

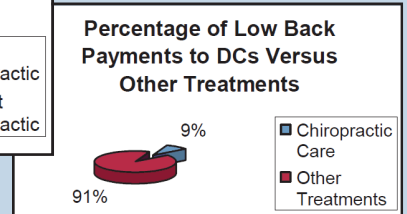
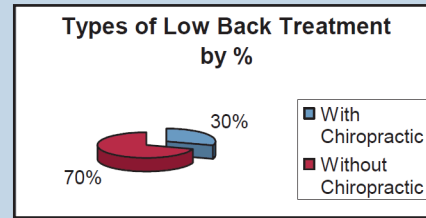
WORKERS COMPENSATION STUDIES

Doctors of chiropractic treat injured workers through the Federal Workers' Compensation system and in all 50 states. In some states, mandates require that private plans cover chiropractic care for injured workers. The following information provides details on the role of doctors of chiropractic in the workers' compensation system.

Cost Comparisons of Chiropractic Care Versus other Health Care Provider

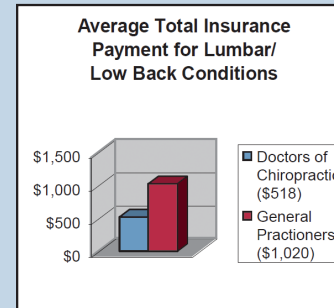
Texas Workers' Compensation Report¹

"The average cost of [low back injury] claims is \$15,884. When a worker with a lower back injury receives at least 75% of their care from a chiropractor that cost decreases to \$12,202 and when they receive at least 90% of their care from a chiropractor the average cost declines even further to \$7,632."



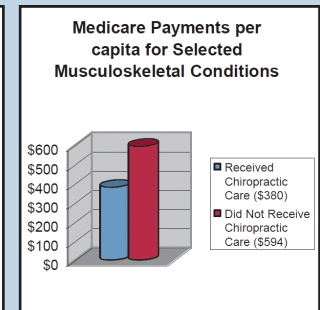
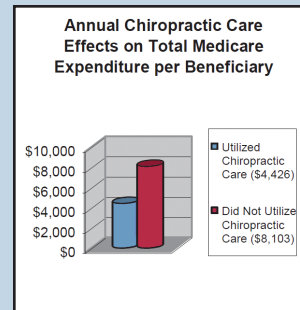
Manga II²

"The doubling of the proportion of the public that visits chiropractors in Ontario from 10% to 20%...will lead to a very substantial net savings in direct and indirect costs. Direct savings to Ontario's health care system may be as much as \$770 million, will very likely be \$548 million, and will be at least \$380 million."



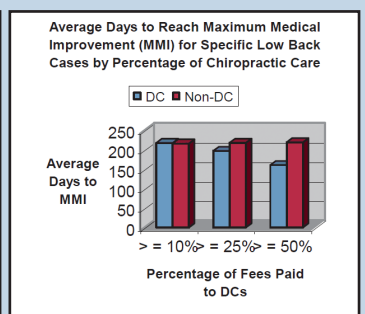
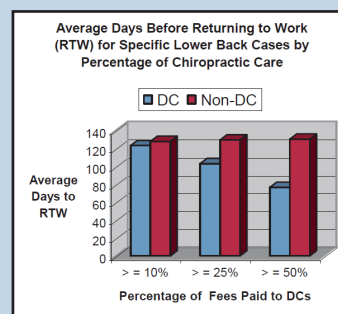
Muse Report³

"...these results strongly suggest that chiropractic care significantly reduces per beneficiary costs to the Medicare program currently and could potentially save even more in the future."



Florida Workers' Compensation Report⁴

"Based on estimated savings per claim, dramatic savings (possibly into the billions of dollars) may be possible with increased claimant access to chiropractic treatment for specific low back and other musculoskeletal conditions."



¹ MGT of America, Inc. Chiropractic Treatment of Workers' Compensation Claimants in the State of Texas (Austin, Texas: 2003)

² Manga, Pran. "Enhanced chiropractic coverage under OHIP (Ontario Health Insurance Plan) as a means for reducing health care costs, attaining better health outcomes and achieving equitable access to health services." Report to the Ontario Ministry of Health, 1998.

³ "Utilization, Cost, and Effects of Chiropractic Care on Medicare Program Costs" Muse and Associates. American Chiropractic Association 2001.

⁴ MGT of America, Inc. Trends in Chiropractic Treatment of Workers' Compensation in the State of Florida (Tallahassee, Florida: 2002)

State Specific Workers Compensation Studies

Chiropractic Treatment of Workers' Compensation Claimants in the State of Texas. Executive Summary. MGT of America Feb 2003.

This retrospective study of workers' compensation claims from 1996 to 2001 was conducted to determine the use and efficacy of chiropractic care in Texas. The researchers reviewed 900,000 claims during that time period to determine if chiropractic was cost-effective compared to medical treatment. They found that chiropractor treatment costs were the lowest of all providers. The study data demonstrated that increased utilization of chiropractic care could lead to declining costs relative to lower back injuries.

Chiropractic care of Florida workers' compensation claimants: Access, costs, and administrative outcome trends from 1994 to 1999. Folsom BL, Holloway RW. *Topics in Clinical Chiropractic* 2002; 9(4): 33-53.

This retrospective study of Florida workers' compensation claims from 1994-1999 found that the average total cost for low-back cases treated medically was \$16,998 while chiropractic care was only \$7,309. Patients treated primarily by chiropractors were found to reach maximum medical improvement almost 28 days sooner than if treated by a medical doctor. Findings from this analysis of the Florida claims indicate that considerable cost savings and more efficient claims resolution may be possible with greater involvement of chiropractic treatment in specific low back cases and other specific musculoskeletal cases.

Managed Care Pre-approval and its Effect on the Cost of Utah Worker Compensation Claims. Jarvis KB, Phillips RB, Danielson C. *Journal of Manipulative and Physiological Therapeutics* 1997; 20(6): 372-376.

In this study, 5000 claims from 1986 and 5000 from 1989 pertaining to injured individuals in the Utah Worker Compensation Fund were examined. The study compared costs for those who received chiropractic care and those who received medical care. From 1986 to 1989 the cost of care for chiropractic increased 12% while medical care increased 71%. The replacement of wages increased 21% for those receiving chiropractic care and 114% for those receiving medical care.

Preliminary Findings of Analysis of Chiropractic Utilization in the Workers' Compensation System of New South Wales, Australia. Tuchin PJ, Bonello R. *Journal of Manipulative and Physiological Therapeutics* 1995; 18(8): 503-511.

In this study, researchers analyzed WorkCover Authority data from New South Wales. Of 1289 cases 30% had back problems. In 12% of the cases, chiropractic care was used for the treatment of spinal injury. The total payments for all cases using chiropractic and physiotherapy care were \$25.2 million, which was 2.4% of the total payments. When 20 claims were chosen at random the average chiropractic cost of care was \$299.65, while the average medical cost was \$647.20. A trend in data collected indicated that when greater than 60% of total cost of treatment came from chiropractic care the number of days missed from work was 9.5. When less than 60% of total cost of treatment came from chiropractic care the number of days missed from work was 50.3.

Murphy DR, Hurwitz EL, Gregory AA, Clary R. A non-surgical approach to the management of lumbar spinal stenosis: a prospective observational cohort study. *BMC Musculoskelet Disord*. 2006 Feb 23;7:16.

Non-surgical treatment for spinal stenosis is often recommended but clinical outcome efficacy data has been little-studied. 57 patients with leg pain and lumbar spinal stenosis (LSS) documented by MRI or CT were treated at the Rhode Island Spine Center with distraction manipulation and neural mobilization. Neural mobilization is a nerve root mobilization technique applied by having the practitioner perform a series of maneuvers moving the foot alternatively into extension and flexion while flexing the hip and extending the knee. The distraction manipulation was theorized to break up periradicular adhesion, thereby releasing nerve root entrapment and restoring vascular function. The patients were also given cat and camel exercises to complement the manual techniques.

In general, patients were treated 2-3 times per week for 3 weeks then re-evaluated for outcome measurements and continued on a reduction of frequency basis for a mean number of 13 treatments. Improvement in disability and patient-rated changes were both significant and clinically meaningful. Long term follow-up at 16.5 months found patient-rated improvement to be 76% while disability measured by Roland Morris Disability Questionnaire was 73%. The researchers concluded this treatment approach is a viable alternative to surgery and most patients should be treated non-surgically before considering an operation.