THE CHIROPRACTIC REPORT

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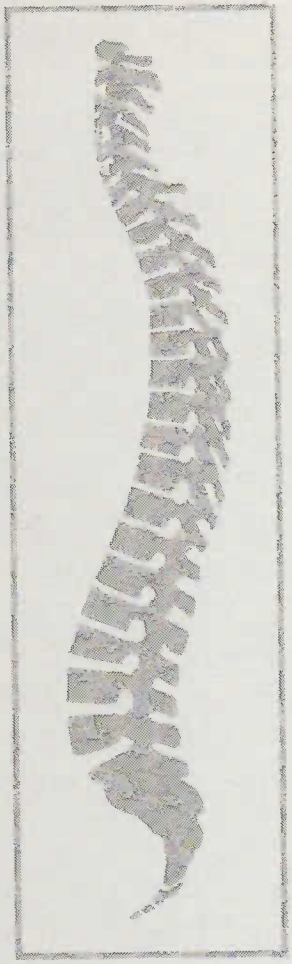

Professional Notes:

Legislative Scope of Practice

In Montreal on June 17-18, 1989 elected representatives and lawyers representing the Canadian Chiropractic Association and provincial associations and licensing boards convened for a National Conference on Chiropractic Legislation in Canada. The aim was to look at the principles of legislation to regulate a health profession, and seek to establish a model for chiropractic in Canada.

The meeting produced agreement on draft proposals. Following review these will come before a second conference to be held this fall. Basic principles that emerged were:

- Legislation should protect title (specific titles and other titles and behaviour leading the public to inter chiropractic qualifications) rather than seek exclusive scope of practice.
- Seeking exclusive scope is unwise because it is unattainable, and efforts to describe an exclusive scope produce legislation that is unacceptably narrow and prevents understanding and acceptance of the profession.
- Legislative scope of practice should be stated in the most general terms, if at all. Details of scope should rather be defined by standards adopted by the self-regulatory body (e.g. Board, College, Council, etc.) established to regulate the practice of chiropractic. These standards, in turn, should be based upon clinical and academic training in accredited colleges of chiropractic.

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The Future of Chiropractic

A. Introduction

1. In September there is to be a gathering of chiropractic leaders in New York, hosted by the New York State Chiropractors Association, to look at the future of chiropractic in the United States. This is one of several such conferences planned for the next 12 months. There are compelling reasons for this display of strategic thinking, which include:

- Chiropractic, and its acceptance in the health science community, have undergone a quite remarkable evolution during the past 10 years. In the most recent issue of the journal 'Manual Medicine' Dr. Jiri Dvorak, editor and one of Switzerland's most prominent neurologists, uses the term 'chiropractic medicine' as a synonym for 'manual medicine' and reports widespread referral from MDs to chiropractors in Switzerland.[1] Is chiropractic about to achieve full integration in the health care system like dentistry and optometry before it? Are there other choices?
- The cost of health care has become unacceptable to the public and government. True economics and market practices are finally being applied to the health care industry, and governments are suddenly controlling providers in a manner not thought possible five years ago. Bernstein predicts the U.S. medical profession will be fully changed from a fee-for-service model to salaried practice in group health care arrangements this century.[2] Where will this revolution leave chiropractors?
- In Europe, North America, and other regions there is a large over-supply of medical practitioners.[3] How will the system adapt to accommodate these MDs. With what impact on other providers?

Lines DC in Australia gives this warning:

> "It is clear that the chiropractic profession must seriously debate and clarify its attitudes on several fronts. In particular it must define its attitudes to health, towards medicine, to education and research, and it must do so with some urgency".[4]

He is right. Here is a review of factors influencing the future of chiropractic, with emphasis on important matters of attitude identified by Lines. Comment is intentionally provocative to stimulate the "serious debate".

B. Factors Inside Chiropractic

2. Life evolves. Much of the future is governed by patterns already established. Let us consider some of the current trends in chiropractic.

Size of Profession

3. In 1976 there were 21,200 chiropractors in practice in the United States (1 per 10,200 people).[5] Currently there are 45,000.[6] The number has doubled during the past 10 years, and there are 8,300 students now enrolled in U.S. chiropractic colleges.[6] In the city of Toronto, Canada, there are over 700 chiropractors. Internationally, communities which once had one or two chiropractors now have 10 or 20 or 30. This growth in the profession means:

- What one chiropractor does in his/her practice now has a greater effect on the reputation and practice of others. Consistency, professionalism, and clear public identity become increasingly important.
- There must be a secure and established place in the health care market to sustain such a large profession.

Education and Research

4. Many important factors underlie the dramatically increased acceptance of chiropractic in the 1980s. In the U.S., the world's most vigorously open society, litigation and political action have been important. Independent government inquiries have been important in countries such as Australia,[7] New Zealand,[8] and Sweden[9] (which, as a result became the most recent country to give legislative recognition to the profession in May 1989).

However perhaps the single most important factor has been the new maturity of chiropractic education and research.

- In the past 10 years – in which, most significantly, nearly 50% of the profession has graduated – independent medical[10] and government[9] investigations have accepted that chiropractic students at accredited colleges receive the same level of education in basic sciences as medical students. In addition chiropractic colleges teach what is now a discrete and specialized modern health science – in essence the differential diagnosis and conservative management of functional disorders of the neuromusculoskeletal (motor) system.
- Who enters the educational process may be as significant as undergraduate education in the future definition of a profession.[11] During the past decade 70% of students

entering the Canadian Memorial Chiropractic College, Toronto, have already completed a university degree. There are now a growing number of chiropractors in Europe, North America and Australia who have also completed training as medical doctors, physiotherapists, or have obtained Ph.Ds in various basic sciences.

• Increasingly chiropractic colleges have firm links (such as cross-faculty appointments and collaborative research) with medical schools and are absorbed into the university system. The Anglo-European College of Chiropractic, Bournemouth, England was given university degree granting status in 1988. Following a March 1989 unanimous resolution by the Nordic Council (representing Denmark, Finland, Norway and Sweden) that a university faculty of chiropractic be established in Scandinavia, final arrangements are being completed at the University of Odense, Denmark.

Australian chiropractic education, with undergraduate programs in Melbourne and Sydney, is now government funded and within the university system. This year Griffith University, Brisbane, Australia, has established a master's degree program in chiropractic science.

Graduates since 1980, who have different education, perceptions, and live in a different health care world from the generation preceding them, will soon govern attitudes in the chiropractic profession.

• There is now a sound body of chiropractic research[12] and continuing criticism of chiropractic in this area has now been labelled a 'red herring' by two major independent inquiries.[7,8] Research is published in chiropractic, medical and other health science literature. Chiropractic researchers are on the editorial boards of medical (e.g. the American Journal of Musculoskeletal Medicine) and multi-disciplinary (e.g. Clinical Biomechanics) peer reviewed journals.

These researchers are governing academic development, and are writing the textbooks and articles that represent the future of chiropractic science. Their frames of reference and use of language are thus of seminal importance for the future.

Language

5. Chiropractic language has changed as chiropractic has been integrated into the health care system. Thus:

• The foremost chiropractic text on x-ray diagnosis is 'Essentials of Skeletal Radiology' by Yochum and Rowe.[13] The title refers to 'radiology' rather than 'roentgenology', the preferred term in chiropractic until recent years, and this work encompassing all disorders likely to confront any chiropractor in practice makes no reference to the chiropractic 'subluxation'.

The chiropractic text 'Whiplash Injuries: The Cervical Acceleration/Deceleration Syndrome' by Foreman and Croft,[14] critically acclaimed in chiropractic and medicine as "the most remarkable compilation of scientific and factual data thus far published concerning the cervical spine" (Ruth Jackson MD, FACS), observes "subluxation is a term that defies casual explanation and precise definition. Its use, therefore, is highly controversial and hotly debated and probably will remain so".

• Chiropractic's major continuing literature review in the United States, published by the Foundation for Chiropractic Education and Research, is entitled 'Spinal Manipulation' and the great majority of chiropractic clinical research published during the past 10 years refers to 'manipulation' or 'spinal manipulative therapy'. As a result chiropractic researchers and clinicians now attend major inter-disciplinary meetings, such as those of the North American Spine Society and the American Back Society, as experts in the field of manipulation generally rather than a limited or alternative branch relevant only to chiropractors.

• The leading journal for the specialty of sports chiropractic, 'Chiropractic Sports Medicine' (Williams & Wilkins), is "dedicated to the advancement of manipulative treatment ... of sports injuries ..." In 1987 Chicoine DC published an article in the journal of the Coaching Association of Canada which produced much greater acceptance of sports chiropractic at national coach level. Chiropractic was presented under key headings of joint play analysis, manipulative therapy, neurological effects, and enhancing athletic performance. Chicoine, a 2:39 marathoner, explains:

> "The key focus of the chiropractors is on detection of reduced joint play. The choice of symptom terminology – dysfunction, fixation, subluxation – depends upon the era of (the chiropractor's) schooling".[15]

• An excellent new book for the public on chiropractic, by Moore DC, published in England and the United States[16] presents chiropractic principles in a form that would satisfy most chiropractors anywhere, but in simple language acceptable to all - and without any criticism of other professions. This allows reviewer Dr. Elson Haas, a medical practitioner, to say:

> "Chiropractic: The Art and Science of Body Alignment" presents a practice well integrated with other currently accepted therapies, avoiding the antagonistic view of standard medicine found in other discussions of the subject. Chiropractic is a growing, important practice ... basically due to the fact that it helps so many people ... In these decades of increased physical, emotional, and mental stresses, clearly we need more 'hands on' care to keep us in line and walking straight in our path in life".[17]

This epitomizes the acceptance chiropractic now receives when there is wise use of language.

6. There is no reason for chiropractors to change their use of terms such as 'subluxation', 'subluxation complex' and 'adjustment' amongst themselves or with patients. In those contexts the terms are traditional, meaningful, and useful. There is every reason to change these terms when talking to the outside world – use of exclusively chiropractic terminology disturbs latent prejudices, confuses, and prevents acceptance with no corresponding benefit. Every lawyer knows that one must modify language to suit the audience – failure to do so simply loses the case.

C. Factors Outside Chiropractic

Acceptance of Manipulation

7. Traditionally medicine regarded manipulation as forceful, imprecise, dangerous and of unproven benefit. In 1978 the principal medical witness before the famous New Zealand Commission of Inquiry testified that no one should ever use spinal manipulation. Medical manipulators have suffered as much harassment by medicine as chiropractors.

Partly as a result spinal manipulation has undergone more clinical research over the past 15 years than any other treatment for back pain. The results:

• More evidence of effectiveness than any other treatment for acute and chronic back pain.[18]

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• Legislative language should be clear, neutral and drafted ultimately by lawyers not chiropractors. A licensing statute is not the place to attempt to define chiropractic in language most satisfying to the profession.

POINTS

• 'Motion Palpation and Chiropractic Technic' by Schafer RC and Faye LJ (Motion Palpation Institute, Huntington Beach, California (1989) 426 pages) is now available and will be viewed by most of the profession as required reading. The book is dedicated to Dr. Henri Gillet and other members of the Belgian Chiropractic Research Association (founded by Gillet in 1924) "whose many years of unselfish devotion to chiropractic science led to the development of the principles inherent within and associated with the evaluation and correction of spinal and extraspinal articular mobility restriction".

• The master's program in chiropractic science at Griffith University, Brisbane, Australia is now established. Dr. Keith Charlton, a prominent Australian chiropractic researcher, and graduate of National College, has been appointed to the university faculty.

Concurrently Griffith University is establishing a Spinal Research Laboratory with funding from the university, FCER, and the Australian Spinal Research Foundation (Australia's equivalent of the FCER). Senior research fellow is Linton Giles DC, Ph.D.

Enquiries to: Dr. Keith Charlton or Professor Webb, Griffith University, Brisbane, Queensland 4111, Australia Tel: (07) 275-7111 or (07) 275-7340.

• The American Chiropractic Association's 'Chiropractic State-of-the-Art' booklets have traced the development of the profession in the U.S. for many years. The 1989-1990 issue, now available, provides a rich source of information on chiropractic. The section entitled 'Principles of Chiropractic' begins with this general description:

> "Chiropractic is a branch of the healing arts which is concerned with human health and prevention of disease. Doctors of chiropractic ... consider man as an integrated being, but give special attention to spinal biomechanics and musculoskeletal, neurological, vascular, and nutritional relationships".

• At this year's European Chiropractors' Union annual convention held in Bergen, Norway:

• Alan Breen DC, Director of Research, AECC, reported on the British Medical Research Council trial comparing chiropractic and medical treatment for back pain. He is principal chiropractic researcher. Following a pilot study the main trial commenced in 1986 and has included 781 patients. The treatment phase was completed in March 1989, six month follow-up is completed this autumn/fall, and results should be available in early 1990.

Trial design allows a number of comparisons – chiropractic v. hospital management; primary v. referred patients; short term (under 1 month) v. longer term back pain; and severe v. less severe. The trial, which has cost over $500,000, has been funded by the Medical Research Council and by the European Chiropractors' Union.

• Nimrod Liram DC, BA, an Israeli chiropractor trained at AECC and holding a degree in statistics from Hebrew University, Jerusalem, reported on his ongoing clinical research with neurologists and orthopaedic surgeons at the Hassard Medical Centre. Israel, which has only 15 chiropractors, has six students in chiropractic college.

• Theo Rudolf DC, MD, trained as a chiropractor in Canada (1974) and an MD in Berne, Switzerland (1983), practises as a rehabilitation specialist in Leukerbad, Switzerland. He spoke of the importance of skilled manipulation for joint function, but also of the need to address muscle dysfunction (the hardware and software of the human system). His lecture dealt with major recent advances in knowledge concerning muscle physiology. Rudolf's practice includes the isokinetic measuring equipment that now allows objective evaluation of spinal function. He endorsed the work of the Mayers on functional restoration for spinal disorders in the U.S., but suggested their results would be even better if combined with manipulation and stretching techniques.

• Karel Lewit MD, neurologist from Prague, author of 'Manipulative Therapy in Rehabilitation of the Motor System', noted that over 90% of musculoskeletal pain and many visceral disorders arise from functional pathology (dysfunction and resulting reflex changes) of the motor system. This dysfunction, felt at joint and muscle barriers, could only be assessed with palpation – "you cannot get this diagnosis in any other way".

"There is no medical specialist adequate to deal with motor function" and "to normalize function requires more skill than addressing pathology". However Lewit warned "don't take out the spine". One must treat the whole motor system. "Afferent nerves give most of the information – only later is the information processed by the central nervous system".

Medical interest parallel to chiropractic has been known as 'orthopaedic medicine' (England), 'manual medicine' (Western Europe), 'neuro-orthopaedics' (Eastern Europe) and 'vertebral neurology' (Russia). Recently the field has been re-named internationally as 'musculoskeletal medicine'.

Quotes-of-the-Month

"The approach of chiropractors to health is positive from the outset. Their assumption that good health is our natural state encourages them to look first at the whole person, to see what may have gone wrong, and then to look for ways to correct this. *Their objectives focus on the spine and its nerves, because to a chiropractor these are the centre of our physical being".*

'Chiropractic: The Art and Science of Body Alignment' by S. Moore, Hamlyn Publishing London (1988) and Harmony Books, New York (1989). Dr. Susan Moore, who practises in Harrogate, England, is President of the British Chiropractic Association.

". . . at the risk of oversimplification and being misunderstood, attention is drawn to what I sometimes call the "ice cream cone" syndrome when trying to explain facet joint dysfunction in the back. The analogy is not my original concept. If you have a column of ice cream cones and are serving ice cream fast, one after the other, each cone tends to come away easily from the next one further down the stack until suddenly, for no apparent reason, a cone is found to be stuck. This is cone-joint dysfunction. If you try to pull the stuck one out by force it breaks up into pieces. That is equivalent to trying to force back lost function. If, however, you restore the lost cone joint play by twisting the cone, it comes away from the stack unharmed. The cone joint play was restored by a manipulative movement which readily restored function."

Mennel J McM (June 1989) 'Understanding Manipulative Medicine in General Practice', JMPT 12(3): 231-235.

ERRATUM

In the last issue of this Report (May 1989) there was a summary of current chiropractic periodicals. The Journal of Manipulative and Physiological Therapeutics (JMPT) and Research Forum, two important general scientific journals, were incorrectly set under the heading 'Special Interest', and printed as one continuous rather than two separate entries.

In addition there was no mention of D.C. TRACTS, an impressive new bimonthly multimedia program (journal plus lectures and case studies in audio cassette and video cassette) published by Data Trace Chiropractic Publishers' Inc. in association with the American Chiropractic Association. For further information, enquiries to: D.C. TRACTS, P.O. Box 1239, Brooklandville, MD 21022-9978 or toll free 1-800-368-3083.

We sincerely regret these errors.

PATHOGENESIS OF LOW BACK PAIN: CLINICAL APPLICATIONS

A summary by William H. Kirkaldy-Willis, MD, FRCS(C and E), President American Back Society, Past-President International Society for the Study of the Lumbar Spine, Emeritus Professor of Orthopaedic Surgery, University of Saskatchewan, Canada. For fuller treatment of this subject see 'Managing Low Back Pain' ed Kirkaldy-Willis, Churchill Livingston, New York and London, 2nd edition 1988 (403 pages); reviewed in The Chiropractic Report Vol 2 No. 4 (May 1988).

Study of Pathogenesis. A knowledge of pathogenesis enables one to form a mental picture of what is wrong in the back during a patient interview. This study can be divided into two parts (1) pathophysiology (dysfunction) and (2) pathoanatomy (abnormal structure).

Pathophysiology. The myofascial cycle is shown in Fig. 1. In the box at 12 o'clock emotional disturbance and minor physical trauma combine to initiate the functional lesion that causes low back pain. Moving around the circle in a clock-wise direction the progressive changes are (1) vasoconstriction in muscle (emotional disturbance expressed through the limbic area in the brain with stimulation of the autonomic nervous system in the hypothalamus leading to vasoconstriction of sensitive areas in muscle). (2) Muscle spasm. (3) Functional changes in muscle. (4) Abnormal muscle contraction. (5) An altered pattern of contraction – sudden, violent, uncontrolled. (6) At 5 o'clock this produces various muscle syndromes. At 7 o'clock - abnormal contraction of multifidus muscle overlying the facet and S-I joints. (7) From 7 o'clock round the circle to 12 o'clock, there is increasing muscle pathology with structural changes (atrophy and fibrosis). (8) Later still these changes in muscle combine with stress and other emotional components to produce a chronic pain syndrome.

Pathoanatomy. From 7 o'clock vertically downward recurring strains to facets and disc affect the three-joint complex. The interaction of these changes results in (1) The three successive phases of the degenerative process: I – Dysfunction, II – Instability (early structural changes). III - Restabilisation (late structural changes). (2) This interaction of facet and disc changes also produces the structural lesions commonly encountered – (a) disc herniation, (b) instability, (c) central stenosis, (d) lateral stenosis and (e) multi-level stenosis.

Clinical Applications

The most important are:

(1) Every patient with low back pain has (a) an emotional and (b) a physical component.

(2) Every physical component has (a) in the early stages, a functional component chiefly in muscle and (b) later on, a structural component affecting both muscle and joint.

(3) Functional changes are more frequently encountered than structural ones. This dysfunction is the main lesion in 90% of cases of low back pain. It is well treated by back school and manipulation.

(4) Prevention is the most important concern. (Achieved through back school and other kinds of education).

(5) Next in importance is the management of dysfunction (90% of cases), done most often through back school and manipulation.

(6) Restoration of function is more important than relief of pain, which usually follows a return to near normal activity.

(7) The less common structural changes may require operation (to be done with great skill and attention to detail).

(8) The combined emotional and structural changes in muscle that produce a chronic pain syndrome often call for a multi-disciplinary program. *This aims at restoring function rather than at relief of pain.*

W.H. Kirkaldy-Willis

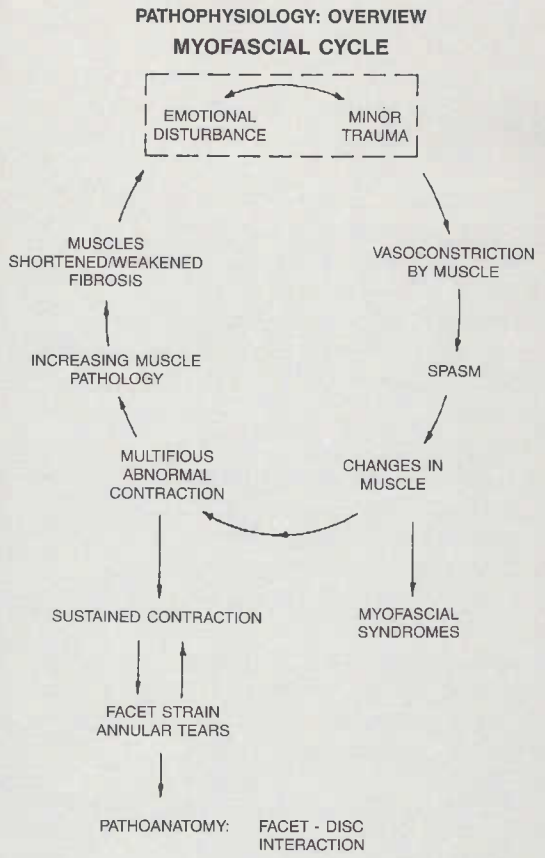

Figure 1

SURGICAL DECISION MAKING: INDICATIONS FOR OPERATION

Decision through Management

- by non operative methods.

(1) Back school (attention to posture, elastic support).

(2) Manipulation.

(3) Facet or S-I Injection.

(4) Denervation of joint.

(5) Steroids to disc.

Psychological Assessment – when the above measures fail.

(1) By surgeon.

(2) By psychologist.

(3) By both together.

Reasons for Fusion – when disability persists.

(1) Clinical/Radiological instability (dynamic X-R).

(2) Source of pain is in disc (physiologic evaluation).

(3) Spondylolisthesis, degenerative or isthmic.

(4) Tests used – CT, MRI, EMG, selective nerve block.

Reasons for Decompression (pain and disability persist).

(1) Disc herniation.

(2) Central stenosis.

(3) Lateral stenosis.

(4) Spondylolisthesis, degenerative or isthmic.

(5) Evaluation by CT, MRI, Myelo/CT, EMG, nerve block.

Reasons for Decompression and Fusion

(1) When entrapment and instability co-exist.

(2) Very rarely on other occasions when in doubt.

• Evidence that results are quicker than with other treatments.[19,20]

Acceptance arises not only from proof of the value of manipulation, but also from the demise of alternative approaches used in medicine - bed rest and medication, passive physical therapy measures involving heat and electrotherapy (still unproven and increasingly referred to by all health professionals as "shake, bake and fake"), chemonucleolysis and other surgery. The emerging consensus in health care is for early activity and functional restoration in the more than 90% of cases of musculoskeletal pain where there is no overt pathology and significant neurological deficit. Manipulation is not only accepted but suddenly has an important first line role in management.

Competition

8. Chiropractors have been faced with remarkably little competition but this will now change with the acceptance of manipulation. Problems such as backache and headache represent a large sector of the marketplace. The leaders of tomorrow's medical specialty that will compete with chiropractic are now in place.

Lewit, a Prague neurologist influenced in the 1950s by a Czech chiropractor trained at Palmer College, addressed the European Chiropractors' Union annual convention in Bergen, Norway last month confirming that one manipulates at the level of dysfunction not pain, the full motor system must be considered rather than individual joints, and the true background training for manipulation is neurology. Disturbed function can only be located by skilled palpation, which requires long training and daily practice. Ideally everyone, especially young children, should have preventive care.

Lewit's 'Manipulative Therapy in Rehabilitation of the Motor System',[21] first published in German and Czech, appeared in English in 1985 and has been influential. It documents 35 years of clinical experience and research that run parallel with chiropractic principles of health care. A second edition is due next year. Now recognized worldwide, Lewit has spoken to medical audiences throughout Europe, the United States, Australia and New Zealand. Mennell's Physical Medicine Research Council brings him to Vancouver in Canada in June, 1990. Within 15 years there will be true competition for chiropractic from within medicine.

Health Care Delivery Models

9. Chiropractic has grown in an era in which the individual made his/her health care decisions. That era is fast disappearing. The cost of health care is now:

• Too much for the individual and therefore largely met by third parties such as employers, private insurers or the government.

• Unacceptable to third parties, and now subject to their aggressive control.

The result, in stark terms, is that the patient who would have consulted a chiropractor yesterday will only do so today if this is acceptable to:

• His/her employer (which implies decisions by the employer, its insurance company and its health care staff); or

• The family doctor or nurse practitioner at his/her group health plan facility. (And these providers are not always free to decide on the basis of their professional experience – they must use the services recognized and provided by the group plan).

(For the best analysis of recent developments in North America and their implications worldwide see 'Second Opinion: What's Wrong with Canada's Health Care System and How to Fix It' by Rachlis and Kushner).[22]

In a nutshell, the price of health care is forcing the potential chiropractic patient to accept the influence of others on his/her choice of health care. Consumer independence, after the surge of recent years, is waning. *Chiropractic has new need of acceptance by those in the business, professional and political communities who are intervening in the chiropractor-patient relationship.*

D. The Need for Outside Advice

10. Chiropractic must consult widely with experts outside the profession and be more objective than in the past. Chiropractic is a service in a tight marketplace. Ultimately chiropractic must coincide with what the public perceives and wants, not what chiropractors want.

11. Wardwell, who has watched chiropractic in the United States more closely than any other sociologist during the past 30 years, observes in his recent article 'Evolution to Acceptance':[23]

a) Chiropractic has never been and will likely never be, an **ancillary** profession – supervised by another profession and dependent upon referral.

b) It used to be a **marginal** profession, one established in its own right in the community but having challenging and unproven theories of health and unaccepted by orthodox health care science. A problem for contemporary chiropractic in the U.S. is that some chiropractors "have made the best of a bad situation for so long, and have organized their careers, lives and psyches around (the ideology of an oppressed minority) so well that many of them find acceptance more difficult to endure than marginality".

c) Although "both movements share a philosophical concern over natural living, drugless therapy, and disease prevention" it is "simply wrong" to equate chiropractic with holistic health.

d) There are strong arguments for chiropractic developing, as it is, as a **limited medical profession** – professions which "practise independent of medical prescription or supervision but within a clearly limited scope of practice, both regarding the part or function of the patient treated and regarding the range of treatment techniques employed".

"... there are strong pressures pushing chiropractors in that direction ... (which) would seem to have much to commend it both to chiropractors and organized medicine although many in both camps currently oppose the idea". Benefits include:

• Cooperation with organized medicine on a model already familiar from dentists, optometrists, psychologists and podiatrists/chiropodists. Medicine begrudges "the nuisance value of competition for patients and fees" but does not feel "seriously threatened".

• Resolution of problems of mutual referral of patients, participation in group health organizations, and competition.

• Third party payors, whether private or government, are far more receptive to reimbursement for chiropractic care.

• There will be a much clearer public perception of what chiropractic is, vital for chiropractic (or any other service or product) in the marketplace. With a clearer view the "public will seek out chiropractic services more frequently than they now do".

E. Conclusions

12. Many things, some not mentioned in this review, are important for the future of chiropractic. One is the continued evolution of chiropractic education – exclusion of less relevant basic science requirements, and inclusion of all aspects of neuromusculoskeletal dysfunction, all manual skills for its detection and treatment, and a fuller grounding in developing disciplines of biomechanics and ergonomics.

Another is the development of more uniform practice standards, a third political unity. The importance of these two was recently illustrated in the U.S. state of Washington. In 1987 four state associations represented the profession. Because of wide variations in standards of care the Department of Labour and Industries threatened to reduce third party coverage. This external threat drew all four state organizations together jointly to produce a standards report, which solved the immediate problem, improved standards and greatly enhanced government acceptance of chiropractic in that state.

13. However the key factor, as Wardwell suggests, may be a broad consensus within chiropractic that it is a limited health profession, paving the way for an attitude of cooperation with the medical profession. During the next 10 years, before there is credible competition, chiropractic must convince the average family medical practitioner:

a) To refer patients with neuromusculoskeletal problems for assessment of function with a view to manipulative therapy.

b) To make that referral to a chiropractor.

Pressures and realities require that accommodation. Wider understanding of the full potential of chiropractic will come later.

14. The changes chiropractic must be willing to make for final acceptance by medicine and society as an integral part of the accepted health system are:

• Promoting wider medical understanding of dysfunction in the neuromusculoskeletal system and the true role of skilled palpation and manipulation – i.e. communicating what chiropractic has to offer.

• Displaying leadership in education, research and practice. Chiropractic must acknowledge it has no monopoly over its art and science – it must, and can, excel within the system rather than challenge from outside.

• Supporting what is good, rather than criticizing what is bad, in medicine. Chiropractic expects to be treated that way itself. Dillon, a professor of economics on the Australian CCE who has been a powerful friend of chiropractic, observed at the Sydney Chiropractic Congress last year – Thomas Edison may have said "the doctor of the future will give no medicine but will interest his patients in the care of the human frame ..." but chiropractic interests are best served by acknowledging there is a valuable role of drugs and surgery.

• Not promoting new or subsidiary aspects of chiropractic that challenge other providers in the health care team. Chiropractic practice has never involved the use of drugs or surgery and cooperation with medicine – quite apart from principle – requires that that remain the gold standard. Nutritional therapy and counselling will ultimately be done more professionally by someone else and should remain at a secondary level, and use of physical therapy modalities should be supplemental to manipulation.

• Recognizing that the management of neuromusculoskeletal disorders frequently requires the skills of several disciplines and a team approach.

15. In many communities in countries such as Australia, Canada, Denmark, England, Mexico, Norway, Switzerland and the United States there is already established understanding and inter-referral between chiropractic and medicine. The challenge is simply to promote this trend and make it general before the influence of competitors and other third parties frustrate the potential of chiropractic.

There is the 'provocative comment' – now it is time for the 'serious debate'.

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