Clinical and Cost Outcomes Of An Integrative Medicine IPA. Sarnat, Richard; Winterstein, James Journal of Manipulative and Physiological Therapeutics 2004; 27: 336-347.

In 1999, a large Chicago HMO began to utilize doctors of chiropractic (DCs) in a primary care provider role. The DCs focused on assessment and evaluation of risk factors and practiced with a non-pharmaceutical/non-surgical approach. Insurance claims and patient surveys were analyzed to compare clinical outcomes, costs and member satisfaction with a normative control group. During the 4-year study, this integrative medical approach, emphasizing a variety of complimentary and alternative medical (CAM) therapies, resulted in lower patient costs and improved clinical outcomes for patients. The patients who went to DCs as their primary care providers had 43 percent decreases in hospital admissions, 52 percent reductions in pharmaceutical costs and 43 percent fewer outpatient surgeries and procedures.

Comparative Analysis Of Individuals With And Without Chiropractic Coverage. Legorreta A, Metz D, Nelson C, Ray S, Chernicoff H, DiNubile N. Archives of Internal Medicine 2004; 164: 1985-1992.

A 4-year retrospective review of claims from 1.7 million health plan members were analyzed to determine the cost effects of the inclusion of a chiropractic benefit in an HMO insurance plan. The data revealed that members with a chiropractic benefit had lower overall total annual health care costs. Back pain patients with chiropractic coverage also realized lower utilization of plain radiographs, low back surgery, hospitalizations and MRI's. Back pain episode-related costs were also 25 percent lower for those with chiropractic coverage (\$289 vs. \$399).

Chiropractic Care: Is It Substitution Care Or Add-On Care In Corporate Medical Plans? Metz D, Nelson C, LaBrot T, Pelletier K. *Journal of Occupational and Environmental Medicine* 2004; 46: 847-855.

In this study, the claims of 8 million members insured by a managed health plan were evaluated to determine how patients utilize chiropractic treatment when they have a chiropractic benefit. They found that patients use chiropractic as a direct substitution for medical care, choosing chiropractic 34 percent of the time. Having a chiropractic benefit rider did not increase the number of patients seeking care for neuromusculoskeletal complaints.

United Kingdom Back Pain, Exercise and Manipulation Randomized Trial: Cost Effectiveness of Physical Treatments for Back Pain In Primary Care. BMJ. 2004 Dec 11;329(7479):1381. Epub 2004 Nov 19.

This study compared the benefits of spinal manipulation and exercise to "best care" in general practice for patients consulting for back pain. 1,287 patients were divided into treatment groups and followed for more than one year. Patients receiving manipulation and exercise had lower relative treatment costs and experienced more treatment benefits than those treated with general medical care. The authors believe that this study convincingly demonstrated that manipulation alone and manipulation followed by exercise provided cost-effective additions to general practice.

Utilization, Cost, and Effects Of Chiropractic Care On Medicare Program Costs. Muse and Associates. American Chiropractic Association 2001.

This study examines cost, utilization and effects of chiropractic services on Medicare costs. The study compared program payments and service utilization for Medicare beneficiaries who visited DCs and those who visited other types of physicians. The results indicated that chiropractic care could reduce Medicare costs. Medicare beneficiaries who had chiropractic care had an average Medicare payment of \$4,426 for all Medicare services. Those who had other types of care had an average of \$8,103 Medicare payment for all Medicare services. The per claim average payment was also lower with chiropractic patients, having an average of \$133 per claim compared to \$210 per claim for individuals who did not have chiropractic care.