

Spinal Neurostimulator: Removal, Insertion, Replacement, and Analysis

CPT® Assistant.

April 2011; Volume 21: Issue 4

Since the pain medicine clarification published in August 2010, we have received further questions pertaining to the intent and use of the spinal neurostimulator codes, 63650, 63655, and 63661-63664. In addition, questions were received related to the programming (code 95972) of the external or implanted pulse generator or receivers.

Review of CPT® Guidelines

The following questions and answers provide further reporting and CPT modifier instructions related to specific procedural scenarios unaddressed in either the CPT Assistant February or August 2010 articles on pain medicine. In order for these instructions to be meaningful, it is helpful to first review the CPT guidelines in the Neurostimulators (Spinal) subsection of CPT 2011 codebook.

Codes 63650, 63655, and 63661-63664 describe the operative placement, revision, replacement, or removal of the spinal neurostimulator system components to provide spinal electrical stimulation. A neurostimulator system includes an implanted neurostimulator, external controller, extension, and an electrode array that consists of multiple contacts or electrodes (4 or more) that provide the actual electrical stimulation in the epidural space.

For percutaneously placed neurostimulator systems (63650, 63661, 63663), the contacts are on a catheterlike lead. An array defines the collection of contacts that are on one catheter.

For systems placed via an open surgical exposure (63655, 63662, 63664), the electrode array consists of contacts that are on a plate or paddle-shaped surface.

Do not report 63661 or 63663 when removing or replacing a temporary percutaneously placed array for an external generator.

Frequently Asked Questions

Question 1: May code 63650 be reported for both insertion of a temporary percutaneous electrode array and a permanent percutaneous electrode array?

AMA Response: Yes. The use of code 63650, Percutaneous implantation of neurostimulator electrode array, epidural, is not altered when the implantation of the percutaneous epidural neurostimulator electrode is performed for the purpose of a 'temporary' trial or for 'permanent' neurostimulation. The difference between the two procedures is the attachment of the electrode array to an external stimulator unit for trial stimulation as opposed to connecting to an implanted pulse generator or receiver for permanent stimulation. Attachment to an external stimulator unit is considered inherent to the work represented by code 63650. Therefore, it is not appropriate to report code 63685, Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling.

However, if the percutaneous electrode array is attached to an implanted spinal neurostimulator pulse generator or receiver, then code 63685 would be reported in addition to code 63650, for the insertion or replacement of the pulse generator or receiver. Code 63685 includes the creation of a subcutaneous pocket made to house the stimulator and tunneling of the electrodes to the pocket. The generator is then placed in the subcutaneous pocket, lead impedances are tested to verify proper connection, and the device is programmed to begin stimulation (code 95972). (Refer to Question 3 for further information related to the use of code 95972.)

Question 2: What CPT codes are reported when a temporary 'percutaneous' electrode array is removed with the insertion of a permanent percutaneous electrode array and an implanted pulse generator or receiver at the same operative session?

AMA Response: The revision of a percutaneously implanted system (code 63663) would only be performed after a permanent electrode array is in place and is later revised. As indicated in CPT Assistant August 2010, if during the trial period a level of pain relief has been achieved, a decision may be made to place a permanent electrode array. If the percutaneous trial electrode is removed and a new percutaneous permanent implant is placed, this constitutes placement of a new percutaneous implant, which would be connected to an implanted pulse generator. Procedurally, this would not be a revision. It would not be appropriate to report code 63663, Revision including replacement, when performed, of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed, because neither this type of electrode plate nor paddle was previously in place. Code 63663 would only be used if a previous permanent (internalized system) array of neurostimulator electrodes had been percutaneously placed, and is now being revised or replaced to improve efficacy.

The work of removing a temporary percutaneous lead array is valued within the code for the 'initial' placement (63650). Therefore, it would not be appropriate to report code 63661, Removal of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed, when removing the percutaneous trial electrode. The placement of the permanent percutaneous neurostimulator electrode array would be reported using code 63650. Based on payer requirements, if performed during the postoperative period of the initial percutaneous electrode insertion (code 63650), it may be necessary to append CPT modifier 58, Staged or Related Procedure or Service by the Same Physician During the Postoperative Period.

Code 63685 should be reported in addition to code 63650 to describe the implantation of the pulse generator and percutaneous electrode array connection.

Nonetheless, if the trial percutaneous electrode array is neither removed nor replaced, but is simply connected to an implanted pulse generator (IPG), only the insertion of the IPG is reported (code 63685). The work of connecting the percutaneous trial electrode to the IPG is included in code 63685. (Refer to Question 3 for further information related to initial programming at the time of implantation (code 95972).)

Question 3: May code 95972 be reported for complex programming of an external nonimplanted neurostimulator pulse generator that is attached to a temporary electrode array?

AMA Response: Correct choice of programming codes is not based upon the intent of the stimulator lead array being used as a 'temporary' external lead or as a 'permanent' implanted lead. An inherent portion of the lead placement, and is not additionally reported using either code 95971 or 95972, is electronic analysis during a percutaneous electrode array placement (63650) or during a laminectomy for implantation of a plate/paddle electrode array (63655) when only impedance testing and stimulation is performed to verify function of the leads (not the pulse generator).

Codes 63650-63688 apply to both simple and complex neurostimulators. Therefore, codes 95970-95975 are reported for initial or subsequent electronic analysis and programming of neurostimulator pulse generators. The guidance to determine electronic analysis of an implanted simple versus complex neurostimulator as specified in the CPT guidelines is based upon device capability, as reflected in either neurostimulator programming code 95971, 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 compliance measurements); simple spinal cord, or peripheral (ie, peripheral nerve, autonomic nerve, neuromuscular) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, or code 95972, 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 compliance measurements); complex spinal cord, or peripheral (except cranial nerve) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, first hour.

As stated in the CPT guidelines, code 95971 describes intraoperative or subsequent electronic analysis of an implanted simple spinal cord or peripheral (ie, peripheral nerve, autonomic nerve, neuromuscular) neurostimulator pulse generator system with programming. Codes 95972 and 95973 describe intraoperative (at initial insertion/ revision) or subsequent electronic analysis of an implanted complex spinal cord or peripheral (except cranial nerve) neurostimulator pulse generator system, with programming.

A simple neurostimulator pulse generator/transmitter (codes 95970, 95971) is one capable of affecting three or fewer of the following: pulse amplitude, pulse duration, pulse frequency, eight or more electrode contacts, cycling, stimulation train duration, train spacing, number of programs, number of channels, alternating electrode polarities, dose time (stimulation parameters changing in time periods of minutes including dose lockout times), more than one clinical feature (eg, rigidity, dyskinesia, tremor). A complex neurostimulator pulse generator/ transmitter (codes 95970, 95972-95975) is one capable of affecting more than three of the above. Modifier 52, Reduced Services, should be appended to code 95972 in the event the duration of the services was performed in less than 31 minutes.

Question 4: How would the removal of a permanent percutaneous catheter-type electrode with the insertion of a permanent paddle-type lead, placed via either a fresh laminotomy or laminectomy at the same spinal level and connected to the existing implanted pulse generator, be reported?

AMA Response: If removing a percutaneously placed catheter-type lead and replacing it with a paddle-type lead via a new laminotomy at the same level, code 63655, Laminectomy for implantation of neurostimulator electrodes, plate/paddle, epidural, should be reported. The removal of the percutaneous electrode array is separately reported using code 63661. Based on payer requirements, if performed during the postoperative period of the initial percutaneous electrode insertion (code 63650), it may be necessary to append CPT modifier 58 to code 63655. If either programming or reprogramming of the implanted pulse generator or receiver is performed, then code 92972 may also be reported (codes 63655 58, 63661 58, 95972). In this circumstance, code 95972 is reported for the analysis of the pulse generator, (not merely lead impedance testing to verify functionality at the time of lead placement). Modifier 52, Reduced Services, should be appended to code 95972 in the event the duration of the services was performed in less than 31 minutes.

To further clarify, the removal of a 'temporary' percutaneous catheter array is included in code 63650. But, the removal of a 'permanent' percutaneous catheter array is not inclusive in code 63650, and should, therefore, be reported using code 63661. Reporting it thus is appropriate regardless of whether the procedures were performed at the same or different spinal level(s).

It would not be appropriate to report code 63664, Revision including replacement, when performed, of spinal neurostimulator electrode plate/paddle(s) placed via laminotomy or laminectomy, including fluoroscopy, when performed, because neither this type of electrode plate nor paddle was previously in place. Code 63664 would only be used if a previous permanent (internalized system) array of neurostimulator electrodes had been placed via either laminotomy or laminectomy, and was now being revised or replaced to improve efficacy.

Question 5: How would the reporting for the procedure performed in Question 4 differ when performed at different spinal levels?

AMA Response: Code 63661, Removal of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed, should be reported in the event removal of the percutaneous electrode is performed at one level with insertion of a paddle-type electrode array requiring laminectomy at a different spinal level. Code and modifier 63655 59 would be reported for the insertion of the paddle-type array requiring laminectomy at a different spinal level from the previously placed percutaneous lead. If performed, either programming or reprogramming of the implanted pulse generator or receiver may also be reported, using code 95972 (63661, 63655 59, 95972). In this circumstance, code 95972 is reported for the analysis of the pulse generator, (not merely lead impedance testing to verify functionality at the time of lead placement). Modifier 52, Reduced Services, should be appended to code 95972 in the event the duration of the services was performed in less than 31 minutes.