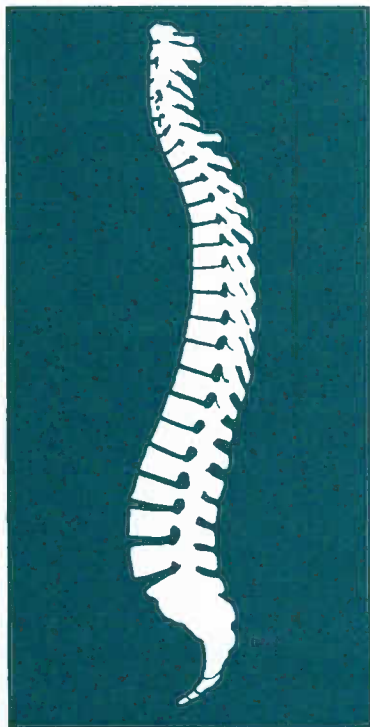


THE CHIROPRACTIC REPORT

www.chiropracticreport.com

Editor: David Chapman-Smith LL.B. (Hons.)

November 2001 Vol. 15 No. 6



THE CHIROPRACTIC PROFESSION

Basic Facts, Independent Inquiries, Common Questions

“The chiropractic profession is assuming its valuable and appropriate role in the health care system in this country and around the world. As this happens the professional battles of the past will fade and the patient at last will be the true winner.”

Wayne Jonas, MD, Director (1995-1998), Office of Alternative Medicine, US National Institutes of Health, Bethesda, MD.¹

A. INTRODUCTION

CHIROPRACTIC (Greek: treatment by hand) arose as a separate profession in the United States in the 1890s. In that era of heroic medicine many alternative disciplines emerged — chiropractic has been the strongest survivor.

Through to the 1950s the chiropractic profession remained in its early development stages — it was isolated, controversial, and largely North American. In the 1960s and 1970s controversy remained, but the foundations were being laid for broader mainstream acceptance of the profession, foundations such as:

- Educational standards and licensing examinations similar to medicine. (In many U.S. states chiropractors and medical doctors sat the same basic science examinations for licensure).
- The first significant research texts and scientific journals.
- Legal recognition and regulation in all US states and in various other countries.

2. Today, more than 100 years after its birth, chiropractic is taught and practised throughout the world and the profession has earned broad acceptance for its services, including its central art of spinal adjustment or manipulation. Evidence of this includes:

a) *Back Pain*. Throughout the 1990s evidence-based national clinical guidelines for the management of back pain,

sponsored by governments in many countries including the UK,² US,³ Denmark⁴ and New Zealand⁵ endorsed the traditional chiropractic approach to management by recommending spinal manipulation and early activity for most patients. The expert panels for these guidelines, predominantly medical experts, have also included chiropractors.

In the UK the Royal College of General Practitioners' new guideline for the management of back pain was developed in partnership with the British Chiropractic Association and recommends to family physicians that, in the absence of certain red flags, they consider referrals of patients with back pain for skilled manipulation.⁶

b) *Neck manipulation*. In the past there has been misrepresentation of risk rates of neck manipulation,⁷ and medical concern about unproven benefit. That era is gone. Recent multidisciplinary expert panels in Canada,⁸ and the US^{9,10} have reviewed the current evidence on risks and benefits and specifically recommended cervical manipulation and mobilization for many patients with common categories of head and neck pain, including motor vehicle accident victims with Grades I-III whiplash associated disorders.

There is now a clear anatomical basis for headache linked to the cervical spine, known as cervicogenic headache, being direct connective tissue bridges between the dura and muscles and ligaments in the upper cervical spine.

c) *General acceptance by medicine and nursing*. In 1997 the World Federation of Chiropractic, the international body representing national associations of chiropractors in 77 countries, was granted official relations by the World Health Organization (WHO) and WHO's affiliated organization for national and international medical organizations, the

Table 1

CURRENT U.S. MEDICAL POLICIES ON CHIROPRACTIC

American College of Surgeons (1987)

- “There are no ethical or collective restraints to full professional cooperation between doctors of chiropractic and medical physicians”.
- Such cooperation should include “referrals, group practice, participation in all health care delivery systems, treatment and services in and through hospitals, participation in student exchange programs between chiropractic and medical colleges, and cooperation in research and continuing education programs”.

American College of Radiology (1987)

- “There are and should be no ethical or collective impediments to interprofessional association and cooperation between doctors of chiropractic and medical radiologists in any setting where such association may occur, such as in a hospital, private practice, research, education, care of a patient or other legal arrangement”.

American Hospital Association (1987)

- The AHA “has no objection to a hospital granting privileges to doctors of chiropractic for the purposes of administering chiropractic treatment, furthering the clinical education and training of doctors of chiropractic, or having x-rays, clinical laboratory tests and reports thereon made for doctors of chiropractic and their patients and/or previously taken x-rays, clinical laboratory tests and reports made available to them upon (patient) authorization”.

Council of International Organizations of Medical Sciences (CIOMS). Acceptance was widely supported by the mainstream health care community.

The World Federation of Neurology, representing neurologists, affirmed that "the relationship between the medical and chiropractic professions worldwide has become increasingly one of mutual respect and collaboration."¹¹ The International Council of Nurses and the World Federation of Public Health Associations offered similar letters of support. The American Public Health Association has established a formal division of chiropractic in recognition of the now significant role of chiropractors in public health programs. There are now chiropractors on the research staff at Harvard and the US National Institutes of Health. What is the status and role of the chiropractic profession in health care systems in 2001? This Report now presents basic facts, the findings of government inquiries (in a world too full of unresearched opinions and partisan claims, the best government inquiries present the most reliable evidence), and then answers common questions that arise when other professionals discuss chiropractic.

B. BASIC FACTS

3. Chiropractic is now the third largest primary health care profession in the western world after medicine and dentistry. There are approximately 70,000 chiropractors in the United States, 10,000 in Japan, 6,000 in Canada, 2,500 in Australia, 1,600 in the United Kingdom and 100-500 in each of Belgium, Denmark, France, Italy, Norway, Sweden, Switzerland, New Zealand, South Africa and The Netherlands.

The profession is established, though in smaller numbers, in other European countries, Asia, Africa, the Middle East and South America.

4. The profession has always presented itself as a natural and conservative source of health care, offering an alternative to medication and surgery. Accordingly it makes no use of drugs or surgery and, unlike osteopathy in the United States, has no aspirations to do so. Medical reservations on this point are quickly put to rest upon first-hand experience of chiropractors and chiropractic offices.

The main focus of chiropractic practice is the relationship between the function of joints, muscles and the nervous system (neuromusculoskeletal disorders)

and the effects of these disorders on health. The spine is of central importance.

The principal treatment is joint adjustment or manipulation. Management also includes rehabilitative exercises, patient education and lifestyle modification, and the use of physical therapy modalities and orthotics and other supports. There is also an emphasis on health promotion and early return to activities for injured patients. The focus on education and patient empowerment, as research now shows, is an important factor in the success of chiropractic management and the high level of patient satisfaction reported.^{12,13,14}

5. **Law.** The practice of chiropractic is now recognized in all world regions. Regulation by legislation exists, for example, in Canada and the United States (North America), Costa Rica, Mexico and Panama (Latin America), Belgium, Denmark, Finland, Norway, Sweden, Switzerland and the UK (Europe), Australia, Hong Kong and New Zealand, (Asia/Pacific), Cyprus, Iran and Saudi Arabia (Eastern Mediterranean) and Nigeria, South Africa and Zimbabwe (Africa). In many other countries where the profession is established, practice is recognized and legal under general law. Common features in all jurisdictions are:

- Primary care (direct contact with patient)
- The right and duty to diagnose, including the right to use diagnostic x-ray.

The European Parliament, by its adoption of the Lannoye Report in 1997, is now encouraging the recognition and regulation of chiropractic practice throughout Europe.

6. **Education.** Common international standards of education have been achieved through a network of accrediting agencies that began with the US Council on Chiropractic Education (CCE), recognized by the US Office of Education since 1974.

Entrance requirements vary according to country, but are a minimum of two years university credits in qualifying subjects in North America. The chiropractic college undergraduate program has a minimum of 4 full-time academic years and is followed by postgraduate clinical training and/or licencing exams in many countries. Postgraduate specialties include chiropractic sciences, orthopedics, radiology, rehabilitation and sports chiropractic.

The Chiropractic Report is an international review of professional and research issues published six times annually. You are welcome to use extracts from this Report. Kindly acknowledge the source. Subscribers may photocopy the Report or order additional copies (.75 cents each – minimum of 20 copies plus shipping) for personal, non-commercial use in association with their practices. However, neither the complete Report nor the majority or whole of the leading article may be reproduced in any other form without written permission.

Subscription: for rates and order form, see page 8. For information or orders visit www.chiropracticreport.com or telephone 416-484-9601, fax 416-484-9665.

Editorial Board

Daniele Bertamini DC, *Italy*

Alan Breen DC PhD, *England*

Peter Gale DC, *United States*

Scott Haldeman DC MD PhD, *United States*

Donald J. Henderson DC, *Canada*

Reginald Hug DC, *United States*

William Kirkaldy-Willis MD, *Canada*

Dana Lawrence DC, *United States*

Miriam A. Minty DC, *Australia*

Michael Pedigo DC, *United States*

Lindsay Rowe MAppSc (Chiropractic) MD, DACBR, FCCR,

FACCR, FICC, DRACR, *Australia*

Louis Sportelli DC, *United States*

Aubrey Swartz MD, *United States*

Changes of mailing instructions should be sent to The Chiropractic Report, 3080 Yonge Street, Suite 5065, Toronto, Ontario M4N 3N1, telephone 416-484-9601, fax 416-484-9665. Printed by Harmony Printing Limited, 123 Eastside Drive, Toronto, Ontario, Canada M8Z 5S5. Copyright © 2001 Chiropractic Report Inc. ISBN 0836-144

In former times most chiropractors graduated from North American colleges. There are now colleges in Australia, Brazil, Canada, Denmark, France, Japan, Korea, Mexico, New Zealand, South Africa and the UK as well as the United States. Depending upon the country chiropractic education is either within the university system (e.g. Australia, Brazil, Canada, Denmark, England and South Africa) or in private colleges (e.g. France, Japan and the United States).

Government inquiries and independent investigations by medical practitioners have affirmed that today's chiropractic undergraduate training is of equivalent standard to medical training in all pre-clinical subjects.^{15, 16} This is now clear, for example, at the University of Southern Denmark in Odense where chiropractic and medical students take the same basic science courses together for three years before entering separate streams for clinical training. On contemporary faculties in independent chiropractic schools, chiropractors are joined by appropriate basic science and medical specialists, whose absence in earlier

times provided grounds for valid criticism of chiropractic education.

7. Government and Third Party Funding. The cost of chiropractic treatment is met fully or in part under government health care plans in the United States (Medicare, Medicaid and Military), Canada, Denmark, Norway, Sweden and Switzerland. In other countries there is funding for special populations — e.g. military veterans in Australia, and the armed services in Israel.

All modern government inquiries into chiropractic — the most thorough being in New Zealand (1979), Australia (1986), Sweden (1987) and Canada (1994) — have recommended government funding for chiropractic services. Workers are entitled to elect chiropractic care under workers compensation law in the United States, Canada, Australia and New Zealand.

C. GOVERNMENT INQUIRIES

9. All formal government inquiries into chiropractic during the past 25 years have found contemporary chiropractic health care safe, effective, cost-effective and recommended licensure and government funding. They have all criticized the level of antipathy and misinformation between the chiropractic and medical professions (with faults on both sides) and expressly called for cooperation in the interests of patients.

This issue of *The Chiropractic Report*, which updates a similar one five years ago, provides current, summary information on chiropractic for others in the health care system — physicians, nurses and other professionals, health care managers, and patients. Subscribers may photocopy the Report for use with them, or order additional original copies at .75 cents each plus shipping. For more information and orders visit www.chiropracticreport.com or contact the Report at the email/telephone/fax addresses given on page 8.

For a more complete description of the profession — its history, education, research, practice, and current status — see *The Chiropractic Profession* by David Chapman-Smith (NCMIC Group Inc., West Des Moines, Iowa, 2000 — 162 pp. hardback, illustrated, US\$49.95 plus shipping) available from NCMIC at tel. 1-877-291-7312 or fax 1-515-282-3347, or *The Chiropractic Report*.

10. Government inquiries, like research, are of widely varying quality and some deserve little credibility. Of importance are the qualifications of the commissioners, the terms of reference, the procedures adopted for hearing and testing evidence, and the degree of opportunity to hear all relevant evidence. On these criteria the most comprehensive and detailed independent examination of chiropractic ever undertaken was that in New Zealand in 1978/79.

11. **New Zealand.** The Commission's 377-page report, *Chiropractic In New Zealand*¹⁷ has obvious authority and balance. It followed judicial hearings then extensive investigations by the Commission in New Zealand, the United States, Canada, England and Australia. These following principal findings appear in the introduction to the Report — note that it is now 20 years since these independent findings:

- Chiropractic is a branch of the healing arts specialising in the correction by spinal manual therapy of what chiropractors identify as biomechanical disorders of the spinal column. They carry out spinal diagnosis and therapy at a sophisticated and refined level.
- Chiropractors are the only health practitioners who are necessarily equipped by their education and training to carry out spinal manual therapy.
- General medical practitioners and physiotherapists have no adequate training in spinal manual therapy, though a few have acquired skill in it subsequent to graduation.
- Spinal manual therapy in the hands of a registered chiropractor is safe.
- The education and training of a registered chiropractor are sufficient to enable him/her to determine whether there are contra-indications to spinal manual therapy in a particular case, and whether the patient should have medical care instead of or as well as chiropractic care.
- Spinal manual therapy can be effective in relieving musculoskeletal symptoms, such as back pain and other symptoms known to respond to such therapy, such as migraine.
- In a limited number of cases where there are organic and/or visceral symptoms, chiropractic treatment may provide relief, but this is unpredictable, and in such cases the patient should be under concurrent medical care if that is practicable.

• Chiropractors do not provide an alternative comprehensive system of health care, and should not hold themselves out as doing so.

• In the public interest and in the interests of patients, there must be no impediment to full professional cooperation between chiropractors and medical practitioners.

• The responsibility for spinal manual therapy training, because of its specialised nature, should lie with the chiropractic profession. Part-time or vacation courses in spinal manual therapy for other health professionals should not be encouraged.

The Commission, in answer to the basic question before it, recommended government funding for chiropractic services. There were also recommendations concerning discipline, interprofessional ethics, hospital access and government-funded research to be conducted jointly by the chiropractic and medical professions. Although there have been major developments since the New Zealand Report in 1979 (e.g. greatly increased cooperation between medicine and chiropractic, and a large volume of research on chiropractic manipulation and cost-effectiveness), this report remains the best reading for impartial conclusions on many aspects of the chiropractic profession.

12. **Australia.** In Australia a Medicare Benefits Review Committee¹⁸ was established in July 1984 and asked by the Federal Minister for Health to "consider requests for extending the scope of Medicare (government-funded health) arrangements to provide benefits for certain paramedical services". These included chiropractic services.

For various reasons, including breadth of terms of reference and non-judicial procedure (detailed written evidence was submitted, and the Committee met with participants, but evidence was not given orally under oath or subject to cross examination), the Australian report is of less weight.

However, all of the findings of the New Zealand Report were accepted. In addition the Committee recommended funding for chiropractic in hospitals and other public institutions, saying:

"We are aware of the very considerable organizational and professional obstacles . . . orthodox practitioners and, indeed, some chiropractors may initially find the experience an uneasy one, but

we consider the differences that currently exist to be unreasonable and efforts should be made to bridge the gap”.

“... the continuing schism between the two professions does little to help improve the health of the many Australians who might benefit from a joint chiropractic/medical approach to their problems”.¹⁹ (Emphasis added).

13. **Sweden.** A Commission on Alternative Medicine in Sweden reported on chiropractic in 1987. Sweden then had no legislation regulating the practice of chiropractic, had approximately 100 chiropractors educated in accredited colleges, and several hundred other practitioners and lay persons who called themselves “chiropractor”.

- The Commission was comprised of representatives of government and education, one MD, and one chiropractor. It did not hold judicial hearings, but conducted detailed investigation of chiropractic education, had the scientific literature assessed by university medical faculty, and commissioned a demographic survey by Statistics Sweden.

The Commission’s findings were consistent with those in Australia and New Zealand. It reported:²⁰

- Chiropractors with the doctor of chiropractic degree (DC) “should become registered practitioners and be brought within the national insurance system in Sweden”.
- “DCs follow a 4-5 year course of university level training . . . in its pre-clinical parts . . . found to be the equivalent to Swedish medical training”. They have “competence in differential diagnosis” and should be regulated on a primary care basis.
- “Measures to improve cooperation between chiropractors, registered medical practitioners and physiotherapists are vital” in the public interest. (Emphasis added).

Following this report the Swedish government passed legislation recognizing and regulating the chiropractic profession. Then, together with the governments from Denmark, Finland and Norway, it supported the establishment of a school of chiropractic at the University of Southern Denmark, in Odense, to provide a regional chiropractic college for students from those countries. Currently there are negotiations for a further school in Sweden.

14. **Canada.** In the industrialized province of Ontario, where chiropractors have been licensed by law since 1927 and chiropractic services have been funded by government since 1970, the government commissioned two studies of the profession in the 1990s.

The first, by health economists Manga et al from the University of Ottawa, reviewed all the international data on the management of back pain, from controlled trials to workers’ compensation statistics. It reported in 1993 that, on grounds of comparative cost-effectiveness, safety and patient satisfaction there was “an overwhelming case in favour of much greater use of chiropractic services in the management of low-back pain.”¹⁴ (These findings were supported the following year by the UK and US guidelines referred to in para 2.)

The government referred the Manga Report and many other issues of access and funding to a Ministry of Health Chiropractic Services Review Committee chaired by a former Minister of Health, Tom Wells. The November 1994 Wells Report endorsed the central findings of the Manga Report and recommended:

- “That on grounds of effectiveness, safety, patient satisfaction and public acceptance . . . chiropractic services should continue

to be funded by the (government’s) Ontario Health Insurance Plan.”

- That a number of financial and other barriers to access should now be removed, that university chiropractic education should be publicly funded on a similar basis to education for medical doctors and other recognized health professions, and that the government should now develop a formal health human resources (manpower) plan reflecting the now established role for chiropractic services.²¹

15. **United Kingdom.** Two important reports on chiropractic during the past 10 years have been the Kings Fund Report, which provided the basis for new legislation on chiropractic supported by the British Medical Association, and last year’s report from the House of Lords’ Select Committee on Science and Technology titled *Complementary and Alternative Medicine*.²² The latter accepted that chiropractic was a leading discipline complementary to medicine, with an important role in the UK health care system.

D. COMMON QUESTIONS

16. **The Chiropractic Subluxation.** Medical critics have sometimes alleged “the chiropractic subluxation (the spinal lesion that is one focus of chiropractic treatment) has no objective existence at all”. This is said to be confirmed by the fact that medical radiologists cannot see such subluxations on x-ray. The position is complicated by the fact that modern medicine has a competing definition of ‘subluxation’.

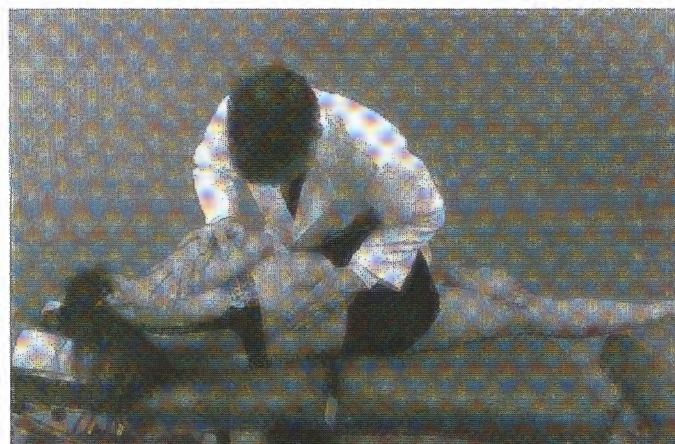
17. ‘Vertebral subluxation’ is the term given by chiropractors to an entity with these essential elements:

- Abnormal function (movement) in a spinal joint.
- Neurological and vascular involvement;
- Often, but not necessarily, a structural (static) displacement of a vertebra.

It is essentially a functional entity, involving restricted vertebral movement in one or more planes of motion, and unless there is structural misalignment is no more visible on x-ray than a limp or headache or any other functional problem.

18. The concept of subluxation is not unique to chiropractic. Its equivalents are the ‘osteopathic lesion’ and the ‘segmental blockage’ of the European manual medical school.

On account of the confusion of terminology, and the artificial barriers to understanding this can create, many North American chiropractors today simply refer to ‘spinal dysfunction’. There



A patient positioned for a lumbar adjustment.

Courtesy of Tom Bergmann, DC

is irony in this since, as Terrett explains, medical authors during the 18th and 19th centuries used subluxation in the chiropractic sense.²³ And during the past 10 years, during which there has been greatly increased cooperation between medicine and chiropractic in research and practice, many medical authors are again using the term subluxation as formerly. (See for example *Sacroiliac Subluxation: A Common Treatable Cause of Low Back Pain in Pregnancy* (1991) by Daly, Frame et al., MDs from the University School of Medicine, Rochester, New York who define and accept 'subluxation' in a manner completely consistent with chiropractic practice.²⁴)

19. Adjustment/Manipulation. Chiropractors prefer the word 'adjustment' to 'manipulation' because it signifies something more controlled, specific and skilled. Today, a wide range of manual techniques have been shared between the different schools of manual health care. It is not generally appreciated that the classic chiropractic adjustment techniques, although quick, are not forceful or violent. To quote the New Zealand Commission, "... it is alleged that (chiropractic) technique consists mainly of the 'dynamic thrust'. This is claimed to be dangerous because it is a sudden high-velocity movement, the patient cannot see what is being done, cannot resist the thrust, and is therefore at the chiropractor's mercy.

"Until the Commission saw chiropractors at work, it imagined from such descriptions that this was the only way the chiropractor operated, while the physiotherapist, with gentle articulations, extension, or mobilization was a very different practitioner. The truth is that, while the chiropractor's movements are indeed often quick, perhaps more so than those of the physiotherapist, they are also usually small and precise. The most forceful manipulations we saw were performed by physiotherapists"²⁵ (Emphasis added).

20. Chiropractic and Medicine — Incompatible or Complementary? The zealous and unsupportable assertion of many early chiropractors was that the vertebral subluxation influencing the nervous system was the source of all or most disease. This is as historical as a then current medical technique, blood-letting with the leech. This skeleton in the chiropractic cupboard, rattled by a fringe movement of extremists as exists in any profession, has sometimes been a continuing barrier to understanding and cooperation between the chiropractic and medical professions.

The best proof for MDs that chiropractic today is a modern health science compatible with medicine is to meet a local chiropractor and observe his/her practice. The next best evidence is to talk to a colleague who has a settled inter-referral relationship with a chiropractor. At the individual level today there is widespread cooperation between chiropractic and medicine at all levels of education, research and practice. In many North American cities a large number of MDs and DCs practice in offices in the same health centre with close cooperation and inter-referral, often now in full and formal partnership.

21. Independent respected health science journals have always published chiropractic research. In recent years journals published/endorsed by medical associations have dropped their former editorial restrictions. For example:

a) In 1992 The American College of Physicians, in its *Annals of Internal Medicine*, published medical research into chiropractic manipulation for back pain. MDs were asked to reappraise the roles of spinal manipulation and the chiropractic profession because of "recent research favourable to the chiropractic treatment of patients with low-back pain"²⁶

For the last 50 years use of spinal manipulation had been "labelled as unorthodox treatment by the medical profession" but new research demanded a change in attitude.

b) In the same year *The Journal of Family Practice*, endorsed by the American Academy of Family Physicians, in an article by Peter Curtis, MD and Jeffrey Bove, DC, PhD from the University of Chapel Hill, North Carolina encouraged family physicians to "re-evaluate their relationship with chiropractors" and provided guidelines for referral.²⁷

Three perceived problems — the education of chiropractors, including ability to diagnose; lack of scientific evidence of effectiveness of chiropractic manipulation; and potential danger from manipulation, especially cervical manipulation — were answered and dismissed as unfounded.

22. In other countries than the U.S. there is a more established pattern of cooperation and inter-referral. Thus, for example:

a) In the United Kingdom, a 1986 survey of general medical practitioners showed that 50% had referred patients for non-medical spinal manipulation (chiropractors and osteopaths) during the past 12 months.²⁸ Today — 10 years later — referral rates will be significantly higher on account of the increased scientific evidence including the highly regarded and publicized British trial of chiropractic,²⁹ and the official support of the British Medical Association³⁰ and the Royal College of General Practitioners.⁶

b) In Canada a 1989 study from the Faculty of Medicine, University of Toronto, reported that a clear majority (62%) of family medical practitioners were referring patients to chiropractors and that 1 in 10 (9.5%) of MDs in family practice were chiropractic patients themselves.³¹ A 1990 survey in Saskatoon, a city with 38 chiropractors, reported that 20% of all chiropractic practice related to neck and back pain patients referred by MDs.³²

23. Notwithstanding these developments many MDs retain the impression that chiropractors have an incompatible approach to health care. One powerful source of this wrongful perception, now exposed in the courts, has been the American Medical Association (AMA) and it should be known that:

- The AMA changed its ethics to allow referral in 1980 but continued a campaign to discourage cooperation.
- In the Wilk Case,³³ litigation between a representative group of chiropractors and the AMA and affiliated organizations, the AMA was found to have breached antitrust laws during 1966-1980 in conspiring to restrict cooperation between individual MDs and chiropractors in order to eliminate chiropractic as a competitor in the U.S. health care system. A patient care defence advanced by the AMA, alleging justifiable concerns about the practice of chiropractic, failed. The court found itself obliged to make a direct ruling on credibility against the AMA on this matter.

- Significantly, in the present context, the court also found that the basis of the AMA's illegal boycott of chiropractic was the calculated portrayal of chiropractors as unscientific, cultist and having a philosophy incompatible with scientific medicine.

If you still have the feeling this may be true, you should reflect upon the sources of your information, and what direct evidence you have to contradict the findings of a number of detailed government investigations.

24. Over-treatment/Patient Dependency/Frequency of Treatment. Some chiropractors over-treat, most do not — if they did

there would not be the impressive evidence of cost-effectiveness that exists (see para 26). This problem exists for all professions. Points that can only be touched upon in the space available are:

- Figures worldwide show much fewer visits per patient than critics suppose. In Ontario, Canada, where government benefits have been available for up to 22 treatments per annum, only approximately 10% of patients have used that maximum in recent years.
- Some conditions require ongoing treatment, as in medicine and physical therapy. This is readily apparent if one thinks of the nature of spinal disorders and the impact of continuing with a lifestyle that aggravates them.
- The view that manipulation either works in one or two treatments or not at all, which came from the British medical approach in the 1960s, has now been rejected by everyone familiar with the literature and this field of practice. In the US a 1991 RAND expert panel, with a majority of medical specialists, concluded that:

“For acute, uncomplicated low-back pain, an adequate trial of spinal manipulation is a course of two weeks for each of two different types of spinal manipulation (four weeks total) after which, in the absence of documented improvement, spinal manipulation is no longer indicated”.³⁴

On a basis of three treatments per week this represents a course of 12 treatments for a patient with acute, uncomplicated low-back pain. If there is documented improvement care may continue, otherwise it should not. Management will typically also involve other interventions such as exercise and education. This RAND definition of an adequate trial of spinal manipulation has now been accepted in the US government-sponsored AHCPR guideline³ and formal practice guidelines established by the chiropractic profession. The latter also give fuller details on appropriate frequency and duration of care for acute, sub-acute and chronic conditions — in the US, for example, see the nationally based Mercy Center Proceedings.³⁵

25. Conditions Treated. Studies in North America, Europe and Australia report that approximately 80% of chiropractic practice is for musculoskeletal pain, with low-back pain the predominant presenting complaint. Another 10% is for headache, concerning which there is a growing body of research evidence of effectiveness.^{36,37,38}

The remaining 10% includes a wide variety of disorders aggravated or caused in part by spinal lesions. This is the 10% that concerns many MDs who have little exposure to manipulative health care. Much needs to be said here, but central issues are:

- No responsible chiropractor today claims to cure organic disease through adjustment of the spine. There is no research to support such a claim. However, clinical experience suggests that vertebrogenic pain plays an often unsuspected role in many conditions.
- The claims of modern chiropractors in this area, and their

clinical experiences, are shared by all professions engaged in spinal manual therapy — including medicine, osteopathy and physiotherapy.

Kunert, a West German cardiologist, prominent in the European manual medicine school in the 1950s and 1960s, gives case examples where the medical diagnoses were respiratory block and heart disease. On reference to his specialized unit, the primary causes were found to be vertebral problems, corrected by spinal manipulation. Following extensive clinical and research experience he concluded that “lesions of the spinal column . . . are perfectly capable of simulating, accentuating or making a major contribution to organic diseases. There can . . . be no doubt that the state of the spinal column does have a bearing on the functional status of the internal organs”.³⁹

- Lewit, a Prague neurologist who is a leader of the manual medicine movement in Europe and whose major text is now available in English, writes at length of his experimental and clinical experience using spinal manipulation to treat patients with respiratory problems, heart disease, digestive problems, gynaecological disorders, migraine, vertigo/dizziness and other conditions.⁴⁰

- Grieve, a noted and well-published English physiotherapist says:

“All those experienced in manipulation can report numerous examples of migrainous headaches, disequilibrium (vertigo), subjective visual disturbances, feelings of retro-orbital pressure, dysphagia, dysphonia, heaviness of a limb, extrasegmental paraesthesia, restriction of respiratory excursion, abdominal nausea and the cold sciatic leg being relieved by manual or mechanical treatment of the vertebral column; but, while these effects are noted, and the underlying mechanisms investigated with the purpose of understanding better what we do, they are insufficient reason to put the cart before the horse.

In other words, the prime impulse for physical treatment of the vertebral column is properly vertebral column disorder, and not visceral disorder”.⁴¹

The final sentence sums up the position — whatever the patient’s complaint may be, the reason for manipulative care is the presence of a neuromusculoskeletal disorder.

26. Cost Effectiveness. The majority of chiropractic practice involves patients with back pain and neck pain/cervical headache, both of which have a high incidence rate and huge impact upon patients, employers, and society in terms of disability and cost.

Medical leaders such as the Glasgow orthopaedic surgeon Gordon Waddell, MD, who was a principal consultant for the literature review for both the UK and the US back pain guidelines and is author of the respected new text *The Back Pain Revolution*,⁴² acknowledge that management of low-back pain has been “a 20th century health care disaster” and that “it is now time for a fundamental change in clinical management and reorganization of health care to meet the needs of these patients.”

For patients with common or mechanical back pain and neck pain/headache there is now a change from extensive diagnostic testing, rest and medication for pain control based on *structural pathology* as in traditional medical practice, to exercise, manual treatments, early mobilization of patients and education about back pain based on *functional pathology* as in traditional chiropractic practice. It is this new common understanding, arising from the research of the 1980s to 1990s, together with

Erratum: The September 2001 issue of this Report, using a normally reliable source, referred to a patient in Calgary, Canada, who died in May 2001 following treatment by a physiotherapist, naming him as Mr. Johnny Ditosto. There was such a patient, but this was not Mr. Ditosto, who died of other causes. *The Chiropractic Report* regrets this error, and an apology has been made to Mr. Ditosto’s family.

pressure from patients and payers, that underlies the new level of cooperation between the chiropractic and medical professions.

This is not only effective but highly cost-effective. Summary comments on the evidence are:

a) *WCB Studies*. These suggest a 45-55% saving in overall costs — treatment costs and compensation for lost time — when patients receive chiropractic rather than medical treatment. The most thorough studies have been in California (1972), Wisconsin (1978), Florida (1988), Utah (1991), and the State of Victoria, Australia (1992).⁴³

b) *Best individual trial*. Perhaps the single strongest research statement on the cost-effectiveness of chiropractic care, because of the quality and independence of the study, comes from the British randomized controlled trial comparing chiropractic and medical/physiotherapy management of patients with low-back pain.²⁹ Tom Meade MD, then Director of the Epidemiology Unit, Medical Research Council, and colleagues, in a trial published in the British Medical Journal in 1990, concluded:

- Chiropractic treatment was significantly more effective, particularly for patients with chronic (long-term) and severe pain and “the benefit of chiropractic treatment became more evident throughout the follow-up period” of two years. (In other words the benefits of chiropractic management were long-term, not temporary.)

- “The potential economic resource and policy implications of our results are extensive”, so much so that now “consideration should be given . . . to providing chiropractic within the National Health Service either in hospitals or by purchasing chiropractic treatment from existing clinics.” (Currently, ten years later and partly because of this trial, this is happening.)

The economic analysis published with the trial results showed that the British government would save in excess of \$20 million per annum just on the category of low-back pain patients included in the trial if care was given by chiropractors.

c) *Best review*. The best overview of all the evidence is the Manga Report titled *A Study to Examine the Effectiveness and Cost-Effectiveness of Chiropractic Management of Low-Back Pain*.¹⁴ This independent study by Canadian health economists commissioned by the Ontario government is by far the most comprehensive review of all the international evidence on cost-effectiveness. It finds “an overwhelming case in favour of much greater use of chiropractic services in the management of low-back pain”. With respect to a transferral of management from physicians to chiropractors in Ontario, Manga et al suggest:

“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 and 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 chiropractors than by physicians. This leads to very significant reductions in direct and indirect costs.” (Copies of the Manga Report are available from *The Chiropractic Report* for \$20.00, includes shipping in North America).

27. **Safety**. The two safety issues raised by medical associations at most inquiries into chiropractic practice have been the safety

of treatment and risks from delayed diagnosis. Both alleged dangers have never been substantiated as significant and, in a chapter devoted to safety, the New Zealand Commission concludes that chiropractic treatment “is remarkably safe”.

The one material risk arising from chiropractic treatment is vertebral artery syndrome (VAS) following cervical adjustment, which may lead to serious complications from stroke. The incidence and mechanisms have been well reported in the chiropractic literature since the 1970s. The risk is extremely remote — about .0001% or 1 case per million treatments. This is the figure given in the 1996 RAND Report on *The Appropriateness of Manipulation and Mobilization for Cervical Spine*⁹ and currently by the neurologist Dr. Scott Haldeman in the most recent literature review in *Spine*.⁴⁴

Terrett’s revealing article *Misuse of the Literature by Medical Authors in Discussion Spinal Manipulative Injury*⁷ reviews the many cases where complications following medical manipulation were wrongly ascribed to chiropractors. He found no example in the medical literature of a mistake the other way.

28. **Research**. In its earlier history the chiropractic profession failed to produce a reasonable volume of research. Chiropractors gave reasons that carried considerable force — such as major trial design problems that resulted in a dearth of clinical research in physical medicine generally, exclusion from public facilities and funding, and the financial priorities of survival and upgrading undergraduate education — but there was a neglect.

29. Over the last 20 years the profession has established a strong research presence for its size, and criticisms about lack of research are simply wrong. There is now an international network of full-time researchers, many with PhDs and cross-appointments with health science universities, strong funding within the profession, and a new era of cooperation with medical and basic science researchers.

The depth of chiropractic research can be assessed by reading peer-reviewed journals such as the *Journal of Manipulative and Physiological Therapeutics* (JMPT), published by Mosby, and the proceedings of major scientific meetings. These are held regularly by organizations such as the Foundation for Chiropractic Education and Research (annually) and the World Federation of Chiropractic (biennially).

E. CONCLUSION

30. In 1979 the New Zealand Commission of Inquiry, after looking at the matter more thoroughly than anyone before or since, decided that the history of opposition of organized medicine to chiropractic was based on three main factors — the history of chiropractic, lack of knowledge coupled with misinformation about modern chiropractic theory and practice, and unprofessional conduct by some chiropractors.

Since that time many developments have led to new common ground. There are, however, continuing misunderstandings. This review seeks to dispel them and give impetus to the growing integration of chiropractic and medical services. **TCR**

REFERENCES

1. Jonas WB, Foreword in *The Chiropractic Profession*, Chapman-Smith D, NCMIC Group Inc., West Des Moines, Iowa, 2000.
2. Rosen M, Breen A et al (1994), *Management Guidelines for Back Pain* Appendix B in Report of a Clinical Standards Advisory Group Committee on Back Pain, Her Majesty’s Stationery Office (HMSO), London.

3. Bigos S, Bowyer O, Braen G et al (1994) *Acute Low Back Problems in Adults. Clinical Practice Guideline No.14. AHCPR Publication No. 95-0642. Rockville, MD; Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services.*
4. Manniche C et al. *Low-back Pain: Frequency Management and Prevention from an HDA Perspective. Danish Health Technology Assessment 1999; 1(1).*
5. *New Zealand Acute Low-back Pain Guide, and Guide to Assessing Psychosocial Yellow Flags in Acute Low-back Pain.* Accident Rehabilitation and Compensation Insurance Corporation of New Zealand and the National Health Committee, Wellington, NZ, 1997.
6. Waddell G, Feder G et al (1996) *Low-Back Pain Evidence Review,* London: Royal College of General Practitioners.
7. Terrett AGJ (1995) *Misuse of the Literature by Medical Authors in Discussing Spinal Manipulative Therapy Injury,* J Manipulative Physiol Ther 18(4):203-210.
8. Spitzer WO, Skovron ML et al (1995) *Scientific Monograph of the Quebec Task Force on Whiplash-Associated Disorders: Redefining Whiplash and its Management,* Spine 20:8S.
9. Coulter ID, Hurwitz EL et al (1996) *The Appropriateness of Manipulation and Mobilization of the Cervical Spine,* RAND Santa Monica, California, Document No. MR-781-CR.
10. McCrory DC, Penzien DB et al. (2001) *Evidence Report: Behavioral and Physical Treatments for Tension-Type and Cervicogenic Headache,* Des Moines, Iowa, Foundation for Chiropractic Education and Research. Product No. 2085.
11. Letter dated September 17, 1996 from Lord Walton of Detchant, President, World Federation of Neurology.
12. Cherkin DC and MacCormack FA (1989) *Patient Evaluation of Low Back Pain Care from Family Physicians and Chiropractors,* Western Journal of Medicine 150(3):351-355.
13. Sawyer CE and Kassak K (1993) *Patient Satisfaction with Chiropractic Care,* J Manipulative Physiol Ther, 16(1):25-32.
14. Manga P, Angus D et al (1993) *The Effectiveness and Cost-Effectiveness of Chiropractic Management of Low-Back Pain,* (Chapter 6) Pran Manga and Associates, University of Ottawa, Canada.
15. Commission on Alternative Medicine, Social Departementete, *Legitimization for Vissa Kiropraktorer,* Stockholm, SOU (English Summary) 1987: 12-13-16.
16. Dvorak J (1983) *Manual Medicine in the United States and Europe in the Year 1982,* Manual Medicine 1:3-9.
17. Hasselberg PD (1979). *Chiropractic in New Zealand: Report of the Commission of Inquiry.* Wellington, New Zealand: Government Printer.
18. Second Report (June 1986) Medicare Benefits Review Committee, C.J. Thompson, Commonwealth Government Printer, Canberra, Australia, Chapt. 10 (Chiropractic).
19. Ref 18 Supra, chapt. 5
20. Ref 15 Supra.
21. Wells T (1994) *Chiropractic Services Review Report,* Ministry of Health, Government of Ontario.
22. *Complementary and Alternative Medicine,* House of Lords Science and Technology Committee, 6th Report, 2000.
23. Terrett A (1987) *The Search for the Subluxation: An Investigation of Medical Literature to 1985,* Chiropractic History 7(1):29-33.
24. Daly JM, Frame PS, Rapoza PA (1991) *Subluxation: A Common Treatable Cause of Low Back Pain in Pregnancy,* Family Practice Research Journal 11:149-59, reprinted in J Orth Med (1991) 13(3):60-65.
25. New Zealand Report (1979) Ref 17 Supra, 130-131.
26. Shekelle G, Adams AH et al (1992) *Spinal Manipulation for Low-Back Pain,* Annals Int Med 117(7):590-598.
27. Curtis P, Bove G, (1992), *Family Physicians, Chiropractors and Back Pain,* J Fam Pract, 35(5):551-555.
28. Anderson E and Anderson P (1987) *General Practitioners and Alternative Medicine,* J. Royal Coll Gen Practitioners 37:52-55.
29. Meade TW, Dyer S et al (1990) *Low-Back Pain of Mechanical Origin: Randomised Comparison of Chiropractic and Hospital Outpatient Treatment,* Br Med J 300:1431-37.
- Meade TS, Dyer S et al (1995) *Randomised Comparison of Chiropractic and Hospital Outpatient Management for Low-Back Pain: Results from Extended Follow Up,* Br Med J 311:349-351.
30. *Complementary Medicine: New Approaches to Good Practice* (1993) British Medical Ass, Oxford Univ Press, 138.
31. Patel-Christopher A (1990) *Family Physicians and Chiropractors: A Need for Better Communication and Cooperation,* U of Toronto, thesis, unpublished.
32. Till G, Mior S et al (1991) *A Study of the Characteristics and Demographics of Patients Receiving Chiropractic Treatment in Saskatoon,* Proceedings of the Scientific Symposium, World Federation of Chiropractic, 28-1 (Abstracts).
33. Wilk et al v AMA et al. U.S. District Court Northern District of Illinois Eastern Division) No. 76 C 3777, Getzendanner J, Judgement dated August 27, 1987. (101 pp).
34. Shekelle PG, Adams AH et al (1991) *The Appropriateness of Spinal Manipulation for Low Back Pain: Indications and Ratings by a Multidisciplinary Expert Panel,* (extracts), RAND, Santa Monica, California. Monograph No. R-4025/2 - CCR/FCER.
35. *Guidelines for Chiropractic Quality Assurance and Practice Parameters* (1992), ed Haldeman S, Chapman-Smith D and Petersen DM, Aspen Publishers, Gaithersburg, Maryland.
36. Parker GB et al (1978) *A Controlled Trial of Cervical Manipulation for Migraine,* Aust NZ J Med 8:589-593.
- Parker GB et al (1980) *Why Does Migraine Improve During a Clinical Trial? Further Results from a Trial of Cervical Manipulation for Migraine.* Aust NZ J Med 10:192-198.
37. Boline P, Kassak K, Bronfort G, Nelson C, Anderson A (1995) *Spinal Manipulation vs Amitriptyline for the Treatment of Chronic Tension-Type Headaches,* J Manip Physiol Ther 18:148-154.
38. Nilsson N, Christensen HW et al (1997) *The Effect of Spinal Manipulation in the Treatment of Cervicogenic Headache,* J Manipulative Physiol Ther 20(5):326-330.
39. Kunert W (1965) *Functional Disorders of Internal Organs due to Vertebral Lesions,* CIBA Symposium 13(3):85-96.
40. Lewit K (1985) *Manipulative Therapy in Rehabilitation of the Locomotor System,* Butterworth and Co., London and Boston, 336-342.
41. Grieve GP (1984) *Mobilization of the Spine.* Churchill Livingstone, London/New York, 4th Edition, 22-23.
42. Waddell G (1998) *The Back Pain Revolution,* Churchill Livingstone, Edinburgh.
43. For references, see the Manga Report, ref 14 supra.
44. Haldeman S, Kohlbeck FJ, McGregor M. *Risk Factors and Precipitating Neck Movements Causing Vertebrobasilar Artery Dissection After Cervical Trauma and Spinal Manipulation,* Spine 1999;24(8):785-794.

SUBSCRIPTION AND ORDER FORM
(6 bi-monthly issues) Year commences January

			<i>Check one</i>
US and Canada (your currency)	1 year	\$88.00	<input type="checkbox"/>
	2 years	\$170.00	<input type="checkbox"/>
Australia	1 year	A\$110.00	<input type="checkbox"/>
	2 years	A\$195.00	<input type="checkbox"/>
Elsewhere	1 year	US\$88.00	<input type="checkbox"/>
	2 years	US\$170.00	<input type="checkbox"/>

Name _____

Address _____

City _____ Province/State _____

Country _____ Postal Code/Zip _____

Telephone (____) _____

PLEASE CHECK ONE

Visa Card number _____

MasterCard Expiration date _____

Cheque/Check enclosed

Payable to: The Chiropractic Report
3080 Yonge Street, Suite 5065
Toronto, Ontario M4N 3N1 Canada
Tel: 416-484-9601 Fax: 416-484-9665
E-mail: TCR@chiropracticreport.com
Website: www.chiropracticreport.com