

2 Surgeries, a Spinal Cord Stimulator and the \$500,000 Difference

The Rising Utilization and Costs of Spinal Cord Stimulators Causes, Clinical and Financial Insight, and Risk Mitigation

Overview

Spinal Cord Stimulation (SCS) is a pain-relief technique that continuously delivers a low-voltage electrical current to the spinal cord to block the sensation of pain. SCS is the most commonly used implantable neurostimulation technology for management of pain syndromes. As many as 50,000 neurostimulators are implanted worldwide every year. [1] Proven as an effective treatment option for many chronic pain sufferers, SCS is most often used to treat neuropathic pain, including diabetic neuropathy, radiculopathies, and Complex Regional Pain Syndrome (CRPS). Pain is reduced by electrical pulses that modify and mask the pain signal from reaching the brain. Stimulation does not eliminate the source of pain, it simply interferes with the signal to the brain.

According to CNBC.com [2], the U.S. SCS market is projected to reach \$2.2B in 2019. That is double the figure from 2014. High prevalence of Chronic Pain Syndrome and disc surgery, a rising geriatric population, and an increased demand for minimally invasive surgeries are major factors driving this growth. [3]

To help illustrate the costs and challenges associated with SCS claims, this white paper will demonstrate how price transparency was leveraged to achieve compelling savings for a nationally recognized Third Party Administrator (TPA) regarding the placement of one rechargeable Spinal Cord Stimulator and two permanent leads.

Disease Summary & Treatment Options

Spinal cord stimulation is an FDA-approved, minimally invasive neurostimulation therapy for advanced chronic pain associated with Degenerative Disk Disease (DDD), Failed Back Surgery Syndrome (FBSS), and Complex Regional Pain Syndrome (CRPS) among others.

Only recently has chronic pain emerged as a distinct phenomenon. It affects about 100 million adults with an estimated annual cost of \$635 billion. When chronic pain occurs, it has the potential to become a disease itself. [4] The complexity of Chronic Pain Syndrome yields a variety of different treatment options escalating in intensity and aggressiveness:

1. Basic: rest and nutrition
2. Mid-Level: prescription opioids and nerve blocks (injection of an anesthetic, steroid, and/or anti-inflammatory into the pain area)
3. High: SCS treatment

High cost of treatment, tough regulatory problems, and reliance on traditional therapies pose certain challenges to SCS, which is usually considered a last resort treatment in the management of pain. However, many neurosurgeons believe it should be considered earlier in some situations.

As additional studies are being published on SCS, it is gaining recognition as an effective treatment option for many chronic pain sufferers—reflected in a growing trend for the procedure. The cost benefits and success of SCS are also being realized. Among those patients whose cause of pain cannot be identified, SCS offers better outcomes and improved quality of life. Although not curative, SCS reduces chronic pain suffering and increases post-operative activity.

Because of this, future growth of SCS procedures seems assured.

Cost Drivers

Evolving developments in MRI compatibility and improvements in battery technology expand the applicability of SCS. This allows for more effective and individualized treatment for patients, as well as the potential to salvage patients who have previously failed neuromodulation.

Because of the growing awareness about spinal cord stimulation among physician and patients, coupled with newfound support of non-opioid pain management therapies, there has been increased demand for the minimally invasive surgery. A variety of different groups—from interventional pain physicians to spinal surgeons to anesthesiologists—are increasingly utilizing SCS.

All the signs point to a reduction of SCS costs: greater usage, systems being purchased in bulk, and competition among manufacturers. Greater awareness and utilization of SCS continues to rise. Historically, these types of trends are what drive implant device costs down in the industry. Yet what is clearly evident in Advanced Medical Strategies' SCS claim history is that providers are billing at higher and higher multiples of cost to maximize profit. It is not uncommon to see mark-ups over 400% of cost.

In short, medical device prices are falling; healthcare provider reimbursements are rising.

Insight & Understanding

It bears repeating: medical device prices are falling.

Most payers are unaware of this fact. Spinal Cord Stimulation is just a microcosm of the problem at large regarding medical-surgical implants and devices (and procedures). That is, implants are a black box in the healthcare industry. It's unsurprising that payers don't know that the prices have fallen, because they do not know the prices for implants period!

Without that knowledge it's impossible for payers to gain leverage on providers. Unfavorable reimbursement scenarios with SCS procedures is a huge hurdle for payers to overcome. They need claims validation, actionable data, intelligence metrics, utilization trending, and benchmarking analytics. Only with these things at hand can payers establish a basis for provider network contracting and reimbursements for implant related services such as SCS.

Case Results

A large nationally recognized TPA using AMS' ImplantDx—the only online payer focused, fully-transparent implant pricing directory in the industry—performed a claim analysis regarding the placement of one (1) rechargeable Spinal Cord Stimulator and two (2) permanent leads. The total billed charges were just over \$700,000. Revenue code 0278 alone totaled over 70% of the bill, \$554,130 (Figure 1). The claim originated in the Midwest part of the U.S., with an existing 20% Network PPO discount.

Figure 1

Date	Revenue Code	Description	Code	Quantity	Bill / Invoice Charge	Allowed Charge	Reimbursement Rate	Reduction
01/12/18	0278	Med Surg Supplies/Implants		5				\$ 554,130.00
01/12/18		Anchor Kit	L8699	1	\$ 6,480.00	\$ 10.00	100.00%	\$ 6,470.00
01/12/18		Perc Lead Kit	C1778	2	\$ 24,000.00	\$ 4,393.80	100.00%	\$ 43,606.20
01/12/18		IPG Kit	C1822	1	\$ 497,400.00	\$ 12,788.28	100.00%	\$ 484,611.72
01/12/18		Skin Closure Device	PS20	1	\$ 2,250.00	\$ 40.00	100.00%	\$ 2,210.00

Taking advantage of the standard membership benefits from being an AMS subscriber, the TPA was able to gain clarity into the issues of medical necessity and overcharges. By easily cross-referencing with ImplantDx all the components used for the procedure from the charges on the itemized bill, AMS determined that this \$709,000 claim, while medically necessary, was egregious in price. This led to a financial review in which the most problematic line items were quickly identified (Figure 2).

Figure 2

Description	Quantity	Bill / Invoice Charge	Allowed Charge	Reimbursement Rate	Reduction
ANCHORINGSYSTEM	1	\$6,480.00	\$10.00	100.00%	\$6,470.00
LEAD	2	\$48,000.00	\$4,393.80	100.00%	\$43,606.20
NEUROSTIMULATOR IMPLANTABLE L4900H55MM THK15MM 67GM 30ML F. RECHARGEABLE PRIMARY CELL BATTERY	1	\$497,400.00	\$12,788.28	100.00%	\$484,611.72
ZIP 4 SKIN CLOSURE DEVICE	1	\$2,250.00	\$40.00	100.00%	\$2,210.00
GRAND TOTALS		\$554,130.00	\$17,232.08		\$536,897.92

In full collaboration with our member-subscriber (with true implant pricing data at hand), the AMS legal team contacted the facility where the procedure was performed, to discuss the existing contractual complexities and the exorbitant claims charges. After an open and honest discussion, the facility agreed to a reduction in implant charges of \$347,000 off the actual billed charges by signing off on the agreement.

If the above overview about the rise in Spinal Cord Stimulator procedures isn't enough to convince payers to be mindful of this trend, a mere week later, AMS later received another claim presented with the identical procedure and implants (Figure 3). The total charged for rev. code 0278 was \$76,000. **That's almost a \$500,000 difference between the two claims for the exact same product used in the same procedure!**

Figure 3

43 REV. CD.	43 DESCRIPTION	44 HCPCS/RATE/HIPPE CODE	45 SERV. DATE	46 SERV. UNITS	47 TOTAL CHARGE	48 NOS
0490	AMBULATORY SURGICAL CARE/GENER	63650	01/24/2018	1	12,000.00	
0490	AMBULATORY SURGICAL CARE/GENER	63650 59	01/24/2018	1	12,000.00	
0490	AMBULATORY SURGICAL CARE/GENER	63685	01/24/2018	1	60,000.00	
0278	SUPPLY/IMPLANTS	L8680	01/24/2018	1	8,000.00	
0278	SUPPLY/IMPLANTS	L8680	01/24/2018	1	8,000.00	
0278	SUPPLY/IMPLANTS	L8687	01/24/2018	1	50,000.00	

This is just but one tale of 2 surgeries, a spinal cord stimulator and the \$500,000 difference that highlights the need for vigilance and price transparency. Without ImplantDx, or some other form of business intelligence, the payer would have wasted the time and expense of going through an outside vendor only to find out it was indeed billed at a reasonable rate, assuming that vendor even had the proper information. With ImplantDx, medical device price transparency is available 24-7, on any computer, tablet, or phone, with just a few clicks.

Vigilance

As noted in the Cost Driver section, availability and success rate of SCS warrant pricing stability in the marketplace. This, unfortunately, is not the case. Considering the wave of indications and other applications of SCS continuing to emerge, the U.S. market is set to explode. In fact, the FDA just recently approved two more Spinal Cord Stimulators this year. [5]

These types of trends always historically allow for competitive pricing options. However, since implant pricing remains a black hole in the industry, payers remain at the mercy of what providers bill. Most payers don't know how much provider implant charges are inflated—and that's assuming they even received an invoice. But cost containment may be the least of their worries. They also waste time, assume unnecessary risk, and are unable to pay claims quickly. That spells disaster. Payers must remain vigilant. Knowledge is power.

Business Intelligence (And Membership Benefits)

Medical claims payers must rethink their approach to emerging high cost claim issues. They can start by adjusting a handful of administrative screening flags in order to improve payment integrity and also by removing claims from the adjudication flow that warrant further investigation and greater scrutiny. High-dollar claims control and investigational abilities are a requirement to be able to manage the disproportionate impact catastrophic claims, specialty pharmaceuticals, and implant costs have on overall medical cost trend increases. A decision support

solution with actual pricing, cost metrics, and applicable clinical information is what payers need to lower their clients' health care costs while maximizing their own efficiencies.

In both cases above, member-subscribers relied on the clinical expertise and data analytics that AMS provides. ImplantDx provided the checks and balance to the former SCS bill's excessive charges, while ensuring the reasonable pricing of the latter—all at the touch of a keystroke in a single, user-friendly view.

This kind of business intelligence eliminates any guesswork about how much healthcare providers and facilities are charging for medical-surgical components and common implant-related procedures. In addition, it relieves the burden of trying to obtain invoices from treating providers (often be required as part of network agreements), which can create adversarial and administrative burdens on the payer/network relationship. Lastly, it validates the number of implants (e.g., screws, leads, stents) used in a particular surgery, and also verifies whether they were medically appropriate in the first place. Time and money saved.

About

Advanced Medical Strategies is the leader in strategic intelligence software for combating emerging high cost claim issues. Through the clinically vetted, predictive health information technology of the Predict Suite (PredictRx, PredictDx, ImplantDx), member-subscribers have access to a comprehensive nexus of 488 specialty drugs, 221 medical diagnoses, and 1.5M implantable devices.

Predict Suite data on billed and allowed charges at the treatment level for 274 unique provider networks in all 50 states, 69,800 ICD10 codes, 44,000 CPT Codes, and 344 DRG Codes allows members to more accurately predict liabilities, set reserves, assess the need for cost containment, validate standard of care treatments, and eliminate the countless hours spent searching for this critical information from disparate sources.

Advanced Medical Strategies

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