

Zen and the Art of Chiropractic Maintenance

An Inquiry Into Health Care Values

By Anthony Rosner, PhD, LLD [Hon.], LLC

With all due respect to Robert Pirsig's classic tome of the 1970s,¹ the book title couldn't be more appropriately applied to both the state and lack of recognition of chiropractic health care. As Pirsig explains in his introduction, the book itself isn't an expostulation on orthodox Zen Buddhist philosophies, or for that matter motorcycles. Rather, it describes a journey with philosophical reflections along the way.

The same might be said of chiropractic's own journey, in this case seeking proper recognition. In particular, chiropractic from the point of view of a variety of third-party payers has been repeatedly turned down for reimbursement when it comes to matters of maintenance or preventive therapy. Completely counterintuitive, you might say, in light of the repeated and sometimes urgent declarations that we hear to the effect that the only way to control the runaway costs and inefficiency of American health care is to *emphasize* preventive care, placing it at the *highest* rather than lowest priority of interventions.²

The evidence from recent research clearly demonstrates that the provision of maintenance or preventive measures from chiropractors appears to deliver tangible benefits, with major impacts upon our health care system:

Cost-Effectiveness

As part of a comprehensive geriatric assessment program, the RAND Corporation studied a subpopulation of patients who were under chiropractic care compared to those who were not, and found that the individuals under continuing chiropractic care were free from the use of a nursing home (95.7 percent vs. 80.8 percent); free from hospitalizations for the past 23 years (73.9 percent vs. 52.4 percent); more likely to report a better health status; more likely to exercise vigorously; and more likely to be mobile in the community (69.6 percent vs. 46.8 percent).

Although it is impossible to clearly establish causality, it is clear that continuing chiropractic care is among the attributes of the cohort of patients experiencing substantially *fewer* costly health care interventions.³

A second review of a larger cohort of elderly patients across the United States compared direct expenditures (hospital care, physicians' services, nursing home) between groups of patients who were under maintenance chiropractic care and those who were not. Nearly a threefold savings of mean annual expenditures was reported as follows: \$3,105 for patients under maintenance care vs. \$10,041 for patients receiving no maintenance care.

Increased Productivity

One study involving elderly populations reviewed the consequences of implementing an onsite industrial chiropractic program that included the early detection, treatment, prevention and occupational management of musculoskeletal injuries two days per week. For the 21 months after implementation of the program, the total number of days of lost time, costs per claim, rate premiums, and especially the number of surgeries decreased dramatically. Cost savings from avoided surgeries alone amounted to \$900,000 for these preventive measures.⁵

Reduced Injury Incidence

An additional study recruited 59 adults ages 18-27 from two elite Australian rules football teams and randomized them into intervention and control groups. The control group was administered standard club, medical, paramedical and sports science management, including medication, surgery, manipulative physical therapy, massage, strength and conditioning, and rehabilitation. The intervention group included all these procedures and added pragmatic chiropractic management, involving manual therapies and/or soft-tissue therapies to the spine, pelvis and lower extremities at a minimum weekly frequency for six weeks; followed by one treatment every two weeks for a three-month period.

The chiropractic intervention resulted in a lower incidence of injuries to the hamstrings, lower limb muscles, and knees, with far shorter periods of play missed as well. A lower incidence of overall back pain was also reported.⁶ Again, the implications are that there may be considerable potential savings in direct costs spent for medical care with patients who are undergoing continuing chiropractic care on a maintenance basis. When return-to-work and other indirect costs are figured in (as implied in the Coulter study described above,³ far greater savings would be expected.

Functional Improvement

Even more persuasive data comes from a recent study⁷ of 29 patients with chronic low back pain who were divided into two groups: one receiving 12 treatments within a single month and the other adding to this regimen one treatment every three weeks for an extended nine months (12-14 additional visits). In terms of disability (as indicated by a modified Oswestry questionnaire), the group receiving the supplementary maintenance treatments continued to improve throughout the entire 10-month period, while the cohort lacking the additional visits reverted to baseline levels within that same period.

The authors of this study speculate that repeated chiropractic visits may have been the direct cause for the improvement of disability scores due to (a) improved trunk mobility,⁸ (b) facilitated release of entrapped synovial folds or relaxation of hypertonic muscle by sudden stretching⁹ or (c) the disruption of articular or periarticular lesions.¹⁰

An even larger patient sample (60) with chronic nonspecific low-back pain was divided into three groups, with one group receiving 12 treatments of sham spinal manipulation over a one-month period; a second group receiving 12 treatments of active spinal manipulation over the same period; and a third group receiving 12 treatments of active spinal manipulation over the same period, followed by maintenance spinal manipulation every two weeks for the following nine months.

At 10 months, *only* the patients receiving the maintenance protocol (group 3) experienced significantly lower pain and disability scores. Patients not receiving the maintenance therapy showed the same improvement at one month, but returned to baseline levels at 10 months. Clearly, the maintenance regimen yielded tangible and long-lasting benefits.¹¹

Lower Disability Recurrence

Workers' compensation data in Illinois, Massachusetts, Maryland, New Hampshire, New York, Texas and Wisconsin, involving 894 cases filing claims from Jan. 1 - Dec. 31, 2006, revealed lower disability recurrence for patients under chiropractic care compared to similar patients treated by physical therapists or physicians. The hazard ratios, reflecting the likelihood of recurrence, were 1.0 for chiropractors, 1.6 for physicians, and 2.0 for physical therapists. Patients in the physical therapy group had the highest proportion of recurrent disability (16.9 percent).

Average weekly costs were \$122 higher during the disability period for those with recurrent disability than for those without. It was unclear whether the chiropractic benefit was indirect, preventing patients from receiving otherwise unproductive procedures that could slow, rather than accelerate their recovery.¹²

To sum up, there is every reason to believe that significant reductions of morbidity, as well as the attainment of major cost savings, could be realized with further emphasis upon chiropractic maintenance therapy as a treatment option. By an odd twist of coincidence, Robert Pirsig's book was turned down by no less than 121 publishers before emerging into the literary world. According to *Guinness World Records*, that number hasn't been equaled by any best-selling book in history.

Chiropractors likewise having faced multiple refusals should take heart from all this information and advocate the promising evidence that lies before them, realizing that more of the same should be unfolding in the near future with the current emphasis upon evidence-based medicine.¹³

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