MASSACHUSETTS

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Medical Policy

# Gastric Electrical Stimulation

## Table of Contents



## Policy Number: 636

BCBSA Reference Number: 7.01.73 (For Plan internal use only)
NCD/LCD: N/A

## Related Policies

- Meniscal Allografts and Other Meniscal Implants, #110
- Vagus Nerve Stimulation, #474
- Vagal Nerve Blocking Therapy for Treatment of Obesity, #644

## Policy

### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity
### Medicare HMO Blue℠ and Medicare PPO Blue℠ Members

Gastric electrical stimulation is considered **INVESTIGATIONAL** for the treatment of gastroparesis of diabetic or idiopathic etiology.

Gastric electrical stimulation is considered **INVESTIGATIONAL** for the treatment of obesity.

## Prior Authorization Information

**Inpatient**

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

**Outpatient**

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

| | Outpatient |
|---|---|
| **Commercial Managed Care (HMO and POS)** | This is **not** a covered service. |
| **Commercial PPO and Indemnity** | This is **not** a covered service. |
| **Medicare HMO Blue℠** | This is **not** a covered service. |
| **Medicare PPO Blue℠** | This is **not** a covered service. |

## CPT Codes / HCPCS Codes / ICD Codes

*Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member*

*Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.*

*The following codes are included below for informational purposes only; this is not an all-inclusive list.*

**The following CPT codes are considered investigational for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

| CPT codes: | Code Description |
|---|---|
| 43647 | Laparoscopy, surgical; implantation or replacement of gastric neurostimulator electrodes, antrum |
| 43881 | Implantation or replacement of gastric neurostimulator electrodes, antrum, open |
| 64590 | Insertion or replacement of peripheral or gastric neurostimulator pulse generator or receiver, direct, or inductive coupling |
| 95980 | Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements), gastric neurostimulator pulse generator/transmitter; intraoperative, with programming |
| 95981 | Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, without reprogramming |
| 95982 | Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, with reprogramming |

## Description

**Treatment**

**Gastroparesis**

Gastric electrical stimulation (GES), also referred to as gastric pacing, using an implantable device, has been investigated primarily as a treatment for gastroparesis. Currently available devices consist of a pulse generator, which can be programmed to provide electrical stimulation at different frequencies, connected to intramuscular stomach leads, which are implanted during laparoscopy or open laparotomy (see Regulatory Status section).

**Obesity**

GES has also been investigated as a treatment of obesity. It is used to increase a feeling of satiety with subsequent reduction in food intake and weight loss. The exact mechanisms resulting in changes in eating behavior are uncertain but may be related to neurohormonal modulation and/or stomach muscle stimulation.

## Summary

Gastric electrical stimulation (GES) is performed using an implantable device designed to treat chronic drug-refractory nausea and vomiting secondary to gastroparesis of diabetic, idiopathic, or postsurgical etiology. GES has also been investigated as a treatment of obesity. The device may be referred to as a gastric pacemaker.

For individuals who have gastroparesis who receive GES, the evidence includes randomized controlled trials (RCTs), nonrandomized studies, and systematic reviews. Relevant outcomes are symptoms and treatment-related morbidity. Five crossover RCTs have been published. A 2017 meta-analysis of these 5 RCTs did not find a significant benefit of GES on the severity of symptoms associated with gastroparesis. Patients generally reported improved symptoms at follow-up whether or not the device was turned on, suggesting a placebo effect. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have obesity who receive GES, the evidence includes an RCT. Relevant outcome are change in disease status and treatment-related morbidity. The Screened Health Assessment and Pacer Evaluation (SHAPE) trial did not show significant improvement in weight loss using GES compared with a sham stimulation. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

## Policy History

| Date | Action |
|---|---|
| 3/2022 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 4/2021 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 4/2020 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 4/2019 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |
| 3/2017 | Annual policy review. New references added. |
| 2/2016 | Annual policy review. New references added. |
| 12/2015 | Clarified coding information. |
| 10/2014 | Annual policy review. New references added. |
| 6/2014 | Updated Coding section with ICD10 procedure and diagnosis codes. Effective 10/2015. |
| 12/2013 | Annual medical policy. Removed HCPCS codes L8680 and L8685-L8686 as they do not meet the intent of the policy. |
| 10/2013 | Removed CPT codes 43648, 43882 and 64595 as they do not apply to the policy. |
| 11/2011-4/2012 | Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements. |
| 10/2011 | Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements. |
| 11/2010 | Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements. |
| 11/2009 | Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements. |
| 7/2009 | Annual policy review. No changes to policy statements. |
| 11/2008 | Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements. |
| 4/2008 | Annual policy review. No changes to policy statements. |
| 11/2007 | Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements. |
| 8/2007 | Annual policy review. No changes to policy statements. |
| 1/2007 | Annual policy review. No changes to policy statements. |

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

## References


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