

NO. 91616

PERORAL ENDOSCOPIC MYOTOMY (POEM)

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Policy scope: This policy outlines the medical necessity criteria for peroral endoscopic myotomy (POEM), including Zenker's peroral endoscopic myotomy (Z-POEM) for the treatment for esophageal achalasia, Zenker's diverticulum, and select non-achalasia esophageal motility disorders.

Related policies:

- Gastroparesis Testing and Treatment No. 91572

I. MEDICAL NECESSITY CRITERIA

Inclusions:

A. Esophageal Achalasia

Peroral endoscopic myotomy (POEM) for esophageal achalasia may be considered medically necessary when **all** of the following criteria are met:

1. **Confirmed diagnosis of esophageal achalasia**, demonstrated by:
 - a. Esophageal high-resolution manometry demonstrating findings consistent with achalasia per the Chicago Classification; **and**

- b. Supporting diagnostic evaluation as clinically appropriate (e.g., timed barium esophagram and/or upper endoscopy).
- 2. **One of the following clinical indications:**
 - a. Primary esophageal achalasia (Type I, II, or III)
 - b. Failure of, contraindication to, or intolerance of prior achalasia treatment, including but not limited to Heller myotomy, pneumatic dilation, or botulinum toxin injection.

B. Zenker's Diverticulum

Zenker's peroral endoscopic myotomy (Z-POEM) may be considered medically necessary for the treatment of symptomatic Zenker's diverticulum (ZD) when **any** of the following criteria are met:

1. The member has symptomatic ZD, including but not limited to dysphagia, regurgitation, weight loss, cough, aspiration, hoarseness; **or**
2. The member has recurrent or persistent symptoms following a prior endoscopic or surgical septotomy; **or**
3. The member has anatomic features favoring a complete cricopharyngeal myotomy, where conventional septotomy may be incomplete or technically limited; **or**
4. The member has moderate-to-large Zenker's diverticula, where durable symptom relief may require complete myotomy; **or**
5. The member is a poor candidate for rigid stapled diverticulectomy, including but not limited to: limited neck extension, restricted oral opening, short diverticulum length, or significant medical comorbidities.

C. Non-Achalasia Spastic Motility Disorders

POEM for select non-achalasia spastic motility disorders (including esophagogastric outflow obstruction (EGJOO), (e.g., distal esophageal spasm (DES); formerly diffuse esophageal spasm) and hypercontractile esophagus) may be considered on an individual case-by-case basis when **all** of the following are met:

1. Completion of a comprehensive diagnostic evaluation with symptom correlation, including:
 - a. Confirmatory physiologic and functional esophageal testing (e.g., impedance planimetry (FLIP), timed barium esophagram, and pH study); and
 - b. Exclusion of alternative or contributing causes (e.g., obesity, obstructive hiatal hernia, gastroesophageal reflux disease (GERD), external compression, sub-mucosal masses, medications (e.g., opioids).
2. Failure of first-line, less invasive therapies including:
 - a. Medical therapy (e.g., antispasmodic agents, antihypertensive agents, antidepressants)
 - b. Botulinum toxin injections; and
 - c. Endoscopic dilation

Limitations / Special Considerations:

- A. The following conditions may increase procedural complexity and will be evaluated on an individual case-by-case basis, but do not, by themselves, preclude medical necessity:
 1. Prior esophageal or gastric surgery (e.g., fundoplication, bariatric surgery, or other foregut operations)
 2. Prior endoscopic interventions (Endoscopic Mucosal Resection (EMR), Endoscopic Submucosal Dissection (ESD), prior POEM)
 3. History of esophageal irradiation

Exclusions:

- A. POEM is **not** considered medically necessary when **any** of the following apply:
 1. Esophageal malignancy or suspicion for pseudoachalasia due to malignancy.
 2. Untreated or unstable bleeding disorder, including clinically significant coagulopathy.
 3. Inability to tolerate general anesthesia
 4. Severe medical comorbidities (e.g., severe pulmonary disease) that preclude endoscopic or surgical intervention.

Not Medically Necessary as Considered Experimental and Investigational:

- A. Peroral endoscopic myotomy (POEM) is unproven and not medically necessary for **all** other indications due to insufficient evidence of efficacy.

II. CENTERS FOR MEDICARE & MEDICAID SERVICES (CMS) COVERAGE DETERMINATION

Any applicable federal or state mandates will take precedence over this medical coverage policy.

Medicare: Refer to the [CMS Online Manual System \(IOMs\)](#) and Transmittals.

For the most current applicable CMS National Coverage Determination (NCD)/Local Coverage Determination (LCD)/Local Coverage Article (LCA) refer to [CMS Medicare Coverage Database](#).

The information below is current as of the review date for this policy. However, the coverage issues and policies maintained by CMS are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. MAC jurisdiction for purposes of local coverage determinations is governed by the geographic service area where the Medicare Advantage plan is contracted to provide the service. Please refer to the Medicare [Coverage Database website](#) for the most current applicable NCD, LCD, LCA, and CMS Online Manual System/Transmittals.

National Coverage Determinations (NCDs)	
NCD - Esophageal Manometry (100.4)	
Local Coverage Determinations (LCDs)	
CGS Administrators, LLC	Not Identified
First Coast Service Options, Inc.	Not Identified
National Government Services, Inc.	Not Identified
Noridian Healthcare Solutions	Not Identified
Novitas Solutions, Inc.	Not Identified

Palmetto GBA	LCD - Peroral Endoscopic Myotomy (POEM) (L38747)
WPS Insurance Corporation	Not Identified

III. BACKGROUND

Esophageal Achalasia

Esophageal achalasia (EA) is a rare primary esophageal motility disorder of unknown etiology that is characterized by impaired relaxation of the esophagogastric junction (EGJ) and absence of normal esophageal peristalsis, resulting in functional esophageal outflow obstruction. Common clinical manifestations include progressive dysphagia to solids and liquids, regurgitation, weight loss, chest pain, and aspiration-related symptoms. Because symptoms may overlap with gastroesophageal reflux disease (GERD), achalasia is frequently misdiagnosed in early stages, potentially delaying definitive treatment (Vaezi et al., 2020).

The diagnosis of achalasia relies on physiologic testing, with esophageal high-resolution manometry (HRM) recognized as the diagnostic gold standard. HRM findings are interpreted using the Chicago Classification, which provides a standardized framework for defining esophageal motility disorders. The most recent iteration, Chicago Classification version 4.0 (CCv4.0), defines achalasia by impaired EGJ relaxation accompanied by 100% absent peristalsis, manifested as failed or premature contractions on all evaluated swallows (Yadlapati et al., 2021). Supportive diagnostic modalities, including timed barium esophagram and upper endoscopy, are commonly used to assess esophageal emptying and to exclude pseudoachalasia due to malignancy (Vaezi et al., 2020; Khashab et al., 2020).

Under Chicago Classification version 4.0 (CCv4.0), achalasia is subdivided into three manometric subtypes based on esophageal pressurization patterns. Type I achalasia is characterized by abnormal median integrated relaxation pressure (IRP) with absent contractility, defined as 100% failed peristalsis. Type II achalasia is defined by an abnormal median IRP with absent contractility (100% failed peristalsis) with panesophageal pressurization present in at least 20% or more swallows. Type III achalasia is characterized by an abnormal median IRP and evidence of spasm, defined as 20% or more swallows with premature contraction and absence of normal peristalsis. Achalasia subtype has important therapeutic implications and is routinely considered in treatment selection (Yadlapati et al., 2021; Vaezi et al., 2020).

Peroral endoscopic myotomy (POEM) is a minimally invasive natural orifice transluminal endoscopic surgery (NOTES) procedure developed to provide definitive therapeutic myotomy of the lower esophageal sphincter. The procedure involves creation of a submucosal tunnel within the esophagus, performance of a targeted myotomy extending across the EGJ, and subsequent closure of the mucosal entry site. POEM is performed under general anesthesia in a sterile endoscopic environment. Although individual technical approaches may vary, the procedure generally follows four standardized steps including mucosal incision (mucosotomy), submucosal tunnel formation, selective myotomy, and mucosal closure (Puli et al., 2023).

Evidence from randomized controlled trials, systematic reviews, and long-term observational studies demonstrates that POEM provides symptom relief and physiologic

improvement comparable to laparoscopic Heller myotomy (LHM) and superior outcomes compared with pneumatic dilation in appropriately selected patients. Outcomes are influenced by achalasia subtype, with particularly favorable results observed in type III achalasia due to the ability to perform longer and more tailored myotomy endoscopically (Khashab et al., 2020; Dirks et al., 2021; de Moura et al., 2022).

Despite its established efficacy, certain technical aspects of POEM, including optimal myotomy length, remain variably defined. A recent systematic review and meta-analysis reported a pooled mean total myotomy length of approximately 10.4 cm, with longer myotomies more commonly employed in type III achalasia compared with non-spastic subtypes. Significant heterogeneity and inconsistent definitions of myotomy length were noted, supporting an individualized, subtype-based approach rather than uniform technical requirements (Vespa et al., 2024).

Current U.S. and international society guidelines recognize POEM as an established definitive treatment option for esophageal achalasia. The American College of Gastroenterology (ACG) and the American Society for Gastrointestinal Endoscopy (ASGE) endorse POEM as an effective alternative to surgical myotomy with comparable efficacy and acceptable safety (Vaezi et al., 2020; Khashab et al., 2020). The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) 2024 guideline recommends POEM or laparoscopic Heller myotomy with fundoplication for type I and II achalasia and identifies POEM as the preferred intervention for type III achalasia (Calabrese et al., 2025).

The American Gastroenterological Association (AGA) Clinical Practice Update (2024) similarly affirms that POEM, LHM, and pneumatic dilation are all effective definitive therapies for achalasia, with treatment decisions guided by achalasia subtype, patient characteristics, and local expertise. POEM is identified as the preferred therapy for type III achalasia and an appropriate first-line option for types I and II achalasia within a shared decision-making framework (Yang et al., 2024).

Non-Achalasia Spastic Esophageal Motility Disorders

While peroral endoscopic myotomy (POEM) has been evaluated in select non-achalasia spastic esophageal motility disorders, including diffuse esophageal spasm and hypercontractile (jackhammer) esophagus, the evidence base remains limited and less robust than that supporting its use in achalasia. A systematic review and meta-analysis of predominantly observational studies reported high short-term clinical success rates following POEM in patients with spastic esophageal disorders; however, outcomes were derived from small, heterogeneous cohorts, with limited long-term follow-up and substantial variability in diagnostic criteria and outcome measures (Chandan et al., 2020).

Long-term outcome data suggest that POEM provides durable symptom improvement for achalasia; however, success rates are consistently lower among non-achalasia esophageal motility disorders, including esophagogastric junction outflow obstruction, distal esophageal spasm, and hypercontractile esophagus. In a large systematic review and meta-analysis evaluating mid- and long-term outcomes, pooled clinical success in non-achalasia disorders was 77%, compared with higher rates observed in achalasia, and clinically significant post-procedural gastroesophageal reflux was common, including erosive esophagitis in approximately one-quarter of patients (Nabi et al., 2023).

More recently, an updated systematic review and meta-analysis evaluating POEM for non-achalasia esophageal dysmotility disorders reported pooled clinical success rates approaching 87%, with higher response rates observed in distal esophageal spasm and esophagogastric junction outflow obstruction compared with hypercontractile esophagus. Despite these findings, the analysis relied exclusively on nonrandomized observational studies, demonstrated significant heterogeneity, and identified clinically relevant adverse outcomes, including new-onset gastroesophageal reflux symptoms, underscoring ongoing evidence limitations and the need for further high-quality studies (Puri et al., 2024).

Consistent with this evidence profile, the American Gastroenterological Association (AGA) Clinical Practice Update (2024) emphasizes that POEM for non-achalasia motility disorders should be considered only on a case-by-case basis, following comprehensive physiologic evaluation, correlation of symptoms with objective testing, exclusion of alternative etiologies (including gastroesophageal reflux disease and mechanical obstruction), and failure of less-invasive therapies. The AGA further notes that data supporting routine use of POEM in these populations remain limited and that careful patient selection and shared decision-making are essential (Yang et al., 2024).

Zenker's Diverticulum (ZD)

Zenker's diverticulum (ZD) is an acquired pulsion diverticulum of the hypopharynx that results from dysfunction of the cricopharyngeal muscle, leading to impaired bolus transit and symptoms such as dysphagia, regurgitation, aspiration, cough, and weight loss. Management is directed at division of the cricopharyngeal muscle to relieve the functional outflow obstruction. While open surgical and rigid endoscopic techniques were historically used, flexible endoscopic approaches have become preferred due to lower morbidity, particularly in older or medically complex patients.

Zenker's peroral endoscopic myotomy (Z-POEM) is a third-space endoscopic technique adapted from esophageal POEM that enables controlled submucosal tunneling and complete division of the cricopharyngeal muscle. Compared with flexible endoscopic septotomy (FES), Z-POEM allows direct visualization of the muscular septum, which may reduce incomplete myotomy and contribute to more durable symptom relief. Although randomized controlled trials are lacking, a growing body of comparative observational evidence and multiple meta-analyses have evaluated the safety and effectiveness of Z-POEM relative to established alternatives.

A 2025 systematic review and meta-analysis by Delgado et al. compared endoscopic submucosal tunneling techniques (ESTTs, including Z-POEM and POES) with FES across nine observational comparative studies involving 759 patients. ESTTs were associated with a significantly higher clinical success rate compared with FES (87.4% vs 75.0%; $P < .01$), while technical success rates were high and comparable between groups. Initial recurrence rates did not differ significantly; however, after exclusion of a heterogeneity-driving study, recurrence favored ESTTs. Adverse event rates were similar between approaches. The authors concluded that tunneling techniques represent a safe and effective alternative to FES, while acknowledging limitations related to non-randomized study designs and the need for future randomized trials (Delgado et al., 2025).

Additional systematic reviews and meta-analyses corroborate these findings. Zhang et al. (2022) analyzed 11 studies of Z-POEM and reported high pooled technical success

(96.3%) and clinical success (93.0%), with a modest but statistically significant improvement in clinical success compared with FES and no significant differences in adverse events or recurrence. Similarly, a 2025 meta-analysis by Singh et al. comparing Z-POEM with FES across seven studies (580 patients) found significantly higher clinical success with Z-POEM, while technical success, recurrence, adverse events, length of stay, and procedure time were comparable between techniques (Singh et al., 2025).

Broader comparative evidence further supports Z-POEM relative to alternative endoscopic and surgical approaches. A 2025 systematic review and meta-analysis by Papaefthymiou et al. evaluated Z-POEM versus flexible and rigid diverticulotomy and demonstrated significantly higher clinical success with Z-POEM (odds ratio 2.14), with similar reintervention and adverse event rates and fewer perforations. Despite these favorable outcomes, the authors classified the overall certainty of evidence as low due to the observational nature of included studies (Papaefthymiou et al., 2025).

Real-world cohort data are consistent with pooled findings. Single-center retrospective series have demonstrated near-universal technical success, substantial and statistically significant improvements in dysphagia and regurgitation scores, frequent same-day discharge, and low short-term complication rates following Z-POEM. However, recurrence requiring reintervention has been reported in a subset of patients within 1–2 years, highlighting the importance of longer-term follow-up (Economopoulos et al., 2025). Larger institutional experiences report durable symptom improvement with low complication rates and suggest that Z-POEM may be particularly advantageous in patients who are poor candidates for rigid stapled diverticulotomy due to anatomic constraints or comorbidities (Gupta et al., 2025).

Overall, the available evidence indicates that Z-POEM is a safe and effective endoscopic treatment for symptomatic Zenker’s diverticulum, with consistently high technical success and clinically meaningful symptom improvement, and with clinical success rates that are equal to or greater than those observed with flexible endoscopic septotomy. While the absence of randomized controlled trials limits the certainty of evidence, the consistency of outcomes across multiple systematic reviews and real-world cohorts supports Z-POEM as an appropriate endoscopic treatment option in selected patients.

IV. GUIDELINES / POSITION STATEMENTS

Medical/Professional Society	Guideline
American College of Gastroenterology (ACG)	Official journal of the American College of Gastroenterology ACG (2020)
American Society for Gastrointestinal Endoscopy (ASGE)	ASGE guideline on the management of achalasia - Gastrointestinal Endoscopy (2020)
AGA	AGA Clinical Practice Update on Advances in Per-Oral Endoscopic Myotomy (POEM) and Remaining Questions-What We Have Learned in the Past Decade: Expert Review (2024)

Society of the American Gastrointestinal and Endoscopic Surgeons (SAGES)	2024 Update to SAGES Guidelines for the Use of Peroral Endoscopic Myotomy (POEM) in the Treatment of Achalasia - A SAGES Publication
International Society for Diseases of the Esophagus (ISDE)	2018 ISDE Achalasia Guidelines
European Society of Gastrointestinal Endoscopy (ESGE)	Endoscopic management of gastrointestinal motility disorders (ESGE) (2020)

V. REGULATORY (US FOOD AND DRUG ADMINISTRATION)

See [U.S. Food & Drug Administration \(FDA\) Medical Device Databases](#) for the most current information.

Device	Premarket Approval, 513(f)(2)(De Novo), or 510(k) Number	Notice date
Olympus Triangle Tip Electrosurgical Knife	K092309	10/30/2009
ERBE HybridKnife	K083608	08/26/2009

VI. CODING

ICD-10 Codes that may support medical necessity

- K22.0 Achalasia of cardia
- K22.4 Dyskinesia of esophagus
- K22.5 Diverticulum of esophagus, acquired
- K22.89 Other specified diseases of esophagus

CPT/HCPCS Codes

- 74246 Radiologic examination, upper gastrointestinal tract, including scout abdominal radiograph(s) and delayed image(s), when performed; double-contrast (e.g., high-density barium and effervescent agent) study, including glucagon, when administered
- 91010 Esophageal motility (manometric study of the esophagus and/or gastroesophageal junction) study with interpretation and report;
- 91013 Esophageal motility (manometric study of the esophagus and/or gastroesophageal junction) study with interpretation and report; with stimulation or perfusion (e.g., stimulant, acid or alkali perfusion) (List separately in addition to code for primary procedure)
- 32665 Thoracoscopy, surgical; with esophagomyotomy (Heller type)

43279	Laparoscopy, surgical, esophagomyotomy (Heller type), with fundoplasty, when performed
43330	Esophagomyotomy (Heller type); abdominal approach
43497	Lower esophageal myotomy, transoral (e.g., peroral endoscopic myotomy [POEM])
43499	Unlisted procedure, esophagus (esophagus) (when used for Z-POEM)

VII. MEDICAL NECESSITY REVIEW

Prior authorization for certain drugs, devices, services and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service or procedure is medically necessary. For more information, refer to the [Priority Health Provider Manual](#).

Individual case review may allow coverage for care or treatment that is investigational yet promising for the conditions described. Requests for individual consideration require prior plan approval. All determinations of coverage for experimental, investigational, or unproven treatment will be made by a Priority Health medical director or clinical pharmacist. The exclusion of coverage for experimental, investigational, or unproven treatment may be reviewed for exception if the condition is either a terminal illness, or a chronic, life threatening, severely disabling disease that is causing serious clinical deterioration.

VIII. APPLICATION TO PRODUCTS

Coverage is subject to the member's specific benefits. Group-specific policy will supersede this policy when applicable.

- **HMO/EPO:** This policy applies to insured HMO/EPO plans.
- **POS:** This policy applies to insured POS plans.
- **PPO:** This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- **ASO:** For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- **INDIVIDUAL:** For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
- **MEDICARE:** Coverage is determined by the Centers for Medicare and Medicaid Services (CMS); if a coverage determination has not been adopted by CMS, this policy applies.
- **MEDICAID/HEALTHY MICHIGAN PLAN:** For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the [Michigan Medicaid Fee Schedule](#). If there is a discrepancy between this policy and the [Michigan Medicaid Provider Manual](#), the Michigan Medicaid Provider Manual will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

IX. REFERENCES

Guidelines

1. Calabrese EC, Kindel T, Slater BJ, Marks J, Swanstrom L, Saxena P, Docimo S, Athanasiadis DI, Hanna NM, Stefanidis D, Rooker C, Maddern G, Kohn GP. 2024 Update to SAGES guidelines for the use of peroral endoscopic myotomy (POEM) in the treatment of achalasia. *Surg Endosc*. 2025 May 21. doi: 10.1007/s00464-025-11789-z. Epub ahead of print. PMID: 40399617.
2. Khashab MA, Vela MF, Thosani N, Agrawal D, Buxbaum JL, Abbas Fehmi SM, Fishman DS, Gurudu SR, Jamil LH, Jue TL, Kannadath BS, Law JK, Lee JK, Naveed M, Qumseya BJ, Sawhney MS, Yang J, Wani S. ASGE guideline on the management of achalasia. *Gastrointest Endosc*. 2020 Feb;*91*(2):213-227.e6. doi: 10.1016/j.gie.2019.04.231. Epub 2019 Dec 13. PMID: 31839408.
3. Vaezi, Michael F. MD, PhD, MSc, FACP¹; Pandolfino, John E. MD, MS, FACP²; Yadlapati, Rena H. MD, MHS (GRADE Methodologist)³; Greer, Katarina B. MD, MS⁴; Kavitt, Robert T. MD, MPH⁵. ACG Clinical Guidelines: Diagnosis and Management of Achalasia. *The American Journal of Gastroenterology* 115(9):p 1393-1411, September 2020. | DOI: 10.14309/ajg.0000000000000731.
4. Yadlapati R, Kahrilas PJ, Fox MR, Bredenoord AJ, Prakash Gyawali C, Roman S, Babaei A, Mittal RK, Rommel N, Savarino E, Sifrim D, Smout A, Vaezi MF, Zerbib F, Akiyama J, Bhatia S, Bor S, Carlson DA, Chen JW, Cisternas D, Cock C, Coss-Adame E, de Bortoli N, Defilippi C, Fass R, Ghoshal UC, Gonlachanvit S, Hani A, Hebbard GS, Wook Jung K, Katz P, Katzka DA, Khan A, Kohn GP, Lazarescu A, Lenglinger J, Mittal SK, Omari T, Park MI, Penagini R, Pohl D, Richter JE, Serra J, Sweis R, Tack J, Tatum RP, Tutuian R, Vela MF, Wong RK, Wu JC, Xiao Y, Pandolfino JE. Esophageal motility disorders on high-resolution manometry: Chicago classification version 4.0[®]. *Neurogastroenterol Motil*. 2021 Jan;*33*(1):e14058. doi: 10.1111/nmo.14058. Erratum in: *Neurogastroenterol Motil*. 2024 Feb;*36*(2):e14179. doi: 10.1111/nmo.14179. PMID: 33373111; PMCID: PMC8034247.
5. Yang D, Bechara R, Dunst CM, Konda VJA. AGA Clinical Practice Update on Advances in Per-Oral Endoscopic Myotomy (POEM) and Remaining Questions—What We Have Learned in the Past Decade: Expert Review. *Gastroenterology*. 2024;*167*(7):1483-1490. doi:10.1053/j.gastro.2024.08.038.
6. Zaninotto G, Bennett C, Boeckxstaens G, Costantini M, et al. The 2018 ISDE achalasia guidelines. *Dis Esophagus*. 2018 Sep 1;*31*(9). doi: 10.1093/dote/doy071. PMID: 30169645.

Esophageal Achalasia

1. Costantini A, Familiari P, Costantini M, Salvador R, Valmasoni M, Capovilla G, 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 Mar;*24*(3):505-515.
2. de Moura ETH, Jukemura J, Ribeiro IB, Farias GFA, de Almeida Delgado AA, Coutinho LMA, et al. Peroral endoscopic myotomy vs laparoscopic myotomy and partial fundoplication for esophageal achalasia: A single-center randomized controlled trial. *World J Gastroenterol*. 2022 Sep 7;*28*(33):4875-4889.
3. Dirks RC, Kohn GP, Slater B, Whiteside J, Rodriguez NA, Docimo S, et al. Is peroral endoscopic myotomy (POEM) more effective than pneumatic dilation and Heller myotomy? A systematic review and meta-analysis. *Surg Endosc*. 2021 May;*35*(5):1949-1962

4. Hayes, Inc. Health Technology Assessment. Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia. Hayes, Inc.; December 3, 2019. Updated March 7 2023.
5. Lee Y, Brar K, Doumouras AG, Hong D. Peroral endoscopic myotomy (POEM) for the treatment of pediatric achalasia: a systematic review and meta-analysis. *Surg Endosc.* 2019 Jun;33(6):1710-1720. doi: 10.1007/s00464-019-06701-5. Epub 2019 Feb 14. PMID: 30767141.
6. Nabi Z, Mandavdhare H, Akbar W, Talukdar R, Reddy DN. Long-term Outcome of Peroral Endoscopic Myotomy in Esophageal Motility Disorders: A Systematic Review and Meta-analysis. *J Clin Gastroenterol.* 2023 Mar 1;57(3):227-238. doi: 10.1097/MCG.0000000000001776. PMID: 36227028.
7. Nabi Z, Talukdar R, Chavan R, Basha J, Reddy DN. Outcomes of Per-Oral Endoscopic Myotomy in Children: A Systematic Review and Meta-analysis. *Dysphagia.* 2022 Dec;37(6):1468-1481. doi: 10.1007/s00455-022-10409-5. Epub 2022 Jan 29. PMID: 35092485.
8. Puli SR, Wagh MS, Forcione D, Gopakumar H. Learning curve for esophageal peroral endoscopic myotomy: a systematic review and meta-analysis. *Endoscopy.* 2023 Apr;55(4):355-360. doi: 10.1055/a-1935-1093. Epub 2022 Sep 1. PMID: 36049775.
9. Vespa E, Barchi A, Mandarino FV, Fasulo E, Fratto MC, Passaretti S, Azzolini F, Savarino EV, Danese S. Standard length of peroral endoscopic myotomy (POEM) for achalasia: a systematic review and meta-analysis. *Dis Esophagus.* 2024 Nov 28;37(12):doae069. doi: 10.1093/dote/doae069. PMID: 39214522; PMCID: PMC11605639.

Non-Achalasia Esophageal Motility Disorders

1. Chandan S, Mohan BP, Chandan OC, Jha LK, Mashiana HS, Hewlett AT, Khashab MA. Clinical efficacy of per-oral endoscopic myotomy (POEM) for spastic esophageal disorders: a systematic review and meta-analysis. *Surg Endosc.* 2020 Feb;34(2):707-718. doi: 10.1007/s00464-019-06819-6. Epub 2019 May 9. PMID: 31073769.
2. Khan MA, Kumbhari V, Ngamruengphong S, Ismail A, Chen YI, Chavez YH, Bukhari M, Nollan R, Ismail MK, Onimaru M, Balassone V, Sharata A, Swanstrom L, Inoue H, Repici A, Khashab MA. Is POEM the Answer for Management of Spastic Esophageal Disorders? A Systematic Review and Meta-Analysis. *Dig Dis Sci.* 2017 Jan;62(1):35-44. doi: 10.1007/s10620-016-4373-1. Epub 2016 Nov 17. PMID: 27858325.
3. Nabi Z, Ramchandani M, et al. Peroral endoscopic myotomy for non-achalasia esophageal motility disorders: mid- and long-term outcomes from a systematic review and meta-analysis. *Endoscopy.* 2023;55(2):123-135. doi:10.1055/a-1904-9343.
4. Puri, R., Giri, S., Panigrahi, S.C. *et al.* Efficacy and safety of per-oral endoscopic myotomy in non-achalasia esophageal motility disorders: a systematic review and meta-analysis. *Esophagus* 21, 419–429 (2024). <https://doi.org/10.1007/s10388-024-01076-6>
5. Yang D, Khashab MA, et al. AGA Clinical Practice Update on peroral endoscopic myotomy for esophageal motility disorders: expert review. *Gastroenterology.* 2024;166(2):457-468. doi:10.1053/j.gastro.2023.10.031.

Zenker's Diverticulum

1. Delgado LM, Meine GC, Santo P, Magalhães CM, Pimenta de Figueiredo VL, Ramos JA, Arantes VN. Endoscopic submucosal tunneling techniques versus flexible endoscopic septotomy for Zenker's diverticulum: a systematic review and meta-analysis. *Gastrointest Endosc.* 2025;101(4):751. Epub 2024 Nov 26.
2. Economopoulos KP, Rothman DLP, Witkowski E, Paranjape C, Krishnan K. Outcomes of Zenker's peroral endoscopic myotomy (Z-POEM) for treatment of Zenker's diverticulum at a tertiary care center: a single-institution retrospective cohort study. *Surg Endosc.* 2025 Oct;39(10):6867-6873. doi:10.1007/s00464-025-12095-4. Epub 2025 Aug 20. PMID:40835763.
3. Gupta V, Gowing S, Khoja A, Hasan SMM, Higgins SS, Liu R, Kidane B. Zenker per-oral endoscopic myotomy (Z-POEM): the ideal first-line therapy for treatment of Zenker diverticulum. *J Thorac Cardiovasc Surg.* 2025 Jul;170(1):74-83. doi:10.1016/j.jtcvs.2024.11.033. Epub 2024 Dec 4. PMID:39638238.
4. Papaefthymiou A, Telese A, Norton B, Ramai D, Tziatzios G, Gkolfakis P, Birchall M, Mohammadi B, Mughal M, Haidry R. Comparative effect between Zenker's peroral endoscopic myotomy and alternatives in the treatment of Zenker's diverticulum: a systematic review and meta-analysis. *Dis Esophagus.* 2025 Jul 3;38(4):doaf047. doi:10.1093/dote/doaf047. PMID:40654274.
5. Singh S, Chandan S, Bapaye J, Brar HS, Mohammed A, Kassab LL, Bhat I, Singh S, Bapaye A, Yang D. Peroral endoscopic myotomy (Z-POEM) versus flexible endoscopic septotomy (FES) for treatment of Zenker's diverticulum: does either make the cut? A systematic review and meta-analysis of outcomes. *Ann Gastroenterol.* 2025 Jan-Feb;38(1):20-27. doi:10.20524/aog.2024.0934. Epub 2024 Dec 12. PMID:39802284; PMCID:PMC11724383.
6. Zhang H, Huang S, Xia H, Shi L, Zeng X, Jiang J, Ren W, Peng Y, Lü M, Tang X. The role of peroral endoscopic myotomy for Zenker's diverticulum: a systematic review and meta-analysis. *Surg Endosc.* 2022 May;36(5):2749-2759. doi:10.1007/s00464-022-09021-3. Epub 2022 Jan 12. PMID:35020054.

SUMMARY OF CHANGES

Deletions:

- Removed outdated references

Additions:

- Expanded scope to include select non-achalasia spastic motility disorders.
- Expanded scope to include Zenker's diverticulum (Z-POEM).
- Medical necessity criteria for Z-POEM for Zenker's diverticulum
- New policy template standardization

Changes:

- Updated exclusions to reflect updated society guideline recommendations.
- Reorganized criteria for clarity across achalasia, Zenker's diverticulum, and non-achalasia disorders.
- Updated background and references to reflect recent trials and guideline updates.

Past committee review dates: 05/2016, 05/2017, 05/2018, 05/2019, 05/2020, 05/2021, 05/2022, 05/2023, 05/2024, 5/2025, 05/2026

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