OVERVIEW
Gastric electrical stimulation is performed using an implantable device designed to treat chronic drug-refractory nausea and vomiting secondary to gastroparesis of diabetic, idiopathic or post-surgical etiology. Gastric electrical stimulation has also been investigated as a treatment of obesity. The device may be referred to as a gastric pacemaker. This policy is intended to document the insertion or implantation of the device as not medically necessary.

PRIOR AUTHORIZATION
Not applicable.

POLICY STATEMENT
BlueCHiP for Medicare and Commercial
Implantation of a gastric electrical stimulation device for any indication is considered not medically necessary because there is insufficient medical literature to support the efficacy of this treatment.

MEDICAL CRITERIA
Not applicable.

BACKGROUND
Gastroparesis is a chronic disorder of gastric motility characterized by delayed emptying of a solid meal. Symptoms include bloating, distension, nausea, and vomiting. When severe and chronic, gastroparesis can be associated with dehydration, poor nutritional status, and poor glycemic control in diabetic patients. While most commonly associated with diabetes, gastroparesis is also found in chronic pseudo-obstruction, connective tissue disorders, Parkinson's disease, and psychological pathologic conditions. Treatment of gastroparesis includes prokinetic agents, such as metoclopramide, and antiemetic agents, such as metoclopramide, granisetron, or ondansetron. Severe cases may require enteral or total parenteral nutrition.

Currently, only one gastric electrical stimulator has received approval from the U.S. Food and Drug Administration (FDA), the Gastric Electrical Stimulator (GES) system (now called Enterra™ Therapy System), manufactured by Medtronic. The GES system consists of 4 components: the implanted pulse generator, 2 unipolar intramuscular stomach leads, the stimulator programmer, and the memory cartridge. With the exception of the intramuscular leads, all other components have been used in other implantable neurologic stimulators, such as spinal cord or sacral nerve stimulation. The intramuscular stomach leads are implanted either laparoscopically or during a laparotomy and are connected to the pulse generator, which is implanted in a subcutaneous pocket. The programmer sets the stimulation parameters, which are typically set at an “on” time of 0.1 sec alternating with an “off” time of 5.0 sec.

Gastric electrical stimulation has also been investigated as a treatment of obesity as a technique to increase a feeling of satiety with subsequent reduced food intake and weight loss. The exact mechanisms resulting in changes in eating behavior are uncertain but may be related to neuro-hormonal modulation and/or stomach muscle stimulation. There are no gastric electrical stimulation devices approved by the FDA for the treatment of obesity.
The evidence on the efficacy of gastric electrical stimulation to treat gastroparesis is inadequate to permit scientific conclusions. In conclusion, gastric electrical stimulation for the treatment of gastroparesis of diabetic, idiopathic, or post-surgical etiologies is considered not medically necessary. Additionally, case series publications are limited and insufficient to draw conclusions on health outcomes. Gastric electrical stimulation for the treatment of obesity is considered not medically necessary.

**COVERAGE**

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for limitations of benefits/coverage when services are not medically necessary.

**CODING**

BlueCHiP for Medicare and Commercial

The following code is not medically necessary when used for gastric electrical stimulation and filed with the diagnosis codes listed below:

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<th>Code</th>
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<td>64590</td>
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**ICD-9**

GES ICD 9 Codes.pdf

**ICD-10**

GES ICD 10 codes.pdf

The following codes are *not medically necessary*:

0157T, 43647, 43881, 95980, 95981, 95982

**RELATED POLICIES**

CPT Category III Codes
Preauthorization via Web-Based Tool for Procedures

**PUBLISHED**

| Provider Update | Jul 2014 |
| Provider Update | Aug 2013 |
| Provider Update | Jul 2012 |
| Provider Update | Aug 2011 |
| Provider Update | Aug 2010 |
| Provider Update | Sep 2009 |
| Provider Update | Jul 2008 |

**REFERENCES**


