



Spinal Cord Stimulation (SCS) Fact Sheet

What Is Spinal Cord Stimulation (SCS)?

Spinal Cord Stimulation, or SCS, offers a treatment option for some of the estimated 100 million people who suffer from chronic pain in the U.S.¹ SCS works by delivering small electrical pulses to the pain sensing pathways of the spinal cord, effectively altering the pain signals traveling to the brain.

SCS is typically prescribed for the treatment of pain of the back, trunk, or limbs. It is most commonly used to treat severe low back and lower extremity pain. Thousands of patients with severe chronic painful conditions have received relief with spinal cord stimulation.

Overview of Spinal Cord Stimulator Systems

The key components of a rechargeable SCS system are leads, an implantable pulse generator (IPG), patient remote control, and a portable charging system.

- The leads are thin wires that deliver precise pulses from the pulse generator to the spinal cord.
- The implantable pulse generator (IPG) is an implantable device that features a rechargeable battery and other electronics that deliver the pulses to the leads. The pulse generator is placed surgically under the skin, usually in the buttock or the abdomen. The IPG is similar in function and appearance to a pacemaker.
- The remote control device allows the patient to turn the system on and off and adjust stimulation within parameters set by physicians.
- The charging system is used by the patient to recharge the IPG battery after it is implanted.

Determining if SCS Therapy is Appropriate for a Candidate

SCS therapy offers an evaluation period: a candidate for SCS can test-drive the therapy during the evaluation period using a temporary external system. To trial the therapy, a minor procedure will be performed to place the leads in the candidate's back. Leads are positioned using a small needle. They are then connected to an external pulse generator that is worn on a belt for 5-7 days. During this period, the system's programs are adjusted and fine-tuned to best alleviate the patient's pain. After this period the candidate will report to the doctor how much pain relief was felt. Together, the candidate and doctor can decide if SCS therapy is something they would like to continue to receive. If so, receiving an SCS implant is the next step. This requires a minor surgical procedure to place an implantable pulse generator (IPG) beneath the skin.

1. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Institute of Medicine of the National Academies, 2011.