

TENS vs. No-TENS in Chronic Low Back Pain (CLBP)

Illustration for Estimated Costs and Projected Savings to Medicare Patients in the USA

Total Number of Medicare Beneficiaries (2012) ¹		Point Prevalence of CLBP ^{2,3}	Estimated % of CLBP Patients Treated ^{4,5}	Estimated Number of Patients w/CLBP Treated in Medicare
49,435,610		10.2%	30%	1,512,730
Event	Incremental Event Rate Difference over 1 Year of Follow-Up in All Patients ⁶	Events Avoided from CLBP Patient Population	Average Cost per Event ⁶	Potential Cost offsets over CLBP Patients
Back Surgery	0.018	27,229	\$ 32,555	\$ 886,444,457
Imaging	0.146	220,859	\$ 832	\$ 183,754,298
Physical Therapy	1.267	1,916,628	\$ 92	\$ 176,329,821
ER Visits	0.033	49,920	\$ 760	\$ 37,939,260
Opioid Therapy	0.203	307,084	\$ 46	\$ 14,125,870
TOTAL POTENTIAL COST OFFSETS				\$ 1,298,593,705
TENS Cost	\$ 295.00			
Supply Cost (1 Month)	\$ 47.90			
6 Month Supply Cost	\$ 287.40			\$ 881,013,757
Total Cost Per Pt	\$ 582.40			
Potential Cost Reductions for payer				\$ 417,579,948

¹<http://kff.org/medicare/state-indicator/total-medicare-beneficiaries/>

²Freburger JK, Holmes GM, Agans RP, et al. The rising prevalence of chronic low back pain. *Arch Intern Med.* 2009; 169(3):251-258.

³Weiner DK, Sakamoto S, Perera S, Breuer P. Chronic low back pain in older adults: prevalence, reliability, and validity of physical examination findings. *J Am Geriatr Soc.* 2006; 54(1):11-20.

⁴Malanga G, Nadler S, Agesen T. Epidemiology. In: Cole AJ, Herring SA, eds. *The Low Back Pain Handbook: A guide for the Practicing Clinician.* 2nd ed. Philadelphia, Pa: Hanley and Belfus, 2003:1-7.

⁵Wolsko PM, Eisenberg DM, Davis RB, Kessler R, Phillips RS. Patterns and perceptions of care for treatment of back and neck pain: results of a national survey. *Spine.* 2003;28:292-7.

⁶Pivec R, Stokes M, Chitnis AS, Paulino CB, Harwin SF, Mont MA. Clinical and Economic Impact of TENS in Patients With Chronic Low Back Pain: Analysis of a Nationwide Database. *Orthopedics.* 2013;36(12):922-928.