

MEDICAL POLICY STATEMENT

Michigan Coordinated Health

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

Medical Policy Statements are derived from literature based on and supported by clinical guidelines, nationally recognized utilization and technology assessment guidelines, other medical management industry standards, and published MCO clinical policy guidelines. Medically necessary services include, but are not limited to, those health care services or supplies that are proper and necessary for the diagnosis or treatment of disease, illness, or injury and without which the patient can be expected to suffer prolonged, increased, or new morbidity, impairment of function, dysfunction of a body organ or part, or significant pain and discomfort. These services meet the standards of good medical practice in the local area, are the lowest cost alternative, and are not provided mainly for the convenience of the member or provider. Medically necessary services also include those services defined in any Evidence of Coverage or Certificate of Coverage documents, Medical Policy Statements, Provider Manuals, Member Handbooks, and/or other plan policies and procedures.

Medical Policy Statements do not ensure an authorization or payment of services. Please refer to the plan contract (often referred to as the Evidence of Coverage or Certificate of Coverage) 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, then the plan contract will be the controlling document used to make the determination.

According to the rules of Mental Health Parity Addiction Equity Act (MHPAEA), coverage for the diagnosis and treatment of a behavioral health disorder will not be subject to any limitations that are less favorable than the limitations that apply to medical conditions as covered under this policy.

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A. Subject**Peroral Endoscopic Myotomy****B. Background**

Achalasia (ie, failure to relax) is a rare esophageal disorder that affects about 1 in every 100,000 people and is usually associated with difficulty swallowing. Most people are diagnosed between the ages of 25 and 60 years. Achalasia occurs when nerves in the esophagus become damaged. As a result, the esophagus becomes paralyzed and dilated over time and eventually loses the ability to squeeze food down into the stomach. Although the condition cannot be cured, the symptoms can usually be controlled with treatment. Treatments for achalasia include oral medications, dilation or stretching of the esophagus, surgery (open and laparoscopic), endoscopic surgery, and injection of muscle-relaxing medicines (botulinum toxin) directly into the esophagus.

Peroral endoscopic myotomy (POEM) is a procedure developed in Japan that is performed with the patient under general anesthesia. Studies suggest that POEM can achieve results comparable to or even better than those of pneumatic balloon dilation and laparoscopic Heller myotomy with similar safety. However, POEM is a newer procedure, and long-term outcome data is limited.

POEM is a form of natural orifice transluminal endoscopic surgery. The procedure is performed perorally, without any incisions in the chest or abdomen. The advantage of this approach is to reduce procedure-related pain and return patients to regular activities sooner than surgeries requiring external incisions.

C. Definitions

- **Achalasia** – A rare disorder making it difficult for food and liquid to pass from the swallowing tube connecting the mouth and stomach. In achalasia, nerve cells in the esophagus degenerate. 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 achalasia types:
 - **Type I** – 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** – 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** – With 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 Symptom Score** – 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), 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 used to treat achalasia.
- **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. The member has a diagnosis of primary achalasia, types 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. Eckardt symptom score is greater than or equal to 3.
 - D. There is no history of previous open surgery of the stomach or esophagus.
- II. Members 18 years or younger should be reviewed for medical necessity.
- III. POEM for any other indication is considered experimental, investigational, and unproven.
- IV. Contraindications for this procedure are as follows:
 - 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 will need to be advised of management considerations prior to undergoing the procedure.

The MEDICAL Policy Statement detailed above has received due consideration as defined in the MEDICAL Policy Statement Policy and is approved.

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 up until 2020 for efficacy and safety of POEM in treating achalasia for 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 laparoscopic Heller myotomy (LHM) based on surgeon and patient's shared decision-making, (2) POEM is recommended over laparoscopic Heller myotomy 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

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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.

Khasab 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 laparoscopic Heller myotomy (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 lower esophageal sphincter (LES) compared with pneumatic dilation. POEM compared with LHM with fundoplication or pneumatic dilation is associated with a higher incidence of GERD. POEM or 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.

Khasab MA et al. (2016) conducted a retrospective single center review of 52 consecutive POEM and robotic Heller myotomy (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		
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