

## Gastroparesis Treatments – Gastric Electrical Stimulation and Gastric Peroral Endoscopic Myotomy (G-Poem) (Formerly Gastric Electrical Stimulation for Gastroparesis)

Policy Number: **M20220228089**  
 Effective Date: **4/1/2022**  
 Sponsoring Department: **Health Care Services**  
 Impacted Department(s): **Health Care Services**

**Type of Policy:**  Internal  External

**Data Classification:**  Confidential  Restricted  Public

### Applies to (Line of Business):

- Corporate (All)
- State Products, if yes which plan(s):  MediSource;  MediSource Connect;  Child Health Plus;  Essential Plan
- Medicare, if yes, which plan(s):  MAPD;  PDP;  ISNP;  CSNP
- Commercial, if yes, which type:  Large Group;  Small Group;  Individual
- Self-Funded Services *(Refer to specific Summary Plan Descriptions (SPDs) to determine any pre-authorization or pre-certification requirements and coverage limitations. In the event of any conflict between this policy and the SPD of a Self-Funded Plan, the SPD shall supersede the policy.)*

### Excluded Products within the Selected Lines of Business (LOB)

N/A

**Applicable to Vendors?** Yes  No

### Purpose and Applicability:

To set forth Independent Health’s medical criteria for the use of **gastric electrical stimulation and Gastric Peroral Endoscopic Myotomy (G-POEM)** for **gastroparesis**.

### Policy:

**Commercial, Self-Funded and Medicare Advantage**

Gastric electrical stimulation:

Gastric electrical stimulation is considered medically necessary in the treatment of chronic intractable nausea and vomiting secondary to severe gastroparesis of diabetic or idiopathic etiology when the following criteria are met:

- Individual is refractory, intolerant or has contraindications to the use of prokinetic and antiemetic medications; and
- Delayed gastric emptying as documented by standard scintigraphic imaging of solid food.

Gastric electrical stimulation is considered not medically necessary in all other indications including but not limited to the treatment of obesity.

G-POEM:

G-Poem is considered medically necessary for members with severe gastroparesis who meet all the following criteria:

- 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; and
- Symptom duration has been greater than 6 months; and
- Member has had an inadequate response to conservative treatment of gastroparesis, including dietary modification and a trial of at least one prokinetic agent (domperidone, metoclopramide, or erythromycin).

G-POEM for treatment of congenital hypertrophic pyloric stenosis and all other indications is considered experimental.

Note: Members receiving GLP-1 Inhibitors should consider this treatment as the gastroparesis etiology prior to a surgical procedure.

### **MediSource, MediSource Connect, Essential Plan and Child Health Plus**

MediSource, MediSource Connect, Essential Plan and Child Health Plus cover gastric electrical stimulation and the G-POEM for gastroparesis utilizing the criteria above.

### **Background**

Gastroparesis is a chronic disorder in which there is delayed gastric emptying of the stomach in the absence of any type of mechanical obstruction. The most common symptoms are nausea and protracted vomiting. Other symptoms include abdominal bloating, and, in severe cases, malnutrition. Idiopathic gastroparesis may be the most common form of gastroparesis with estimation that no detectable primary underlying abnormality is found in approximately one-half of patients with delayed gastric emptying. Diabetes mellitus is the most frequently recognized systemic disease associated with gastroparesis. Initial management of gastroparesis consists of dietary modification, optimization of glycemic control and hydration, and pharmacologic therapy with prokinetic and antiemetic medications. Patients who are refractory to medical therapy may require surgical interventions in the forms of tube gastrostomy, subtotal gastrectomy, or pyloroplasty.

Gastric electrical stimulation, i.e., the Enterra device (Medtronic Inc.), sends electrical impulses to the stomach muscles to help them to work more normally. The amount of stimulation can be adjusted to suit the patient.

The Enterra Therapy gastric electrical stimulation system was developed to treat patients who have gastroparesis. There are 3 main parts to the Enterra system: a pair of leads, an implanted pulse generator (IPG), and a programming system. This device has received FDA humanitarian device exemption approval for treatment of refractory diabetic and idiopathic gastroparesis, documented by objective measures of delayed gastric emptying by standard scintigraphic imaging.

The G-POEM procedure myotomizes the pylorus, rather than the lower esophageal sphincter. During the G-POEM procedures, a submucosal tunnel is typically created 5 cm proximal to the pylorus along the greater curvature or anterior gastric wall. A short (2 cm) antral myotomy is then performed in addition to pyloromyotomy via the submucosal tunnel. According to the American Gastroenterological Association clinical practice update (2023) states “offering G-POEM to adult patients with refractory gastroparesis who (1) have undergone esophagogastroduodenoscopy to confirm no mechanical gastric-outlet obstruction; (2) had a solid-phase gastric emptying scan (GES) confirming delayed gastric emptying, preferably with retention >20% at 4 hours; and (3) have moderate-to-severe symptoms, preferably with nausea and vomiting as the dominant symptoms. Patients who have failed gastric electrical stimulator therapy, pyloric stenting and botulinum toxin injection should also be offered G-POEM. Failure of these therapies is not a prerequisite to G-POEM.”

An evaluation of the peer-reviewed scientific literature, including but not limited to subscription materials, has provided Independent Health the basis for its medical necessity coverage outlined above.

**Pre-Authorization Required?** Yes  No

---

Pre-authorization is required for this service.

## Definitions

---

**Gastric electrical stimulation** uses an implanted electrical device with electrodes attached to the stomach to stimulate the coordinated contractions that enable stomach emptying. The Enterra Therapy system (Medtronic Inc.) was developed to treat patients who have gastroparesis.

**Gastroparesis** is a gastrointestinal motility disorder characterized by delayed gastric emptying without evidence of physical obstruction. The main symptoms include nausea, vomiting, early satiety, distension/bloating, and epigastric pain.

**G-POEM** (Gastric Peroral Endoscopic Myotomy) is an endoscopic equivalent of surgical pyloroplasty, similar to Peroral Endoscopic Myotomy (POEM) but myotomizes the pylorus, rather than the lower esophageal sphincter. G-POEM is performed for severe refractory diabetic gastroparesis.

## References

---

### Related Policies, Processes and Other Documents

N/A

### **Non-Regulatory References**

Abell TL, Yamada G, McCallum RW, et al. Effectiveness of gastric electrical stimulation in gastroparesis: Results from a large prospectively collected database of national gastroparesis registries. *Neurogastroenterol Motil.* 2019 Dec;31(12):e13714.

Camilleri M. Gastroparesis: Etiology, clinical manifestations, and diagnosis. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on February 13, 2024.)

Camilleri M. Treatment of gastroparesis. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on February 13, 2024.)

Camilleri M, Parkman HP, Shafi MA, et al; American College of Gastroenterology. Clinical guideline: management of gastroparesis. *Am J Gastroenterol.* 2013 Jan;108(1):18-37.

Ducrotte P, Coffin B, Bonaz B, et al; ENTERRA Research Group. Gastric Electrical Stimulation Reduces Refractory Vomiting in a Randomized Crossover Trial. *Gastroenterology.* 2020 Feb;158(3):506-514.e2.

Hasler WL. Electrical stimulation for gastroparesis. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on February 13, 2024.)

Hayes, Inc. Medical Technology Directory Report Gastric Electrical Stimulation for Gastroparesis. ; Lansdale, PA: October 2018.

Khashab MA. Peroral endoscopic myotomy (POEM). In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on February 13, 2024.)

Khashab MA, Wang AY, Cai Q. AGA Clinical Practice Update on Gastric Peroral Endoscopic Myotomy for Gastroparesis: Commentary. *Gastroenterology.* 2023 Jun;164(7):1329-1335.e1.

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.* 2020 Aug;34(8):3352-3367.

National Institute of Health and Care Excellence (NICE) [web site]. Gastroelectrical stimulation for Gastroparesis Interventional procedures guidance. May 28, 2014. Available at: <https://www.nice.org.uk/guidance/ippg489/resources/gastroelectrical-stimulation-for-gastroparesis-pdf-1899870000273349> Accessed February 13, 2024.

Shanker A, Bashashati M, Rezaie A. Gastric Electrical Stimulation for Treatment of Refractory Gastroparesis: the Current Approach to Management. *Curr Gastroenterol Rep.* 2021 Jan 22;23(2):2.+

Yan J, Tan Y, Zhou B, Zhang S, Wang X, Liu D. Gastric per-oral endoscopic myotomy (G-POEM) is a promising treatment for refractory gastroparesis: a systematic review and meta-analysis. *Rev Esp Enferm Dig.* 2020 Mar;112(3):219-228.

**Regulatory References**

Food and Drug Administration (FDA) [web site]. Gastric Electrical Stimulation (GES) System Humanitarian Device Exemption (HDE) H990014. Available at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfhde/hde.cfm?id=375491> Accessed February 13, 2024.

New York State Department of Health [web site]. New York State Medicaid Program Physician Procedure Codes– Section 5 Surgery. April 2023 . Available at: <https://www.emedny.org/ProviderManuals/Physician/PDFS/Physician%20Procedure%20Codes%20Sect5.pdf> Accessed February 13, 2024 .

***This policy contains medical necessity criteria that apply for this service. Please note that payment for covered services is subject to eligibility criteria, contract exclusions and the limitations noted in the member’s contract at the time the services are rendered.***

**Version Control**

---

Signature / Approval on File? Yes  No

Revision Date	Owner	Notes
4/1/2024	Health Care Services	Revised
3/1/2024	Health Care Services	Reviewed
1/1/2024	Health Care Services	Revised
3/1/2023	Health Care Services	Reviewed