Peroral Endoscopic Myotomy (POEM)** 

## **Applicable Lines of Business**

Commercial	Χ	CHIP	Х
Medicare	Χ	ACA	X
Medicaid	Χ		

I. Policy: Peroral Endoscopic Myotomy (POEM)

# II. Purpose/Objective:

To provide a policy of coverage regarding Peroral Endoscopic Myotomy (POEM)

## III. Responsibility:

- A. Medical Directors
- B. Medical Management

# IV. Required Definitions

- 1. Attachment a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
- 2. Exhibit a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
- 3. Devised the date the policy was implemented.
- 4. Revised the date of every revision to the policy, including typographical and grammatical changes.
- 5. Reviewed the date documenting the annual review if the policy has no revisions necessary.

## V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

# **Medicaid Business Segment**

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.

Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking
into account both the functional capacity of the Member and those functional capacities that are appropriate for
Members of the same age

## **DESCRIPTION:**

Peroral endoscopic myotomy (POEM) is a hybrid technique derived from natural orifice transluminal endoscopic surgery and advances in endoscopic submucosal dissection to perform a myotomy. POEM involves an esophageal mucosal incision, followed by creation of a submucosal tunnel crossing the esophagogastric junction and myotomy before closure of the mucosal incision. Peroral endoscopic myotomy represents a novel, minimally invasive, endoscopic treatment for achalasia

### INDICATIONS:

# **Commercial and Medicare Business Segments**

Peroral endoscopic myotomy (POEM) is considered medically necessary when all the following criteria are met:

- The member is 18 years of age or older; and
- Member has a diagnosis of primary achalasia; and
- Eckardt symptom score is greater than 3; and
- POEM is being proposed as an alternative to pneumatic dilation or myotomy (open or laparoscopic)

# **Eckardt Score for Symptomatic Evaluation in Achalasia**

Score	Weight Loss (kg)	Dysphagia	Retrosternal Pain	Regurgitation
0	None	None	None	None
1	< 5	Occasional	Occasional	Occasional
2	5 - 10	Daily	Daily	Daily
3	>10	Each Meal	Each Meal	Each Meal

The Eckardt symptom score is the grading system most frequently used for the evaluation of symptoms, stages and efficacy of achalasia treatment. It attributes points (0 to 3 points) for four symptoms of the disease (dysphagia, regurgitation, chest pain and weight loss), ranging from 0 to 12. Scores of 0-1 corresponds to clinical stage 0, 2-3 to stage I, 4-6 to stage II, and a score >6 to stage II. Score greater than or equal to 3 are considered active achalasia.

Gockel I, Junginger T. The value of scoring achalasia a comparison of current systems and the impact on treatment--the surgeon's viewpoint. Am Surg. 2007;73(4):327-331.

## **Medicaid Business Segment:**

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

Peroral Endoscopic Myotomy (POEM) is **NOT** a covered Medicaid benefit. Consideration through a Program Exception is required.

## **EXCLUSIONS:**

Any application of Peroral endoscopic myotomy (POEM) not listed under Indications is considered to **be Experimental**, **Investigational or Unproven** and therefore **NOT COVERED**.

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

## **CODING ASSOCIATED WITH:**

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at <a href="https://www.cms.gov">www.cms.gov</a> or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

43497 Lower esophageal myotomy, transoral (ie, peroral endoscopic myotomy [POEM])

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

## **LINE OF BUSINESS:**

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

#### REFERENCES:

Kahrilas PJ, Katzka D, Richter JE. Clinical Practice Update: The use of per-oral endoscopic myotomy in achalasia: expert review and best practice advice from the AGA Institute. Gastroenterology. 2017;153(5): 1205 – 1211.

Barbieri LA HC, Rosati R, Romario UF, Correale L, Repici A. Systematic review and meta-analysis: efficacy and safety of POEM for achalasia. United European Gastroenterology Journal. 2015 Aug; 3(4): 325 – 334.

Kumbhari V, Tieu AH, Onimaru M, et al. Peroral endoscopic myotomy (POEM) vs laparoscopic Heller myotomy (LHM) for the treatment of Type III achalasia in 75 patients: a multicenter comparative study. Endoscopy international open. 2015; 3(3): E195 – 201.

Khoury T, Mizrahi M, Mahamid M, et al. State of the art review with literature summary on gastric peroral endoscopic pyloromyotomy for gastroparesis. J Gastroenterol Hepatol. 2018;33(11):1829-1833.

Ponds FA, Fockens P, Lei A et al. Effect of Peroral Endoscopic Myotomy vs Pneumatic Dilation on Symptom Severity and Treatment Outcomes Among Treatment-Naive Patients With Achalasia: A Randomized Clinical Trial. JAMA, 2019 Jul 10;322(2).

Li H, Peng W, Huang S et al. The 2 years' long-term efficacy and safety of peroral endoscopic myotomy for the treatment of achalasia: a systematic review. J Cardiothorac Surg, 2019 Jan 5;14(1).

Aghaie Meybodi M, Qumseya BJ, Shakoor D, et al. Efficacy and feasibility of G-POEM in management of patients with refractory gastroparesis: A systematic review and meta-analysis. Endosc Int Open.2019;7(3):E322-e329. Aiolfi A, Bona D, Riva CG, et al. Systematic review and Bayesian network meta-analysis comparing laparoscopic Heller myotomy, pneumatic dilatation, and peroral endoscopic myotomy for esophageal achalasia. J Laparoendosc Adv Surg Tech A. 2019

Evensen H, Kristensen V, Larssen L, et al. Outcome of peroral endoscopic myotomy (POEM) in treatment naive patients. A systematic review. Scand J Gastroenterol. 2019;54(1):1-7.

Werner YB, Hakanson B, Martinek J, et al. Endoscopic or surgical myotomy in patients with idiopathic achalasia. N Engl J Med. 2019;381(23):2219-2229.

Mohan BP, Chandan S, Jha LK, et al. Clinical efficacy of gastric per-oral endoscopic myotomy (G-POEM) in the treatment of refractory gastroparesis and predictors of outcomes: A systematic review and meta-analysis using surgical pyloroplasty as a comparator group. Surg Endosc. 2019. Doi: 10.1007/s00464-019-07135-9.

Huang Z, Cui Y, Li Y, Chen M, Xing X. Peroral endoscopic myotomy for achalasia patients with prior Heller myotomy: A systematic review and meta-analysis. Gastrointest Endosc. 2020.

Mota RCL, de Moura EGH, de Moura DTH, et al. Risk factors for gastroesophageal reflux after POEM for achalasia: A systematic review and meta-analysis. Surg Endosc. 2020.

Khashab MA, Vela MF, Thosani N, et al. ASGE guideline on the management of achalasia. Gastrointest Endosc. 2020;91(2):213-227.e216

Bernardot L, Roman S, Barret M et al. Efficacy of per-oral endoscopic myotomy for the treatment of non-achalasia esophageal motor disorders. Surg Endosc. 2020; 34(12):5508-5515

Chandan S, Mohan BP, Chandan OC, et al. Clinical efficacy of per-oral endoscopic myotomy (POEM) for spastic esophageal disorders: a systematic review and meta-analysis. Surg Endosc. 2020; 34(2):707-718

Costantini A, Familiari P, Costantini M, et al. Poem versus laparoscopic Heller myotomy in the treatment of esophageal achalasia: A case-control study from two high volume centers using the propensity score. J Gastrointest Surg. 2020; 24(3):505-515

Zhong C, Tan S, Huang S, et al. Peroral endoscopic myotomy versus pneumatic dilation for achalasia: a systematic review and meta-analysis. Eur J Gastroenterol Hepatol. Nov 2020; 32(11): 1413-1421

Zhong C, Tan S, Huang S, et al. Clinical outcomes of peroral endoscopic myotomy for achalasia in children: a systematic review and meta-analysis. Dis Esophagus. Apr 07 2021; 34(4)

Podboy AJ, Hwang JH, Rivas H, et al. Long-term outcomes of per-oral endoscopic myotomy compared to laparoscopic Heller myotomy for achalasia: a single-center experience. Surg Endosc. Feb 2021; 35(2): 792-801

Dirks RC, Kohn GP, Slater B, et al. Is peroral endoscopic myotomy (POEM) more effective than pneumatic dilation and Heller myotomy? A systematic review and meta-analysis. Surg Endosc. May 2021; 35(5): 1949-1962

Kohn GP, Dirks RC, Ansari MT, et al. SAGES guidelines for the use of peroral endoscopic myotomy (POEM) for the treatment of achalasia. Surg Endosc. May 2021; 35(5): 1931-1948.

Nabi Z, Mandavdhare H, Akbar W, et al. Long-term outcome of peroral endoscopic myotomy in esophageal motility disorders: a systematic review and meta-analysis. J Clin Gastroenterol. 2023; 57(3):227-238.

Vespa E, Pellegatta G, Chandrasekar VT, et al. Long-term outcomes of peroral endoscopic myotomy for achalasia: a systematic review and meta-analysis. Endoscopy. 2023; 55(2):167-175.

Saleh CMG, Familiari P, Bastiaansen BAJ, et al. The Efficacy of Peroral Endoscopic Myotomy vs Pneumatic Dilation as Treatmentfor Patients With Achalasia Suffering From Persistent or Recurrent Symptoms After Laparoscopic Heller Myotomy: A Randomized Clinical Trial. Gastroenterology. Jun 2023; 164(7): 1108-1118.e3

Shally L, Saeed K, Berglund D, et al. Clinical and financial outcomes of per-oral endoscopic myotomy compared to laparoscopic heller myotomy for treatment of achalasia. Surg Endosc. Jul 2023; 37(7): 5526-5537

Bi YW, Lei X, Ru N, et al. Per-oral endoscopic myotomy is safe and effective for pediatric patients with achalasia: A long-term follow-up study. World J Gastroenterol. Jun 14 2023; 29(22): 3497-3507.

Canakis, A., et al., Long-term outcomes (3 years) after gastric peroral endoscopic myotomy for refractory gastroparesis: a systematic review and meta-analysis. iGIE, 2023. 2(3): p. 344-349.e3

This policy will be revised as necessary and reviewed no less than annually.

Devised: 5/21

Revised: 5/23 (add Eckardt score criteria)

Reviewed: 5/22; 5/24

## CMS UM Oversight Committee Approval: 12/23

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at https://www.geisinger.org/health-plan/providers/ghp-clinical-policies

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health

Plan, Geisinger Quality Options, Inc. described under this medical policy.	and Geisinger Indemnity Insurance C	ompany regarding the medical service	, medical device or medical lab test