


Reporting Lower Esophageal Sphincter Neurostimulation (1013T-1018T)


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For the CPT 2026 code set, six Category III codes (1013T-1018T) have been established to report procedures and services related to an implanted neurostimulator system in the lower esophageal sphincter (LES) for treating symptomatic gastroesophageal reflux disease (GERD), including the initial laparoscopic placement and/or revision of the entire system, revision or removal of components, analysis of the system, and analysis without and with reprogramming. In addition, exclusionary and instructional parenthetical notes have been added to assist with correct reporting. This article provides an overview of the intent and appropriate reporting of these new codes.


Category III Codes


 **1013T** Laparoscopy, surgical, implantation or replacement of lower esophageal sphincter neurostimulator electrode array and neurostimulator pulse generator or receiver, requiring pocket creation and connection between electrode array and pulse generator or receiver, including cruroplasty and/or electronic analysis, when performed


>(For laparoscopic implantation or replacement of gastric neurostimulator electrodes, use 43647)


>(For revision or removal of gastric neurostimulator pulse generator, use 64595)


>(For electronic analysis and programming of gastric neurostimulator pulse generator, see 95980, 95981, 95982)

 **1014T** Laparoscopic revision or removal, lower esophageal sphincter neurostimulator electrodes


 **1015T** Revision or removal, lower esophageal sphincter neurostimulator pulse generator or receiver

>(For laparoscopic revision or removal of gastric neurostimulator electrodes, antrum, use 43648)

 **1016T** Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of waveform, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements), lower esophageal sphincter neurostimulator pulse generator/transmitter; intraoperative, with programming

<p style="color:green;>(Do not report 1016T in conjunction with 1013T)

 **1017T** subsequent, without reprogramming

 **1018T** subsequent, with reprogramming

A new surgical treatment has been developed for GERD, a chronic digestive disease, that involves placing neurostimulator electrodes laparoscopically in the LES to control acid reflux by delivering mild electrical signals to a patient's weak or dysfunctional LES muscle throughout the day.¹ Codes 1013T-1018T have been established to report services associated with this new treatment.

Surgical Procedures (1013T-1015T)

Code 1013T describes the initial laparoscopic placement or subsequent replacement of an entire neurostimulation system consisting of electrodes and a pulse generator or receiver in a subcutaneous pocket. Code 1013T includes cruroplasty and/or intraoperative electronic analysis without or with programming of the system; therefore, these services should not be separately reported by the surgeon performing the laparoscopic placement or subsequent replacement of the entire neurostimulation system. Code 1014T describes the laparoscopic revision or removal of the neurostimulator electrodes. Code 1015T is used to report the revision or removal of the pulse generator or receiver.

Analysis and Programming Services (1016T-1018T)



Code 1016T is reported for intraoperative electronic analysis and programming of an implanted neurostimulator pulse generator system when it is performed by a physician other than the surgeon who placed or replaced the system. While the operating surgeon who implants the system (1013T) may test the system function during surgery, the intraoperative programming is typically **not** performed by the operating surgeon. However, if both testing and programming are performed intraoperatively by the implanting surgeon, these services are considered inherent to code 1013T. Therefore, they should not be reported separately, as indicated by the exclusionary parenthetical note that precludes reporting code 1013T with code 1016T. However, if **another** physician provides the intraoperative electronic analysis and programming, code 1016T may be reported separately by the physician who performed the analysis and programming services. If a subsequent postoperative electronic analysis of the system **without** reprogramming is performed, report code 1017T. Conversely, if a subsequent neurostimulator electronic analysis **with** reprogramming is performed, report code 1018T. Note that if an open implantation or replacement of an LES neurostimulator electrode array and neurostimulator pulse generator or receiver requires the creation of a pocket and a connection between the electrode array and pulse generator or receiver, as well as cruroplasty and/or electronic analysis, report unlisted code 64999 instead of code 1013T.

To ensure accurate reporting of these new codes, exclusionary parenthetical notes have been added to direct users to the appropriate codes for gastric neurostimulator system procedures.

The following clinical examples and procedural descriptions reflect typical clinical scenarios for which these new codes would be appropriately reported.

Clinical Example (1013T)

A 60-year-old male presents with gastroesophageal reflux disease (GERD) that has not responded to drug therapy. The patient is referred for consideration of non-pharmacologic therapeutic approaches to management of GERD.

Description of Procedure (1013T)

Place the patient in a supine position under general anesthesia with physiological monitoring. Establish laparoscopic access through predetermined port placement and use a liver retractor to expose the diaphragmatic crura. Access the esophageal hiatus through the pars flaccida, enabling controlled dissection of the esophageal muscle while preserving tissue integrity. Measure the intra-abdominal esophageal segment and, if it is less than 3 cm, perform additional dissection to ensure adequate length for lower esophageal sphincter (LES) electrode implantation. Next, prepare a 3 x 2 cm area for LES electrode placement, and dissect the crural muscles with minimal disruption to surrounding structures. Anchor LES electrodes in position and place the other end of the leads adjacent to the planned generator position. Create a pocket to house the generator, connect the leads, and place the generator in the pocket. Approximate the diaphragmatic crura using nonabsorbable sutures with pledget reinforcement, if needed. Calibrate hiatal closure to maintain physiologic esophageal movement while preventing excessive constriction. Perform intraoperative endoscopy to verify that the repair is intact and does not cause obstruction. Irrigate the peritoneum, evacuate pneumoperitoneum, and remove the laparoscopic ports. Close the abdominal incisions using standard techniques.



Clinical Example (1014T)

A 45-year-old female, who has an implantation of a lower esophageal sphincter neurostimulation system for gastroesophageal reflux disease, is referred for removal of neurostimulator electrode(s).

Description of Procedure (1014T)

Using laparoscopic techniques, identify the neurostimulator leads. Perform tests to determine if they are working properly, make adjustments, and reposition leads as necessary. If adjustments are unsuccessful or if there is another reason (eg, infection), remove the neurostimulator leads, and close the laparoscopic incisions.

Clinical Example (1015T)

A 65-year-old male, who has gastroesophageal reflux disease and a lower esophageal sphincter stimulator refractory to the therapy, is referred for revision/removal of neurostimulator pulse generator.

Description of Procedure (1015T)

Identify prior implantable lower esophageal sphincter neurostimulator pulse generator. Inject prior operative incision with local anesthetic and carefully incise prior incision site. Dissect open the prior pocket and gently exteriorize the pulse generator. Unscrew array set screw and remove the pulse generator from the array. If present, determine etiology of existing pocket problem. Remove any debris/infectious material from pocket and copiously irrigate. Use aseptic syringe to irrigate pocket. Cap the proximal end of the lead and secure it to the fascia. Close the initial pocket site with multilayer closure and confirm hemostasis. Apply surgical glue to skin edges.

Clinical Example (1016T)

A 35-year-old female, who has medically refractory gastroesophageal reflux disease, is undergoing insertion of a lower esophageal sphincter neurostimulator. Interrogation, analysis, and programming of the lower esophageal sphincter neurostimulator are requested.

Description of Procedure (1016T)

The surgeon delivers the lead into the abdominal cavity through the laparoscopic port and then performs a dissection of the tissues around the lower esophageal sphincter, with suturing of the electrodes into the lower esophageal sphincter. The surgeon tunnels the stimulating lead through the peritoneum into a pocket in the right lower quadrant and attaches it to the stimulator (separate procedure). The physician performing the programming then interrogates and analyzes the impedance of the neurostimulator. If the impedance is out of range, the physician removes, cleans, and reattaches the stimulating lead to the neurostimulator and reassesses the impedance in a stepwise manner with



repeat interrogation, removing and reinsertion of the stimulating lead into the stimulator, and/or removal and replacement of the stimulating lead until the proper range of impedance is achieved or the surgeon is requested to reposition the electrodes. Convey this information to the surgeon to facilitate electrode anchoring and closure of the incision(s) (separate procedure). Upon closure of the incision(s), the physician reassesses and analyzes the impedance of the stimulating lead. Program and review the stimulation settings. The physician verifies and records the stimulation rate, pulse width, cycling on/off times, stimulating electrode selections, and battery status. The physician turns on the neurostimulator and removes the interrogating head.

Clinical Example (1017T)

A 42-year-old female, who has medically refractory gastroesophageal reflux disease, has previously undergone placement of a lower esophageal sphincter neurostimulator with initial improvement of her symptoms. The patient is now seen in a follow-up with complaints of reflux.

Description of Procedure (1017T)

Place the interrogation head over the subcutaneous stimulator. The physician obtains interrogation and measurements of lead impedance, battery voltage, and stimulation settings. Compare these to the settings from the previous visit. The physician determines that no adjustment of the stimulator parameters is required. Document the stimulation parameters, impedance, and operation of the lower esophageal sphincter neurostimulator in the patient's medical record. Terminate the interrogation procedure.

Clinical Example (1018T)

A 47-year-old male, who has medically refractory gastroesophageal reflux disease (GERD), has previously undergone placement of a lower esophageal sphincter neurostimulator with initial improvement of his symptoms. The patient is now seen in a follow-up with worsening GERD symptoms and daily complaints of nocturnal regurgitation and breakthrough heartburn despite high adherence to therapy.

Description of Procedure (1018T)

Place the interrogation head over the subcutaneous stimulator. The programmer with a memory head recognizes the patient's stimulator. The physician obtains interrogation and measurements of impedance, voltage, and current, stimulation rate, pulse width, cycling on/off times, stimulating electrode selections, and battery status. Compare these to the settings from the previous visit. It is determined that there has been a change in electrode impedance, and thus, the neurostimulator applies a change in the current. The physician determines that an adjustment of the stimulator parameters is required. Communicate the analysis results to the patient that therapeutic adjustment is warranted. Replace the stimulator interrogation head over the patient's subcutaneous stimulator. The physician interrogates the device, reviews stored data and symptom logs, and modifies one or more parameters, such as increasing the amplitude and adjusting the stimulation polarity, to optimize patient response while preserving safety, with changes based on a structured clinical decision matrix developed for this therapy. At the conclusion of modification of parameters, the physician reprograms the stimulator to achieve the desired impedance, voltage, current, polarity, and/or stimulation. When reprogramming is successful and the neurostimulator is delivering the desired amps of current, terminate the procedure. Document all

adjustments made to the stimulation parameters and ongoing operation of the lower esophageal sphincter neurostimulator in the patient's medical record.

References

1. Nikolic M, Schwameis K, Paireder M, et al. Tailored modern GERD therapy – steps towards the development of an aid to guide personalized anti-reflux surgery. Sci Rep 9. December 16, 2019. Accessed August 29, 2025. <https://doi.org/10.1038/s41598-019-55510-2>.