

A Study to Examine the Effectiveness and Cost-Effectiveness of Chiropractic Management of Low-Back Pain

by

1. Pran Manga, Ph.D. (1)
2. Douglas E. Angus, M.A. (2)
3. Costa Papadopoulos, MHA (3)
4. William R. Swan, B.Comm. (4)

August 1993

1 Professor and Director, Masters in Health Administration Program, University of Ottawa; and President, Pran Manga and Associates Inc., Ottawa.

2 Adjunct Professor, University of Ottawa and Project Director, The Cost-Effectiveness of the Canadian Health Care System, Queen's - University of Ottawa Economic Projects.

3 Health Care Consultant and Associate of Pran Manga and Associates, Inc.

4 Consultant in Health Care Economics.

The support of the Ministry of Health, Government of Ontario, which solely funded the project, is gratefully acknowledged. The views and opinions expressed in this report are those of the authors only, and should not be attributed to the MHA Program, University of Ottawa, the Ministry of Health or the Ontario Chiropractic Association .

EXECUTIVE SUMMARY

Introduction

The serious fiscal crisis of all governments in Canada is compelling them to contain and reduce health care costs. It has brought a new and unprecedented emphasis on evidence-based allocation of resources, with an overriding objective of improving the cost-effectiveness of health care services.

The area of low-back pain (LBP) offers governments and the private sector an excellent opportunity to attain the twin goals of greater cost-effectiveness and a major reduction in health care costs. Today LBP has become one of the most costly causes of illness and disability in Canada - a phenomenon which does not appear to be generally appreciated or understood in medical and government circles in Canada. Studies on the prevalence and incidence of LBP suggest that it is ubiquitous, probably the leading cause of disability and morbidity in middle-aged persons, and by far the most expensive source of workers' compensation costs in Ontario - as indeed in most other jurisdictions.

Much of the treatment of LBP appears to be inefficient. Evidence from Canada, the USA, the UK and elsewhere shows that there are conflicting methods of treatment, many with little - if any scientific evidence of effectiveness, and very high costs of treatment. Despite this, levels of disability from LBP are increasing.

In the Province of Ontario LBP is managed mostly by physicians and chiropractors, with physiotherapists also playing a significant role. While medical services are fully insured under Medicare, chiropractic care services are only partially covered. LBP patients incur the highest out-of-pocket expenses for chiropractic services. Virtually no out-of-pocket expenses are incurred for medical treatment, with the exception of drugs, and out-of-pocket expenses incurred for physiotherapy services fall somewhere in between the two.

Medical physicians, chiropractors, physiotherapists and an assortment of other professionals together offer about thirty-six therapeutic modalities for the treatment of LBP. In this study we focused principally on the effectiveness and cost effectiveness of chiropractic and medical management of LBP.

FINDINGS

F1.

On the evidence, particularly the most scientifically valid clinical studies, spinal manipulation applied by chiropractors is shown to be more effective than alternative treatments for LBP. Many medical therapies are of questionable validity or are clearly inadequate.

F2.

There is no clinical or case-control study that demonstrates or even implies that chiropractic spinal manipulation is unsafe in the treatment of low-back pain. Some medical treatments are equally safe, but others are unsafe and generate iatrogenic complications for LBP patients. Our reading of the literature suggests that chiropractic manipulation is safer than medical management of low-back pain.

F3.

While it is prudent to call for even further clinical evidence of the effectiveness and efficacy of chiropractic management of LBP, what the literature revealed to us is the much greater need for clinical evidence of the validity of medical management of LBP. Indeed, several existing medical therapies of LBP are generally contraindicated on the basis of the existing clinical trials. There is also some evidence in the literature to suggest that spinal manipulations are less safe and less effective when performed by non-chiropractic professionals.

F4.

There is an overwhelming body of evidence indicating that chiropractic management of low-back pain is more cost-effective than medical management. We reviewed numerous studies that range from very persuasive to convincing in support of this conclusion. The lack of any convincing argument or evidence to the contrary must be noted and is significant to us in forming our conclusions and recommendations. The evidence includes studies showing lower chiropractic costs for the same diagnosis and episodic need for care.

F5.

There would be highly significant cost savings if more management of LBP was transferred from medical physicians to chiropractors. Evidence from Canada and other countries suggests potential savings of many hundreds of millions annually. The literature clearly and consistently

shows that the major savings from chiropractic management come from fewer and lower costs of auxiliary services, much fewer hospitalizations, and a highly significant reduction in chronic problems, as well as in levels and duration of disability. Workers' compensation studies report that injured workers with the same specific diagnosis of LBP returned to work much sooner when treated by chiropractic physicians than by medical physicians. This leads to very significant reductions in direct and indirect costs.

F6.

There is good empirical evidence that patients are very satisfied with chiropractic management of LBP and considerably less satisfied with physician management. Patient satisfaction is an important health outcome indicator and adds further weight to the clinical and health economic results favoring chiropractic management of LBP.

F7.

Despite official medical disapproval and economic disincentive to patients (higher private out-of-pocket cost), the use of chiropractic has grown steadily over the years. Chiropractors are now accepted as a legitimate healing profession by the public and an increasing number of medical physicians.

F8.

In our view, the constellation of the evidence of:

- (a) the effectiveness and cost-effectiveness of chiropractic management of low-back pain.
- (b) the untested, questionable or harmful nature of many current medical therapies .
- (c) the economic efficiency of chiropractic care for low-back pain compared with medical care.
- (d) the safety of chiropractic care.
- (e) the higher satisfaction levels expressed by patients of chiropractors, together offers an overwhelming case in favor of much greater use of chiropractic services in the management of low-back pain.

F9.

The government will have to instigate and monitor the reform called for by our overall conclusions, and take appropriate steps to see that the savings are captured. The greater use of chiropractic services in the health care delivery system will not occur by itself, by accommodation between the professions, or by actions on the part of the Workers' Compensation Board and the private sector generally.

RECOMMENDATIONS

Our recommendations for reform include the following:

R1.

Current policy discourages the utilization of chiropractic services for the management of LBP. There should be a shift in policy to encourage and prefer chiropractic services for most patients with LBP.

R2.

Chiropractic services should be fully insured under the Ontario Health Insurance Plan, removing the economic disincentive for patients and referring health providers. This one step will bring a shift from medical to chiropractic management that can be expected to lead to very significant savings in health care expenditure, and even larger savings if a more comprehensive view of the economic costs of low-back pain is taken.

R3.

Chiropractic services should be fully integrated into the health care system. Because of the high incidence and cost of LBP, hospitals, managed health care groups (community health centres, comprehensive health organizations, and health service organizations) and long-term care facilities should employ chiropractors on a full-time and/or part-time basis. Additionally such organizations should be encouraged to refer patients to chiropractors.

R4.

Chiropractors should be employed by tertiary hospitals in Ontario. Hospitals already employ chiropractic in the United States with good effect. Similar recommendations have been made recently by government inquiries in Australia and Sweden, and following government funded research in the U.K. and other countries. Unnecessary or failed surgery is not only costly but also represents low quality care. The opportunity for consultation, second opinion and wider treatment options are significant advantages we foresee from this initiative which has been employed with success in a clinical research setting at the University Hospital, Saskatoon.

R5.

Hospital privileges should be extended to all chiropractors for the purposes of treatment of their own patients who have been hospitalized for other reasons, and for access to diagnostic facilities relevant to their scope of practice and patients' needs.

R6.

Chiropractors should have access to all pertinent patient records and tests from hospitals, physicians, and other health care professionals upon the consent of their patients. Access should be given upon the request of chiropractors or their patients.

R7.

Since low-back pain is of such significant concern to workers' compensation, chiropractors should be engaged at a senior level by Workers' Compensation Board to assess policy, procedures and treatment of workers with back injuries. This should be on an interdisciplinary basis with other professional, technical and managerial staff so that there is early development of more constructive relationships between chiropractors, physicians, physiotherapists and Board staff and consultants. A very good case can be made for making chiropractors the gatekeepers for management of low-back pain in the workers' compensation system in Ontario.

R8.

The government should make the requisite research funds and resources available for further clinical evaluation of chiropractic management of LBP, and for further socioeconomic and

policy research concerning the management of LBP generally. Such research should include surveys to obtain a better understanding of patients' choices, attitudes and knowledge of treatments with respect to LBP. The objective of these surveys should be better information for health policy, programme planning and consumer education purposes.

R9.

Chiropractic education in Ontario should be in the multidisciplinary atmosphere of a university with appropriate public funding. Chiropractic is the only regulated health profession in Ontario without public funding for education at present, and it works against the best interests of the health care system for chiropractors to be educated in relative isolation from other health science students.

R10.

Finally, the government should take all reasonable steps to actively encourage cooperation between providers, particularly the chiropractic, medical and physical therapy professions. Lack of cooperation has been a major factor in the current inefficient management of LBP. Better cooperation is important if the government is to capture the large potential savings in question and, it should be noted, is desired by an increasing number of individuals within each of the professions.