HAP CareSource™

MEDICAL POLICY STATEMENT
Michigan Coordinated Health

Policy Name & Number	Date Effective
Peroral Endoscopic Myotomy-MI Coordinated Health-MM-1825	09/01/2026
Policy Type	
MEDICAL	

Medical Policy Statements are developed from a review of the available evidence-based, clinical information based on and supported by clinical guidelines from medical specialties, peer-reviewed medical and scientific studies, nationally recognized utilization and technology assessment guidelines, and other medical management industry standards to aid in determining the medical necessity of a service. Medically necessary services are defined in the plan-specific Evidence of Coverage, Member Handbooks, Provider Manuals, Medical Policy Statements, and/or other plan policies and procedures.

Medical Policy Statements do not guarantee an authorization or payment of services. Please refer to the plan contract (e.g., Evidence of Coverage, Member Handbook) for the service(s) referenced in the Medical Policy Statement. Except as otherwise required by law, if there is a conflict between the Medical Policy Statement and the plan contract and/or provider agreement, then the plan contract and/or provider agreement will be the controlling document. Reasonable discretion may be used in interpreting and applying this Policy Statement to services provided in a particular case, and the policy may be modified at any time. Medical Policy Statements may be superseded by federal and state laws and regulations, as applicable. In the case of a discrepancy between the Policy Statement's effective date and any applicable legal or regulatory requirement, the law or regulation will govern.

Coverage for mental health and substance use disorder (MH/SUD) benefits are provided at the same level as coverage for medical and surgical (M/S) benefits, as required by the Mental Health Parity and Addiction Equity Act (MHPAEA). MH/SUD benefits are not subject to limits or requirements that are more restrictive than those that apply to M/S benefits.

Table of Contents

A. Subject

Peroral Endoscopic Myotomy

B. Background

Achalasia is a rare motility disorder that results from the degeneration of ganglion cells in the wall of the esophagus leading to failed relaxation of the lower esophageal sphincter and loss of esophageal peristalsis; the cause is unknown. As the sphincter becomes paralyzed and dilated over time, difficulty may occur passing food and liquid to the stomach. Symptoms include chest pain, heart burn, and difficulty belching. Potential complications are progressive dilation of the esophagus and increased risk of esophageal cancer. Although achalasia cannot be cured, symptoms may be controlled with treatment such as oral medications, dilation or stretching of the esophagus, open or laparoscopic surgery, endoscopic surgery, or injection of muscle-relaxing medicines (such as botulinum toxin) directly into the esophagus.

While laparoscopic Heller myotomy (LHM) is the most common surgical procedure for the treatment of achalasia, peroral endoscopic myotomy (POEM) is a newer, less invasive surgical alternative. The POEM procedure is performed through a submucosal tunnel layer of the esophagus and proximal stomach endoscopically without the need for incisions in the chest or abdomen. Since POEM does not require external incisions, this approach aims to reduce procedure-related pain and return patients to regular activities sooner than surgical modalities.

A review of clinical data suggests that the overall efficacy of POEM is similar to surgical myotomy and better than pneumatic dilation. However, patients who undergo POEM show an increased risk of gastroesophageal reflux disease (GERD) and erosive esophagitis which should be discussed.

C. Definitions

- **Achalasia** – A rare disorder making it difficult for food and liquid to pass from the esophagus to the stomach. In achalasia, nerve cells in the esophagus degenerate and as a result, the lower end of the esophagus, the lower esophageal sphincter (LES), fails to open to allow food into the stomach, leading to complications such as coughing, choking, aspiration pneumonia, ulceration, and weight loss. There are three different types of achalasia:
  - **Type I (Classic Achalasia)** – Characterized by minimal esophageal pressurization, this type is associated with the incomplete relaxation of the LES, a lack of mobility in terms of contraction and relaxation, and a small amount of pressure built up in the esophagus.
  - **Type II (Panesophageal Pressurization)** – Indicated by esophageal compression, this type is more severe with more massive compression in the esophagus, often caused by the failure to relax and the build-up of pressure in the esophagus, typically from food.
  - **Type III (Spastic Achalasia)** –Characterized by spasms that result in sudden, abnormal squeezing of the esophagus and the LES, this type of achalasia is the most severe and can also elicit the most serious symptoms (eg, chest pains that

may mimic those of a heart attack and spasms that can wake a person from sleep).

- **Eckardt Score** –Standardized, scored assessment to evaluate symptoms, stages, and efficacy of achalasia treatment. It attributes points (0 to 3 points) for 4 symptoms of the disease (dysphagia, regurgitation, chest pain, and weight loss), with scores ranging from 0 to 12.
- **Gastroesophageal Reflux Disease (GERD)** – A chronic disorder that occurs when stomach bile or acid flows into the esophagus and irritates the lining.
- **Laparoscopic Heller Myotomy (LHM)** – A minimally invasive, surgical procedure performed laparoscopically to treat achalasia. It involves making cuts in the opening of the lower esophageal sphincter (LES) to allow food to pass more easily..
- **Pneumatic Balloon Dilation (PD)** – An endoscopic therapy for achalasia. An air-filled cylinder-shaped balloon disrupts the muscle fibers of the lower esophageal sphincter, which is too tight in patients with achalasia.

D. Policy

I. HAP CareSource considers the POEM procedure to be medically necessary when **ALL** the following clinical criteria are met:
   A. Member has a diagnosis of primary achalasia, type I, II, or III.
   B. POEM is being proposed after the member has tried and failed conventional therapy, including pneumatic dilation or is not a surgical candidate for Heller myotomy.
   C. Member has an Eckardt score of greater than or equal to 3.
   D. Member has no history of previous open surgery of the stomach or esophagus.

II. Request for members 18 years or younger will undergo individualized medical necessity review based on disease severity and available evidence.

III. POEM for any other indication is considered experimental, investigational, and unproven.

IV. The following conditions may represent contraindications and, if present, warrant individualized clinical assessment:
   A. severe erosive esophagitis
   B. significant coagulation disorders
   C. liver cirrhosis with portal hypertension
   D. severe pulmonary disease
   E. esophageal malignancy
   F. prior therapy that may compromise the integrity of the esophageal mucosa or lead to submucosal fibrosis, including recent esophageal surgery, radiation, endoscopic mucosal resection, or radiofrequency ablation

V. Previous therapies for achalasia (eg, PD, botulinum toxin injection, or LHM) are not contraindications to POEM.

VI. Members receiving POEM should be made aware there is a high risk in developing GERD and should be advised as such prior to undergoing the procedure.

E. Summary of Evidence

Dimopoulou A, et al. (2024) systematically reviewed studies to compare the efficacy of laparoscopic Heller myotomy (LHM) to POEM in children with achalasia. In 32 studies with 800 total children, (using a random-effects model) the pre- and post-operative Eckardt score difference was 4.387 (95% CI, 3.799-4.974) with a mean LES pressure difference of 3.63 mmHg (95% CI, 2.247-3.879). Operation duration was 130.15 min (95% CI, 62.59-197.71) for LHM and 83.64 min (95% CI, 55.14-112.14) for POEM. The pooled length of hospital stay was 3.4 days (95% CI, 2.6-4.44), which was comparable for LHM and POEM.

Zhong C, et al. (2022) systematically reviewed studies evaluating outcomes for POEM in geriatric patients from 2009 to 2020. In this review, 7 studies with 469 total geriatric patients had a pooled success of 98.1% (95% confidence interval [CI], 95.1-99.3%) with a pooled clinical success of 92.5% (95% CI, 89.3-94.8%). The Eckardt score decreased by 6.09 points (95% CI, 5.44-6.74, p<0.000001) and lower esophageal sphincter (LES) was significantly reduced by 13.53 mmHg (95% CI, 5.14-21.91, p=0.002). The pooled adverse events rate was 9% (95% CI, 4.3-17.9%), and the post-POEM clinical reflux rate was 17.4% (95% CI, 12.9-23.2%).

Huang Z et al. (2021) systematically reviewed studies until 2020 for efficacy and safety of POEM in treating achalasia in patients with prior Heller myotomy. There were 9 studies for a total of 272 achalasia patients where POEM was successfully performed in 270 patients (99.3%) after prior Heller myotomy. Clinical success was achieved in 90% (95% CI, 83.1%-96.8%) of patients, with Eckardt scores lowered by 5.14 (95% CI, 4.19-6.09), lowered LES pressure by 12.01 mmHg (95% CI, 6.74-17.27), and integrated relaxation pressure (IRP) lowered by 10.02 mmHg (95% CI, 4.95-15.09). Pooled rates for presence of postoperative GERD showed that symptomatic GERD was 36.9% (95% CI, 20.7-53.1%), endoscopy was 33% (95% CI, 9.6-56.4%), and pH monitoring was 47.8% (95% CI, 33.4-62.2%).

Kohn GP, et al. (2021) released guidelines from the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) to support decision-making regarding the use of POEM for treatment of achalasia. There were 4 major recommendations that applied to adults and children with achalasia: (1) Adult and pediatric patients with type I and II achalasia may be treated with either POEM or (LHM based on surgeon and patient's shared decision-making, (2) POEM is recommended over LHM for type III adult or pediatric achalasia, (3) POEM is recommended over pneumatic dilation for achalasia, and (4) with joint patient and surgeon decision-making, either POEM or pneumatic dilation can be used to treat achalasia for patients who are concerned with continued use of proton pump inhibitors post-operatively.

Tan S et al. (2021) systematically reviewed studies to 2019 for the efficacy and safety of POEM to treat achalasia in patients with a failed previous intervention. A total of 15

studies with 2,276 achalasia patients had a pooled rescue POEM technical success of 1.00 (95% CI, 0.98-1.01), clinical success of 0.98 (95% CI, 0.92-1.04), and adverse events of 1.17 (95% CI, 0.78-1.76). There was an overall significant reduction in pre- and post-Eckardt score (mean difference, 5.77, p<0.001) and LES pressure (mean difference, 18.3 mmHg, p<0.001) for achalasia patients with failed previous intervention after POEM.

Khashab MA, et al. (2020) published guidelines from the American Society for Gastrointestinal Endoscopy to provide recommendations for the treatment of achalasia based on an assessment of the individual and comparative effectiveness, adverse effects, and cost of 4 therapies, including POEM, botulinum toxin injection, pneumatic dilation, and Heller myotomy. Pneumatic dilation and LHM are effective and established treatment options in the management of achalasia. Short-term outcomes for POEM are at least equivalent to LHM, although the risk of GERD could be higher. Severe adverse events are rare when POEM is performed by experienced surgeons. Vaezi MF, et al. (2020) published clinical guidelines from the American College of Gastroenterology on the diagnosis and management of achalasia. Tailored POEM or LHM was recommended for type III achalasia as more efficacious disruptive therapy of the LES compared with pneumatic dilation. POEM compared with LHM with fundoplication or pneumatic dilation is associated with a higher incidence of GERD. POEM and pneumatic dilation have comparable symptomatic improvement in patients with type I or II achalasia. POEM and LHM result in comparable symptomatic improvement in patients with achalasia. POEM is a safe option in patients who have previously undergone pneumatic dilation or LHM.

Khashab MA et al. (2017) conducted a retrospective single center review of 52 consecutive POEM and RHM patients to compare inpatient charges incurred in patients for treatment of achalasia. There were no significant differences between POEM and RHM for rate of adverse events or length of stay. POEM patients had a similar clinical response rate to RHM. The POEM group incurred significantly less total charges compared to RHM due to the procedure itself as well as for the inpatient hospital stay.

F. Conditions of Coverage

NA

G. Related Policies/Rules

NA

H. Review/Revision History

	DATE	ACTION
Date Issued	07/30/2025	New policy. Approved at Committee.
Date Revised	06/17/2026	Annual review, updated background, definitions, and sections D. II. and D. IV., updated references. Approved at Committee.
Date Effective	09/01/2026	
Date Archived		

I. References

1. 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*. 2020;30(2):147-155. doi:10.1089/lap.2019.0432
2. Dimooulou A, Dimopoulou D, Analitis A, et al. Laparoscopic Heller myotomy versus peroral endoscopic myotomy in children with esophageal achalasia: a systematic review and meta-analysis. *Ann Gastroenterol*. 2024;37(6):655-664. doi:10.20524/aog.2024.0923
3. Familiari P, de Andreis FB, Landi R, et al. Long versus short peroral endoscopic myotomy for the treatment of achalasia: results of a non-inferiority randomized controlled trial. *Gut*. 2023;72(8):1442-1450. doi:10.1136/gutjnl-2021-325579
4. Health Technology Assessment: Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia. Hayes; 2023. Reviewed March 7, 2023. Accessed May 15, 2026. www.evidence.hayesinc.com
5. Huang Z, Li Y, Chen M, et al. Peroral endoscopic myotomy for achalasia patients with prior Heller myotomy: a systematic review and meta-analysis. *Gastrointest Endosc*. 2021;93(1):47-56. doi:10.1016/j.gie.2020.05.056
6. Khashab MA, Vela MF, Thosani N, et al. ASGE guideline on the management of achalasia. *Gastrointest Endos*. 2020;91(2):213-227. doi:10.1016/j.gie.2019.04.231
7. Khashab MA, Kumbhari V, Tieu AH, et al. Peroral endoscopic myotomy achieves similar clinical response but incurs lesser charges compared to robotic Heller myotomy. *Saudi J Gastroenterol*. 2017;23(2):91-96. doi:10.4103/1319-3767.203360
8. 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*. 2021;35(5):1931-1948. doi:10.1007/s00464-020-08282-0
9. Meng F, Li P, Wang Y, et al. Peroral endoscopic myotomy compared with pneumatic dilation for newly diagnosed achalasia. *Surg Endosc*. 2017;31(11):4665-4672. doi:10.1007/s00464-017-5530-0
10. Patel DA, Lappas BM, Vaezi MF. An overview of achalasia and its subtypes. *Gastroentero Hepatol*. 2017;13(7):411-421. Accessed May 15, 2026. www.ncbi.nlm.nih.gov
11. Schneider AM, Louie BE, Warren HF, et al. A matched comparison of per oral endoscopic myotomy to laparoscopic Heller myotomy in the treatment of achalasia. *J Gastrointest Surg*. 2016;20(11):1789-1796. doi:10.1093/dote/doad055
12. Spechler SJ. Achalasia: pathogenesis, clinical manifestations, and diagnosis. UpToDate. Updated July 3, 2024. Accessed May 15, 2026. www.uptodate.com
13. Tan S, Zhong C, Ren Y, et al. Efficacy and safety of peroral endoscopic myotomy in achalasia patients with failed previous intervention: a systematic review and meta-analysis. *Gut Liver*. 2021;15(2):153-167. doi:10.5009/gnl19234
14. Vaezi MF, Pandolfino JE, Yadlapati RH, et al. ACG clinical guidelines: diagnosis and management of alchalasia. *Am J Gastroentero.* 2020;115(9):1393-1411. doi:10.14309/ajg.0000000000000731
15. 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. doi:10.1055/a-1894-0147

16. Zhong C, Huang S, Xia H, et al. Role of peroral endoscopic myotomy in geriatric patients with achalasia: a systematic review and meta-analysis. *Dig Dis*. 2022;40(1):106-114. doi:10.1159/000516024