

# **Peroral Endoscopic Procedures and Esophageal Manometry**

LOB(s): ⊠ Commercial	State(s): ⊠ Idaho ⊠ Montana ⊠ Oregon ⊠ Washington □ Other:	
Medicare		
🖾 Medicaid	🖾 Oregon 🔲 Washington	

## **Enterprise Policy**

PacificSource is committed to assessing and applying current regulatory standards, widely-used treatment guidelines, and evidenced-based clinical literature when developing clinical criteria for coverage determination. Each policy contains a list of sources (references) that serves as the summary of evidence used in the development and adoption of the criteria. The evidence was considered to ensure the criteria provide clinical benefits that promote patient safety and/or access to appropriate care. Each clinical policy is reviewed, updated as needed, and readopted, at least annually, to reflect changes in regulation, new evidence, and advancements in healthcare.

Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determinations are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.

## Background

Achalasia is a primary motor esophageal disorder, characterized by absence of relaxations of the lower esophageal sphincter and of peristalsis along the esophageal body. This results in impaired transition of the food into the stomach and the patient typically experiences dysphagia. Other symptoms reported are regurgitation of saliva or undigested food, respiratory symptoms (nocturnal cough, recurrent aspiration, and pneumonia), heartburn, and chest pain.

Peroral Endoscopic Myotomy (POEM) is an endoscopic procedure used to treat achalasia. The POEM procedure involves guiding an endoscope through the esophagus, making a series of small (incisions) at the base of esophagus. These incisions help relax stiff esophageal muscles and widen any narrowing in that location that is contributing to achalasia.

Gastroparesis is a chronic motility disorder defined as a functional disorder with objective delayed gastric emptying in the absence of a mechanical obstruction. The symptoms of gastroparesis include nausea, vomiting, early satiety, belching, bloating, and/or upper abdominal pain. Initial management of gastroparesis consists of dietary modification, optimization of glycemic control and hydration, and pharmacologic therapy with prokinetic and antiemetic medications.

Gastric Peroral Endoscopic Myotomy (G-POEM) is a less invasive alternative treatment of severe gastroparesis that is refractory to medical therapy in selected patients. G-POEM consists of creating a

prepyloric submucosal tunnel extending to the pylorus before dissecting circular and oblique muscle bundles, as per the peroral endoscopic myotomy.

High Resolution Esophageal pH Manometry is a diagnostic test that evaluated the condition of the esophagus by measuring the pressure in the esophagus while measuring the amount of stomach acid that flows into the esophagus.

## Criteria

#### Commercial

#### Prior authorization is required

#### I. Peroral Endoscopic Myotomy (POEM)

PacificSource considers the Peroral Endoscopic Myotomy (POEM) procedure medically necessary when **ALL** the following criteria is met:

- A. Diagnosis of esophageal achalasia type III (spastic) is established by ONE of the following:
  - **1.** Twenty percent (20%) or more of swallows have premature spastic contractions as indicated by esophageal manometry
  - **2.** Non-relaxing lower esophageal sphincter pressure (LES) indicated by both a barium esophagogram with fluoroscopy and esophageal manometry
- B. Failure of a previous treatment for achalasia (e.g., Botox, pneumatic dilation)
- C. None of the following contraindications are present:
  - 1. Severe erosive esophagitis
  - 2. Esophageal malignancy
  - 3. Recent esophageal surgery and endoscopic intervention
  - 4. Bleeding disorder, including coagulopathy
  - 5. Liver cirrhosis with portal hypertension

#### II. Gastric Peroral Endoscopic Myotomy (G-POEM)

PacificSource considers the Gastric Peroral Endoscopic Myotomy (G-POEM) procedure medically necessary when **ALL** the following criteria is met:

- A. Diagnosis of gastroparesis has been confirmed by a gastric emptying study (GES), where abnormal GES was defined as gastric retention greater than 60% at 2 hours and/or 10% at 4 hours after meal ingestion
- **B.** Symptom duration has been greater than 6 months
- **C.** Member has failed conservative treatment of gastroparesis, including dietary modification and a trial of at least one prokinetic agent at maximum dosage (e.g., domperidone, metoclopramide, or erythromycin)

#### III. High Resolution Esophageal pH Manometry

PacificSource considers High Resolution Esophageal pH Manometry medically necessary when **ALL** the following criteria is met:

- **A.** Member has dysphagia diagnosis (including symptoms of achalasia, rumination syndrome and PPI-refractory chest pain)
- B. Member is being evaluated for anti-reflux surgery

#### Medicaid

PacificSource Community Solutions follows an internal hierarchal process in the "*Clinical Criteria Used in UM Decisions*" policy, which includes reviewing each code to identify relevant guideline notes from the OHP Prioritized List of Health Services and Oregon Administrative Rules (OAR) for coverage of Peroral Endoscopic Myotomy (POEM).

PacificSource follows the *"Early and Periodic Screening, Diagnostic, and Treatment (EPSDT)"* criteria for members under 21 and Young Adults with Special Health Care Needs (YSHCN).

#### Medicare

PacificSource Medicare follows CMS guidelines and criteria. In the absence of CMS guidelines and criteria, PacificSource Medicare will follow internal policy for determination of coverage and medical necessity.

## Experimental/Investigational/Unproven

PacificSource considers the POEM procedure experimental/investigational and/or unproven for any other indications.

## **Coding Information**

- 43497 Lower esophageal myotomy, transoral (e.g., peroral endoscopic myotomy [POEM])
- 43499 Unlisted procedure, esophagus
- 91299 Unlisted diagnostic gastroenterology procedure

## **Definitions**

- Achalasia an esophageal motility disorder characterized by esophageal aperistalsis and lack of coordinated lower esophageal sphincter (LES) relaxation in response to swallowing.
- Aperistalsis failure of the normal waves of contraction and relaxation that move contents through the digestive tract.
- **Esophageal manometry** This test measures the pressures and the pattern of muscle contractions in the esophagus and the lower esophageal sphincter.
- **Gastroparesis -** chronic motility disorder defined as a functional disorder with objective delayed gastric emptying in the absence of a mechanical obstruction

**Pneumatic dilation** - An endoscopic therapy for achalasia. An air-filled cylinder-shaped balloon disrupts the muscle fibers of the lower esophageal sphincter.

## References

Aiolfi, A., Bona, D., Riva, C. G., Micheletto, G., Rausa, E., Campanelli, G., Olmo, G., Bonitta, G., & Bonavina, L. (2020). Systematic Review and Bayesian Network Meta-Analysis Comparing Laparoscopic Heller Myotomy, Pneumatic Dilatation, and Peroral Endoscopic Myotomy for Esophageal Achalasia. *Journal of laparoendoscopic & advanced surgical techniques. Part A*, *30*(2), 147–155. https://doi.org/10.1089/lap.2019.0432.

Cappell, M. S., Stavropoulos, S. N., & Friedel, D. (2020). Updated Systematic Review of Achalasia, with a Focus on POEM Therapy. *Digestive diseases and sciences*, *65*(1), 38–65. <u>https://doi.org/10.1007/s10620-019-05784-3</u>.

Grover, M., Farrugia, G., & Stanghellini, V. (2019). Gastroparesis: a turning point in understanding and treatment. Gut, 68(12), 2238–2250. <u>https://doi.org/10.1136/gutjnl-2019-318712</u>

Hayes Comparative Effectiveness Review of Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia, Winifred S. Hayes Inc., Updated March 7, 2023. <u>https://evidence.hayesinc.com/report/dir.peroral3346</u>

Horton, A., Jawitz, N., & Patel, A. (2021). The Clinical Utility of Provocative Maneuvers at Esophageal High-resolution Manometry (HRM). Journal of clinical gastroenterology, 55(2), 95–102. https://doi.org/10.1097/MCG.00000000001466

Issa, D., Benias, P. C., & Carr-Locke, D. L. (2021). Achalasia and gastroparesis: Coexisting entities or consequence of therapy?. Endoscopy international open, 9(8), E1222–E1226. https://doi.org/10.1055/a-1492-2487

Kahrilas, P. J., Katzka, D., & Richter, J. E. (2017). Clinical Practice Update: The Use of Per-Oral Endoscopic Myotomy in Achalasia: Expert Review and Best Practice Advice From the AGA Institute. Gastroenterology, 153(5), 1205–1211. <u>https://doi.org/10.1053/j.gastro.2017.10.001</u>

Lembo, A., & Robson, K. (2023, July 26). Overview of gastrointestinal motility testing. UpToDate. https://www.uptodate.com/contents/overview-of-gastrointestinal-motility-testing

Meara M, Perry K, Hazey J. Economic impact of per oral endoscopic myotomy versus laparoscopic Heller myotomy and endoscopic pneumatic dilation. 2019. Available at: <u>https://www.sages.org/meetings/annual-meeting/abstracts-archive/economic-impact-of-per-oral-endoscopic-myotomy-versus-laparoscopic-heller-myotomy-and-endoscopic-pneumatic-dilation/</u>

Oregon Administrative Rules (OARs). Oregon Health Authority. Health Systems: Medical Assistance Programs – Chapter 410

https://secure.sos.state.or.us/oard/displayChapterRules.action?selectedChapter=87 P

Rey, E., Choung, R. S., Schleck, C. D., Zinsmeister, A. R., Talley, N. J., & Locke, G. R., 3rd (2012). Prevalence of hidden gastroparesis in the community: the gastroparesis "iceberg". Journal of neurogastroenterology and motility, 18(1), 34–42. <u>https://doi.org/10.5056/jnm.2012.18.1.34</u>

Rogers, B. D., & Gyawali, C. P. (2020). Enhancing High-Resolution Esophageal Manometry: Use of Ancillary Techniques and Maneuvers. *Gastroenterology clinics of North America*, *49*(3), 411–426. <u>https://doi.org/10.1016/j.gtc.2020.04.001</u> Sawyer MA, Achalasia Imaging. Medscape, May 16, 2022. https://emedicine.medscape.com/article/363551-overview

Stapleton, J., & Wo, J. M. (2009). Current treatment of nausea and vomiting associated with gastroparesis: antiemetics, prokinetics, tricyclics. Gastrointestinal endoscopy clinics of North America, 19(1), 57–vi. <u>https://doi.org/10.1016/j.giec.2008.12.008</u>

The Health Evidence Review Commission (HERC) Prioritized List of Health Services https://www.oregon.gov/oha/HSD/OHP/Pages/Prioritized-List.aspx

Vosoughi, K., Ichkhanian, Y., Benias, P., Miller, L., Aadam, A. A., Triggs, J. R., Law, R., Hasler, W., Bowers, N., Chaves, D., Ponte-Neto, A. M., Draganov, P., Yang, D., El Halabi, M., Sanaei, O., Brewer Gutierrez, O. I., Bulat, R. S., Pandolfino, J., & Khashab, M. (2022). Gastric per-oral endoscopic myotomy (G-POEM) for refractory gastroparesis: results from an international prospective trial. Gut, 71(1), 25–33. <u>https://doi.org/10.1136/gutjnl-2020-322756</u>

Yadlapati R. (2017). High-resolution esophageal manometry: interpretation in clinical practice. Current opinion in gastroenterology, 33(4), 301–309. <u>https://doi.org/10.1097/MOG.00000000000369</u>

Zaninotto G, Bennett C, Boeckxstaens G, et al. The 2018 ISDE achalasia guidelines. *Dis Esophagus.* 2018; 31(9). Available at: <u>https://academic.oup.com/dote/article/31/9/doy071/5087687</u>.

## Appendix

Policy Number:		
Effective: 6/1/2020	Next review: 3/1/2026	
Policy type: Enterprise		
Author(s):		
Depts: Health Services		
Applicable regulation(s): OARs 410-120-1200, 410-141-3820, 410-141-3825, 410-151-0001, 410-151-0002, 410-151-0003.		
Commercial OPs: 3/2025		
Government OPs: 3/2025		