# RMHP Gastric Electrical Stimulation - Neurostimulator; Gastric Pacing

MCG Health

Ambulatory Care 27th Edition

AUTH: RMHP\_AC\_5017 (AC)

Link to Codes

- Clinical Indications for Procedure
- Definitions
- References
- Policy History
- Codes

### **Clinical Indications for Procedure**

Return to top of RMHP Gastric Electrical Stimulation - Neurostimulator; Gastric Pacing - AC

- For ALL RMHP plans, the healthcare device is/was needed for the appropriate care of the Member because of ALL of the following
  - Please select the reason (s) the Member requires gastric electrical stimulation, also called gastric pacing, and related services ALL of the following
    - The Member has chronic intractable nausea and vomiting secondary to gastroparesis of diabetic or idiopathic etiology.
    - The Member has diagnostic imaging results demonstrating significantly delayed gastric emptying.
    - The Member is refractory or intolerant of prokinetic and antiemetic medications
    - The device being requested is FDA approved for use in gastric neurostimulation to treat gastroparesis.

#### **Definitions**

Return to top of RMHP Gastric Electrical Stimulation - Neurostimulator; Gastric Pacing - AC

Gastric pacing (gastric pacemaker) entails the use of a set of pacing wires attached to the stomach and an external electrical device that provides a low-frequency, high-energy stimulation to entrain the stomach at a rhythm of 3 cycles per minute. However, the gastric pacemaker is cumbersome and problematic for chronic use because of external leads. A newer, implantable device (the Enterra Therapy System by Medtronic, Minneapolis, MN) was developed to provide gastric electrical stimulation.

Unlike gastric pacing, the Enterra delivers a high-frequency (12 cycles per minute), low-energy stimulation to the stomach. This stimulating frequency does not entrain the stomach, and therefore does not normalize gastric dysrhythmias; hence, the term gastric electrical stimulation is employed to differentiate between the Enterra and gastric pacing. With gastric electrical stimulation, electrodes are implanted in the serosa of the stomach laparoscopically or during a laparotomy, and are connected to the pulse generator that is implanted in a subcutaneous pocket.

## References

Abell T, et al. Gastric electrical stimulation for medically refractory gastroparesis. Gastroenterology 2003;125(2):421-8.

Anand C, Al-Juburi A, Familoni B, Rashed H, Cutts T, Abidi N, et al. Gastric electrical stimulation is safe and effective: a long-term study in patients with drug-refractory gastroparesis in three regional centers. Digestion. 2007;75(2-3):83-9

Cutts TF, Luo J, Starkebaum W, Is gastric electrical stimulation superior to standard pharmacologic therapy in improving GI symptoms, healthcare resources, and long-term health care benefits? Neurogastroenterol Motil. 2005;17(1):35-43

Gourcerol G, Leblanc I, Leroi AM, et al. Gastric electrical stimulation in medically refractory nausea and vomiting. Eur J Gastroenterol Hepatol. 2007;19(1):29-35.

Hasler WL. Methods of gastric electrical stimulation and pacing: a review of their benefits and mechanisms of action in gastroparesis and obesity. Neurogastroenterology and Motility 2009;21(3):229-43. DOI: 10.1111/j.1365-2982.2009.01277.x.

McCallum R, Lin Z, Wetzel P, Sarosiek I, Forster J. Clinical response to gastric electrical stimulation in patients with postsurgical gastroparesis. Clin Gastroenterol Hepatology. 2005;3:49-54.

McCallum RW, Snape W, Brody F, et al. Gastric electrical stimulation with Enterra therapy improves symptoms from diabetic gastroparesis in a prospective study. Clin Gastroenterol Hepatol. 2010;8(11):947-954.

Moga C, Harstall C. Gastric electrical stimulation (Enterra Therapy System) for the treatment of gastroparesis. Health Technology Assessment Report No. 37. Edmonton, AB: Alberta Heritage Foundation for Medical Research; January 1, 2006

McKenna D, Beverstein G, Reichelderfer M, et al. Gastric electrical stimulation is an effective and safe treatment for medically refractory gastroparesis. Surgery. 2008;144(4):566-572;

O'Grady G, Egbuji JU, Du P, Cheng LK, Pullan AJ, Windsor JA. High-frequency gastric electrical stimulation for the treatment of gastroparesis: a meta-analysis. World Journal of Surgery 2009;33(8):1693-701. DOI: 10.1007/s00268-009-0096-1.

Ontario Ministry of Health and Long-Term Care, Medical Advisory Secretariat (MAS). Gastric electrical stimulation. Health Technology Policy Assessment. Toronto, ON: MAS; August 2006

Oubre B, Luo J, Al-Juburi A, et al. Pilot study on gastric electrical stimulation on surgery-associated gastroparesis: Long-term outcome. South Med J. 2005;98(7):693-697

Soffer E, et al. Review article: gastric electrical stimulation for gastroparesis--physiological foundations, technical aspects and clinical implications. Alimentary Pharmacology and Therapeutics 2009;30(7):681-94. DOI: 10.1111/j.1365-2036.2009.04082.x.

United Healthcare Commercial and Individual Exchange Medical Policy Gastrointestinal Motility Disorders, Diagnosis and Treatment, Policy Number 2024T0415B, Effective Date January 1, 2024, reviewed 4/18/2024

United Healthcare Medicare Advantage Coverage Summary, Gastroesophageal and Gastrointestinal (GI) Services and Procedures, Policy Number MCS039.10, Approval Date, January 18, 2024, effective date March 1, 2024 reviewed 4/18/2024.

UnitedHealthcare Community Plan Medical Policy, Gastrointestinal Motility Disorders, Diagnosis and Treatment, Policy Number: : CS046.P, Effective Date April 1,2024, reviewed 4/18/20224

No NCD/LCD/LCA exists per CMS Medicare Coverage Database 4/18/2024.

Colorado MCD Fee schedule 43647,43648, 43881,43882, Priced and PA required, 43999 manually priced, 64590, 64595, 95980 - 95982 priced.

## **Policy History**

Return to top of RMHP Gastric Electrical Stimulation - Neurostimulator; Gastric Pacing - AC

History Summary: See archived versions and tracking spreadsheet for details. Policy developed 11/14/2007 with annual reviews, updates and committee approvals thereafter through 2023.

2024 Annual review and updates

#### Codes

Return to top of RMHP Gastric Electrical Stimulation - Neurostimulator; Gastric Pacing - AC

CPT®: 43647, 43648, 43659, 43881, 43882, 43999, 64590, 64595, 95980, 95981, 95982

CPT copyright 2022 American Medical Association. All rights reserved.

MCG Health

Ambulatory Care 27th Edition