# THE CHIROPRACTIC REPORT

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### Professional Notes

# Mechanisms of Action of Spinal Manipulation

Sophisticated new research with human patients — not just animal models and cadavers as in the past — is confirming the chiropractic premise that spinal manipulation acts by means of biomechanical and neurophysiological responses.

In a new study from the University of Vermont presented at the World Federation of Chiropractic's 7th Biennial Congress in Orlando, Florida this month, and winning the prestigious Scott Haldeman Award or First prize in the international original research competition, Christopher Colloca, DC, Tony Keller, PhD, Professor, Department of Mechanical Engineering and Robert Gunzburg, MD PhD, Senior Consultant, Department of Orthopedic Surgery, measured biomechanical and neurophysiological responses to spinal manipulation in 9 patients undergoing lumbar decompression surgery. Each patient received a number of real (150 N peak force) and sham (30 N)

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### PHILOSOPHY, PRACTICE AND IDENTITY

Why Agreement is Needed, and What is Being Done

### A. Introduction

AS A MEMBER of the public, when should I consult a chiropractor, what type of treatments will I receive, and how is this different from medical or osteopathic care?

In this issue we return to the old chestnut of the identity of the chiropractic profession and its role within the healthcare system. We do this for three reasons:

- i) First, given current rapid developments in healthcare systems throughout the developed world, the lack of a clear market identity is now a major problem for the profession. In the words of the Institute for Alternative Futures, in a 1998 report to the profession in the US, "without a clear and agreed upon role, and a shared vision, the profession will decline and suffer greatly in the near future because of new competitive pressures."
- ii) Second, there is a new in-depth analysis of these competitive pressures and the current position of the chiropractic profession from an independent health policy perspective. This is a study by Cooper and McKee titled *Chiropractic in the United States: Trends and Issues*<sup>2</sup> published in the *Milbank Quarterly*, an influential journal on public health and health care policy.

In a thoroughly researched analysis that should be read by all leaders in the profession, Cooper and McKee, from the Medical College of Wisconsin, look at the internal factors (chiropractic as viewed by chiropractors through the lens of their education, principles and practice) and external factors (market realities of new competition, cost, patient needs and available areas for expansion of scope of practice) influencing the profession today. From their independent policy and systems perspective they describe:

- a) Strengths of the profession, including:
- High levels of patient satisfaction and support based on the value of the "chiro-practic encounter" (which features sensitivity to patients as individuals; effective communication; a holistic approach; good results with neuromusculoskeletal (NMS) disorders).
- A strong political base
- The popularity of complementary and alternative medicine (CAM), reflecting a public suspicious of reductionist medical care and wanting personal empowerment and preventive care.
- b) Weaknesses of the profession, including:
- Rapidly growing competition from massage therapists and acupuncturists within CAM and for the same NMS conditions that are the mainstay of chiropractic practice. (In the US massage therapists have grown from 75,000 in 1995 to more than 250,000 in 2002, now have a market share of patients with neck, shoulder and back pain exceeding 20%, and have similar evidence of effectiveness and patient satisfaction rates as chiropractic. Acupuncture, with over 50 accredited programs, is anticipated to double its current number of 15,000 acupuncturists to 30,000 by 2015).
- Rapidly growing competition within chiropractic's core art of spinal manipulation.
- Lack of a clear and acceptable identity because of the schism between straights and mixers, a schism that is widening as the profession now reacts to market pressures. (To maintain incomes at a time of sudden growth in the number of chiropractors but major restrictions from managed care, many chiropractors are pressing for a fuller primary care role or expanding into other forms of CAM

including acupuncture, massage therapy and the sale of nutritional products).

- iii) Third, important new steps with respect to identity were taken at the beginning of this month at the 7th Biennial Congress of the World Federation of Chiropractic (WFC), held in Orlando, Florida, attended by representatives of all the major national chiropractic associations worldwide and co-sponsored by both the American Chiropractic Association (ACA) and the International Chiropractors' Association (ICA). In particular:
- After a panel discussion and open forum on the issue of identity, in which representatives of the profession worldwide agreed that lack of a clear and appropriate market identity was now a serious problem, the Assembly of member associations directed the WFC to coordinate an international consultation on identity – in an inclusive and transparent manner, and with appropriate independent consultants.
- In another panel discussion and open forum session, addressing the question Is Vitalism a Strong Foundation or Quicksand for the Chiropractic Profession it became apparent that there was little disagreement on the philosophical basis of the profession when leaders of all factions get together in a forum which respects their views and offers rational discussion. The real problem is that, given the colorful history and personalities of the profession, this happens too infrequently.

More details on the WFC, its Congress, and this discussion of vitalism appear below — but first here is a recent story to illustrate the issues and emotions that arise during all discussion about the identity of the chiropractic profession.

2. In March, in a move characteristic of the times in North America, the Riverbend Medical Group in Massachusetts merged with Springfield Diagnostics and Rehabilitation (SDR), a large chiropractic practice in Springfield. Riverbend is the largest private, multi-specialty group in Western Massachusetts with clinics in Agawam, Chicopee, Westfield and Springfield. SDR moved into the Springfield facility giving patients direct integration with Riverbend's many other specialty areas of care - diagnostic imaging, behavioral health, cardiology, gastroenterology, ob/gyn, physical therapy, etc.

Dr. Robert Lounsbury, President of Riverbend, plans to incorporate chiropractic services in all clinics because "the physicians in our group are well aware that patients are accessing these types of services and gaining benefit from them."

For his part chiropractor Dr. Joseph Boyle, owner of SDR, understands that integration with Riverbend was possible because he had a well-defined scope of practice limited primarily to neuromusculoskeletal disorders. Like most chiropractors he has patients who "use a chiropractor almost like they would a primary care physician" and Dr. Boyle explains that these patients will now be able to obtain chiropractic care "within a model where they also have good access to medical physicians who know and understand that these patients use alternative care."

- 3. How do you react to this news? Chiropractors, because of their professional training and history of independence, typically react in one of three ways:
- a) Applauding this development because of its potential benefits to all parties, especially patients - many of whom will now gain first real access to chiropractic services.
- b) Fearing this change, on the grounds that patients will tend to see chiropractic care as a specialty within a conventional medical model of practice, rather than a complementary or alternative approach to healthcare based upon a distinct set of chiropractic principles.
- c) A complex and unsettling mixture of both of the above reactions.

### B. Identity and Communication

- 4. For continued growth and success any profession must develop a clear identity — a well-defined scope of practice that answers needs as perceived by consumers. This requires two very different processes with very different levels of communication:
- a) Internal communication and Consensus. Successful internal communication will give the profession a common basis for its education, research, practice and development wherever that profession is practised. Such communication can only exist with an agreed vision, purpose, paradigm and identity.
- b) External communication. This, significantly different from the language and subtleties of internal communication, simplifies and explains to the outside

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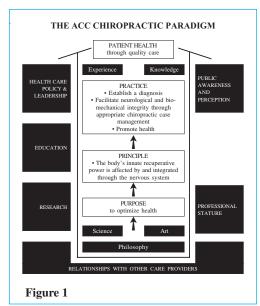
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world what it wants to know - what services are offered, and what needs are met, by the profession.

Successful internal consensus is a necessary prerequisite for successful external communication. Developing this has proved an enduring challenge for the chiropractic profession for a mixture of historical, educational, cultural and professional reasons.

In recent years the World Federation of Chiropractic (WFC) has presented a promising and successful new forum for internal communication and consensus on identity because its member national associations in 80 countries represent a full spectrum of the chiropractic profession, because the WFC has acted in close partnership with the practice, education and research communities, and because initial efforts to gain consensus have proved successful.



# C. WFC and Internal Communication.

5. In an important breakthrough in July 1996 the Association of Chiropractic Colleges (ACC), representing all chiropractic colleges in North America, reached unanimous agreement on a paradigm of chiropractic summarized in Figure 1. This paradigm, designed to provide a basic blueprint for chiropractic education, practice and research, was approved by both the ACA and the ICA, and then by the WFC at its 2001 Assembly in Paris. The full text of the paradigm can be found at www.wfc.org.

However for the purposes of consensus within the profession, let alone external understanding, this paradigm is very general. What is "philosophy", what is "appropriate chiropractic case management"? The full text of the paradigm gives no further detail.

- 6. In an ambitious but successful project the WFC and the ACC jointly sponsored a broadly representative international meeting in Fort Lauderdale, Florida in November 2000 to better define the philosophy of chiropractic.<sup>3</sup> Consensus statements from that watershed meeting appear in Figure 2, and have since been acted on by many chiropractic colleges including the historical source of the philosophy of chiropractic, Palmer College in Davenport, Iowa. These consensus statements call for a philosophy of chiropractic taught in a manner intellectually defensible in the discipline of philosophy and drawing on philosophical schools of thought that include:
- Conservatism

- Holism
- Humanism
- Naturalism
- Vitalism

Five models of healthcare, including the biopsychosocial model, were listed for consideration in chiropractic education and practice – all of significance, none to be excluded.

- 7. The most challenging of the above philosophical principles in a scientific world dominated by a mechanist approach, but a principle with an established history in the philosophy of chiropractic, is vitalism. This was the context in which the WFC invited further discussion of vitalism at its Orlando Congress this month. This is what happened:
- a) First, the discussion was placed in the context of a high-quality scientific conference so that the audience represented a good cross-section of the profession's academic and research communities, and in the context of a meeting co-sponsored by both the ACA and the ICA so as to signal a full spectrum of chiropractic opinion.

Co-chairs for the session were Dr. David Koch, Past-President, Sherman College of Straight Chiropractic and Dr. Reed Phillips, President, Southern California University of Health Sciences, representing both poles of opinion.

b) Next, before chiropractors expressed their opinions, there was a keynote address from an outside expert, Dr. David Peters from England, a medical practitioner and homeopath who is now Professor of Integrated Medicine at the University of Westminster in London. Peters explained that biomedicine, despite its many scientific triumphs, had not answered many fundamentally important questions of body-mind unity and health.

Scientists had succeeded brilliantly with an explanation of structure, taking us down to the levels of the cell, DNA and the gene, but not with the consciousness that provides the operating environment for the gene – the biomechanical, structural and electrical information flows predicted by vitalists in the past and now addressed in psycho-neuro-immunology, Hyland's Intelligent Body Hypothesis, and the science of consciousness. Peters' conclusions are worth quoting in full.

"The world seen through the eyes of 21st Century science is quite different from the mechanical, mindless universe science once depicted. Formerly, it was

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### Figure 2

### Conference Consensus Statements from WFC/ACC Conference on Philosophy in Chiropractic Education

- 1. A shared approach to health and healing, based upon a shared philosophy of chiropractic, is important for the identity and future of the chiropractic profession.
- 2. Chiropractic is a unique discipline, but exists as part of a broader entity, the health care system. Accordingly, the discussion of philosophy as a discipline and the philosophy of health care, as well as specifically the philosophy of chiropractic, should be important components in every chiropractic curriculum.
- 3. The philosophy of chiropractic should be taught and developed in a manner that is intellectually defensible in the discipline of philosophy.
- 4. Principles from philosophical schools of thought that were discussed at some length at this meeting in the context of the philosophy of chiropractic included:
- $\bullet \ Conservatism$
- Naturalism
- Holism
- Vitalism
- Humanism
- 5. Other philosophical ideas that were presented at the meeting, but for which there was insufficient time for extended discussion included American pragmatism, complexity theory, critical rationalism, ethics, logic, mechanism, post modernism, reductionism, sociology of the professions, and systems theory.
- 6. Models of health care discussed at the meeting, and offered for consideration in chiropractic education, included the:
- Biopsychosocial model
- Patient-centered model
- Condition-centered model
- Vertebral subluxation-centered model
- · Evidence-based model
- 7. With respect to the Association of Chiropractic Colleges' Paradigm of Chiropractic put before the meeting by the ACC, it is appropriate that the philosophy of chiropractic is presented as a core component of the foundation of the chiropractic paradigm of health. This philosophical foundation may be further understood in light of the above statements.

# THE CHIROPRACTIC WORLD

### **Mechanisms of Action of Spinal Manipulation**

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manipulative thrusts to the skin over lumbar spinous processes and facet joints after devices were fixed to measure motion (accelerometers attached to intraosseous pins) and neurophysiological response (bipolar platinum electrodes positioned around the S1 spinal nerve roots). Results included:

- Statistically significant increases in medial-lateral, PA, and axial vertebral displacement following chiropractic manipulation, compared to sham thrusts.
- Manipulation delivered to the facet joints resulted in approximately threefold greater medial-lateral motions as compared to manipulations delivered to the spinous processes.
- With respect to neurophysiological responses, manipulations resulted in compound action potential responses that were significantly greater than the sham thrusts, and were "typically characterized by a single voltage potential change lasting several milliseconds in duration." In other words, there were spinal nerve root responses temporally related to the induced vertebral motions.

This and other prize winning papers will be published in JMPT early next year. Other prizes were:

- Second Prize: Chiropractic-Related Adverse Reactions and Their Effects on Satisfaction and Clinical Outcomes Among Patients Enrolled in the UCLA Neck Pain Study, Eric L. Hurwitz, DC PhD, Hal Morgenstern, PhD, Maria Vassilaki, MD MPH and Lu-May Chiang, MS, Department of Epidemiology, UCLA School of Public Health, USA.
- Third Prize: Assessing the Clinical Significance of Change Scores Recorded on Subjective Measures, Hugh Hurst, DC and Jennifer Bolton, PhD, Anglo-European College of Chiropractic, Bournemouth, UK.
- **Private Practice Prize**. *Guidance Hypothesis with Verbal Feedback in Learning a Palpation Skill*, R. Kevin Pringle, DC MEd, Houston, Texas, USA.

# Cost-Effectiveness – Important New Evidence from California

Other exciting research from the 150 papers received for the WFC's Congress included a study of major practical importance in the field of cost-effectiveness.

When a chiropractic benefit was added to a large insurance plan in California, chiropractic costs were not an add-on – the chiropractic services substituted for medical services producing substantial overall savings. Details are:

- a) This was a four year study of administrative claims data for 1.7 million members of a managed care health plan in California, comparing the one million members without chiropractic coverage with the 700,000 members with chiropractic coverage.
- b) Among plan members who were treated for neuromusculoskeletal conditions, total health care costs were 13% lower for

those with chiropractic coverage. The cost of treating episodes of low-back pain was 28% lower in the group with chiropractic coverage.

- c) Back pain patients with chiropractic coverage had:
- i) Fewer in-patient stays (9.3 vs 16.6 stays per 1000 patients)
- ii) Fewer MRIs (43.2 vs 68.9 per 1000 patients)
- iii) Fewer radiographs (17.5 vs 22.7 per 1000 patients)
- iv) A lower rate of back surgery (3.3 vs 4.8 surgeries per 1000 patients)
- d) Members with chiropractic coverage were slightly younger (average age of 33 vs 36) and less likely to have specific comorbid medical conditions.
- e) Nelson et al. conclude that "inclusion of a chiropractic benefit in a managed health care plan results in a reduction in the overall utilization of health care resources, and thereby, cost savings." Cost reduction arises from four mechanisms a favourable selection process; a substitution effect of chiropractic care for medical care; lower rates of use of high cost procedures; and lower cost management of care episodes by chiropractors. In particular this managed care plan would have saved \$47.5 million over four years if all of its 1.7 million health plan members had chiropractic coverage.

(Nelson CF, Metz D, Legorreta A et al. (2003) *Effects of Inclusion of a Chiropractic Benefit on the Utilization of Healthcare Resources in a Managed Healthcare Plan*. Proceedings of the WFC's 7th Biennial Congress, World Federation of Chiropractic, Toronto, 271-272 (Abstract only).)

### Danish Chiropractic Patients - Then and Now

This new paper from Denmark, comparing surveys of patients seen in chiropractic practice in 1962 and 1999, presents these interesting observations:

- a) In 1962 there were approximately 50 chiropractors in Denmark, mostly educated at Palmer College in the US and promoting themselves in the tradition of Palmer philosophy. Chiropractic was unregulated, alternative and outside the mainstream Danish health care system.
- By 1999 chiropractic practice was regulated, there was government funding for services and Danish chiropractic students were attending a fully government-funded five year program at the University of Southern Denmark. There were now approximately 400 chiropractors and the profession was much better known and integrated within the Danish health care system.
- b) Notwithstanding all these changes, the 1962 and 1999 surveys of patients seen in practice had "remarkably similar" results. In both, approximately 70% of patients presented with complaints directly related to the low-back or neck, and less than 10% presented with non-neuromusculoskeletal disorders.
- c) Perhaps the most significant difference was that in 1999 patients were much more frequently consulting chiropractors at an earlier stage rather than as a last resort. In 1962 almost 50%

## News and Views

of patients had their complaint for more than one year before seeing a chiropractor, whereas in 1999 almost 80% of patients had their complaint for between one month and one year.

(Hartvigsen J, Bolding-Jensen O et al. (2003) *Danish Chiro*practic Patients Then and Now – A Comparison Between 1962 and 1999, J Manipulative Physiol Ther 26:65-6)

LROM MEANINGLESS FOR MEASURING DISABILITY

Here is a study that seriously undermines American Medical Association guidelines which judge low-back impairment and disability on the basis of lumbar range of motion (LROM) in each plane and are in wide use in North America. The study has authority because it comes from a team of researchers from the University of Waterloo in Canada led by the internationally renowned biomechanics expert Stuart McGill, PhD. Points are:

- a) Previous studies of the relationship between LROM and disability have reported poor results, but are hard to compare because they have used a wide variety of ROM and subjective disability measures.
- b) The current study tested the hypothesis that LROM in all planes is not related to disability as measured by a exacting set of functional tests, and that LROM measures for patients judged sufficiently functional to return to work would not differ from those for patients not recommended to return. Much more thorough measures of both LROM and disability were used than in the past namely:
- i) LROM was "precisely and accurately measured with a three dimensional lumbar motion unit" which is fully described in the paper. LROM measurements taken included full voluntary flexion, extension, right and left lateral flexion and right and left axial rotation.
- ii) Functional ability was evaluated by a large battery of tests used by experienced assessment evaluators and included the Oswestry Disability Questionnaire, maximum hand grip, average isometric pull strength, average isometric push strength, dynamic pull, maximum heart rate, carry, walk time, sitting, stationary standing time and lifting cycles completed. These are fully described in the paper.
- c) Those studied were 18 workers with chronic low-back pain referred to a rehabilitation center for determination of compensation and fitness for return to work. Although the number of subjects was "somewhat low", it was sufficient to detect any reasonable correlation (of 0.44 or more) according to standard statistical tables.
- d) It was found that the relation between LROM measures and functional ability as tested was "weak or non-existent" and that in these patients the authors "were unable to support an approach that relates functional ability with LROM". The authors conclude that, although some form of objective LBP assessment is needed, both clinically and legally, it is not LROM. They give explicit reasons why the methods used by the AMA guidelines are highly questionable.

(Parks KA, Crichton KS et al. (2003) A Comparison of Lumbar Range of Motion and Functional Ability Scores in Patients with Low Back Pain: Assessment for Range of Motion Validity, Spine, 28(4):380-384.)

Dr. Christopher Colloca of the USA (left) receives the Scott Haldeman Award (\$7,000), First prize in the original research competition at the World Federation



of Chiropractic's 7th Biennial Congress in Orlando, Florida on May 3, 2003 from (*right to left*) Dr. Scott Haldeman, Chair, WFC Research Council, Dr. Peter Ferguson, President, National Board of Chiropractic Examiners and Dr. Adrian Upton, Head of Neurology, McMaster University, Canada, one of the panel of judges.



At the World Federation of Chiropractic's 7th Biennial Congress in Orlando, Florida on May 3, Dr. John Allenburg (center) Past-President, Northwestern University of Health Sciences, Bloomington MN, receives his WFC Honor Award for outstanding services towards the interna-

tional growth of the chiropractic profession from (*left*) Dr. Enrique Benet Canut of Mexico and (*right*) WFC President Dr. Paul Carey of Canada. Dr. Allenburg played a leading role not only in US chiropractic education but also in establishing new university-based chiropractic programs in Sao Paulo, Brazil and Mexico City.

Dr. Alan Breen (*left*) of the Anglo-European College of Chiropractic, Bournemouth, England, receives his WFC Honor Award from Dr. Carey and (*right*) Dr. Scott Haldeman, Chair, WFC Research Council. Dr. Breen, the leading chiro-



practic researcher in the UK for the past 30 years, helped design the Meade et al. trial and much other research that has documented the effectiveness of chiropractic care. only vitalistic therapists who claimed to dissolve the boundaries between mind and body, self and world, practitioner and patient; but scientists are now proposing that the human organism has qualities of innate intelligence — that it is a living matrix of information — and neuroscience is exploring how the whole organism generates consciousness. If the latest scientific images of the human being steer us back to the art of medicine, then the trend will be on the basis of a new science of health and well-being.

It will be an entirely new way of understanding what we are and what promotes wellness and self-regulation, but in all probability it will affirm the timeless well-springs of healing: diet, movement, relatedness, community; and it will investigate the complexity of subtle therapies, their psycho-physiology and their impact on the structural matrix.

At their best, complementary and bio-psycho-social conventional medicine complement one another both in theory and practice; and they are already travelling in the same direction. The emerging science of the unitary information-filled organism will be a guiding star. I believe vitalist medicine safeguarded this idea until it could be more fully understood and that it can show medicine the way to a better destination. That destination will not be complementary medicine, but integrated healthcare where all the rigor and technical power of Biomedicine are the background, while primary care appropriately augmented by vitalistic therapies comes to the fore.

The challenge is for these two streams of thought and practice to re-shape one another while retaining what is best in both. With science rediscovering the whole organism and establishing a basis for information flow in the intelligent body this convergence seems inevitable. A new scientific Vitalism? Why not?"<sup>4</sup>

c) Following Peters came four papers from chiropractic panelists from diverse backgrounds – but all of whom proved to be in agreement on the position of the chiropractic profession with respect to vitalism. This is that it is false to argue that chiropractic is or should be based either on vitalism with a capital V or a strictly mechanist approach. Chiropractic, with its respect for both structure and function, stands at the intersection of intelligence and matter, both mechanist and vitalist principles are important, and chiropractors operate comfortably within what is now known as the biopsychosocial model of health.

To answer the question posed in the discussion, vitalism is neither quicksand nor an adequate foundation for chiropractic principles and practice. It is one important part of the foundation.

d) Dr. Ashley Cleveland, an educator from Cleveland Chiropractic College, Kansas City, reviewed the writings of DD Palmer and Stephenson to demonstrate that the profession was never founded on "the extreme of vitalism" but a philosophy of "the interdependence of matter and the intelligence of living organisms", and a clinical art and practice that operationalized this world view.

The history and politics of the profession had produced "unduly narrow and constricted" interpretations of the philosophy of chiropractic, creating conflict between chiropractors "where none should exist".

e) Dr. Gerard Clum, Life Chiropractic College West, Hayward, California, drew an analogy between concrete, which needs the right proportions of various elements (sand, stone, cement and water) to provide a strong foundation, and the multi-faceted basis of chiropractic practice which had foundational elements

including a philosophy that emphasized self-regulation/vitalism, a body of technical and scientific knowledge, and the art of the delivery of care.

f) Dr. Cheryl Hawk, a clinical research scientist at Palmer College, Davenport, Iowa, addressed the challenges for her and other members of the chiropractic research community whose world view combines mechanist and vitalist thought. Modernism, which has shaped western thought since the late 18th century, "favors a single way of explaining the world." In western healthcare that way has been the mechanist perspective. There is no science or reality beyond the physical. Vitalism is a "ghost in the machine" of life.

However, post-modern thought, which has emerged in the second half of the 20th century, accepts diversity in values and beliefs. There are various world views, all based on assumptions rather than absolute reality, and one is not necessarily more right or valid than another. "The map is not the territory", said Hawk, and divergent world views can co-exist and are best judged by their utility in various circumstances. Practising chiropractors and scientists designing chiropractic research must combine the mechanist and vitalist world views. This plurality is not only acceptable but also healthy and desirable.

- g) Dr. Charles Masarsky, a clinician from Virginia, addressed the challenge that the concept 'vitalism' has a bad name because, generally and within the writings of early chiropractic leaders, it was associated with intelligence as a spiritual concept. In modern "big-tent vitalism" he proposed an emphasis on the more science-friendly term "information" because information theory now has a well-developed foundation. He thus restates a fundamental principle of Stephenson and the philosophy of chiropractic that "life is the expression of intelligence through matter" as follows:
- "Life functions depend upon the free and timely flow of information and the integrity of matter."
- 8. When the session was thrown open for comment and questions it became apparent that in this fully representative chiropractic audience there was no significant dispute at the level of philosophy or principles. There was only concern at the more superficial but still important level of the most effective language with which to describe the philosophy of chiropractic to external audiences. Thus for example:
- a) Prominent clinical researcher Dr. Craig Nelson from the Northwestern University of Health Sciences in Minnesota asked Dr. Peters, who had called himself a vitalist, why one would use the language of vitalism when the concepts involved can be explained in terms of well-accepted fields of study such as psychology, information theory and psychoneuroimmunology. Peters agreed that 'vitalism' had considerable baggage, could be unnecessarily divisive, and that one should be able to talk in terms of the more modern concepts mentioned especially the biopsychosocial model of health. However in his work he felt that the concept of vitalism was needed "to keep us alive to the importance of holism in healthcare since reductionism is so deeply entrenched".
- b) Leading researcher Dr. Scott Haldeman of the University of California, Irvine, asked why so many in the profession felt compelled to hold dogmatically to the reductionist explanation/metaphor of the subluxation, when everyone present acknowledged the importance of a more holistic, complex and multifaceted basis for the philosophy and practice of chiropractic. Dr.

Clum suggested that those strongly defending the concept of subluxation would have been fully supportive of the day's discussion but were adopting such a stance on the basis that it was seen as a necessary tactic to preserve the profession's position at the crossroads of structure/matter and function/intelligence/information.

- 9. This two hour philosophy forum on vitalism in Orlando represented the chiropractic profession at its best. Informed, intelligent debate that emphasized the substantial unity within the profession and furthered the understanding of all present. Fair conclusions seems to be:
- a) The chiropractic profession must embrace and be able to discuss the mechanist and vitalist paradigms. In the words of Hawk, "an unthinking acceptance of vitalism is no different from an unthinking acceptance of the mechanist model they are both not only unproductive but actually obstructive, since they perpetuate stereotypes and dogmatic inflexible thinking."
- b) Core concepts of vitalism, including holism and the impact of information flow on physical structure, are of fundamental importance to the philosophy and practice of chiropractic.
- c) 'Vitalism', however, is a label with baggage in a world dominated by a mechanist view, and where that view has produced phenomenal technological advances and is still equated by many to be synonymous with science and even reality. Chiropractors should therefore be able to discuss vitalistic elements of their philosophy in terms of contemporary concepts of the science of consciousness, including the holistic biopsychosocial model of health.
- 10. All of the above relates to principles. What about communication and agreement within the profession on the practical subject of methods of chiropractic practice? This was the subject of a further conference jointly sponsored by the WFC and ACC, and held in Sao Paulo, Brazil last October. The conference was designed to achieve an international consensus on core issues of chiropractic clinical education. In a meeting with strong international representation from education institutions and the practising profession, full consensus was reached on the following:

### a) Modes of Care.

- "Programs should reflect the continuing central role of adjustment techniques in chiropractic education and practice."
- "Curriculum content should include other modes of care and clinical competencies that are evidence-based and meet the primary needs of patients using chiropractic services. Examples referred to at this conference include rehabilitative exercises, occupational health as it relates to the prevention and management of neuromusculoskeletal disorders, and sports chiropractic."
- b) **Examination and Diagnosis**. The consensus in this area, known to be problematical for the profession, was:

"With respect to patient examination, assessment and diagnosis, there is a wide variance in methods taught and practiced, and there would be value in a conference of a similar nature to the current one seeking a consensus that would promote greater consistency in chiropractic education and practice in this area. It is likely that this will be the specific subject of the next WFC/ACC conference, currently being planned for late 2004.

### D. WFC AND EXTERNAL COMMUNICATION

11. As can be seen, at the request of its member national associations the WFC has progressed some distance in establishing the basis for a broad consensus within the profession on core principles and practice.

However at its Orlando Congress member associations asked the WFC to go much further, to coordinate a much wider grassroots consultation to achieve the historic goals of:

- a) A broad consensus on identity to help transform a profession with a record of divisions and labels (e.g. mixer/straight; evidence-based/subluxation-based; mechanist/vitalist) into one which, although having a normal and healthy diversity, has an agreed core and unifying identity.
- b) A broad consensus on how to communicate that identity externally to others in the healthcare system the public, other professionals, third party payors.

At the heart of this identity lie questions such as:

- Are chiropractors mainstream or alternative?
- Is the chiropractic adjustment a specific form of skilled manipulation or not?
- Are chiropractors, with the distinct holistic principles they possess, specialists in the management of neuromusculoskeletal disorders able to integrate their practices into mainstream healthcare, or alternative primary healthcare providers essentially separate from and in conflict with medical care?
- 12. Historically chiropractic has managed to resist clear definition without suffering too much. Spinal manipulation was condemned by the medical profession as ineffective and potentially dangerous, and no one else provided effective competition. Whatever one called it, most patients benefiting from skilled manual therapy would eventually have to receive spinal adjustment from a chiropractor. However recent changes, documented in North America by the IAF, Cooper and McKee and others, make it clear that the hour of decision has come.
- 13. Outside expert commentators and the public have offered consistent advice.
- a) In 1979 a New Zealand Commission of Inquiry into Chiropractic, which looked at the profession more thoroughly than any independent investigation before or since, found that "chiropractic is a branch of the healing arts specializing 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".<sup>6</sup>

The Commission concluded that "chiropractors do not provide an alternative comprehensive system of healthcare, and should not hold themselves out as doing so," that "the responsibility for spinal manual therapy training . . . should lie with the chiropractic profession" and that "in the public interest and in the interests of patients there must be no impediment to full professional cooperation between chiropractors and medical practitioners." Chiropractic, said the Commission, should be seen as an important specialized branch of mainstream healthcare services.

b) In the following year, the eminent sociologist Walter Wardwell, PhD,<sup>7</sup> writing about the future role of chiropractors, saw three possible futures for the profession – practice on medical referral, which he thought unlikely, continuation of the alternative parallel status to medicine that chiropractic had at that

time, or a more defined primary contact status similar to dentists, optometrists, podiatrists and psychologists. As a long-time patient and observer of the profession he considered the latter, based upon the conservative management of neuromusculoskeletal disorders without the use of drugs or surgery, the best.

- c) Patients and the public have delivered the same message. Surveys consistently show that the great majority of chiropractic patients have neuromusculoskeletal disorders, principally back pain, neck pain and chronic headaches, and that the public including those who have never consulted a chiropractor trusts the profession in that role. "These conditions are the kinds that the public believes that chiropractors can treat best," says Wardwell, and if the profession emphasizes this identity "medical opposition should cease, the public's image of chiropractors should improve, payments for services rendered should be more readily made, the number of referrals to chiropractors by other types of practitioners should increase, and chiropractors should gain an even more secure place in the American health care system." However Wardwell acknowledged that the future really depended upon what chiropractors themselves wanted.
- d) The message of Dr. Peters is the same. Chiropractic, with its unique principles and contribution to healthcare, should be integrated into mainstream primary care.

### E. Conclusion

14. The path to full integration of chiropractic services into mainstream healthcare is open – but will the chiropractic profession reach a consensus on whether or not to take this path? Although the majority of chiropractors, like dentists and psychologists and others, will likely maintain independent practices, are they comfortable with and supportive of what has

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just happened at Riverbend in Massachusetts – discussed at the beginning of this article. That is what the World Federation of Chiropractic, in partnership with other leading chiropractic organizations, must now explore.

A number of national associations have, of course, already taken strong steps to establish the identity of chiropractic in their countries. We close with one example. This is the British Chiropractic Association (BCA), one of the larger associations worldwide with over 1,000 members. In a professional statement of identity, appearing in full at the BCA's website www.chiropractic-uk.co.uk, the BCA "supports the rights of practitioners to follow a diversity of practice modes", "upholds the rights of patients to have access to the healthcare services of their choice", "applauds interprofessional cooperation", and then describes the profession as follows:

"Chiropractic is a primary contact healthcare profession, with its own distinct holistic principles and practice, specializing in the art of manipulation of the joints, largely by hand alone, with a view to normalizing neuromusculoskeletal function as it relates to the spine and to patients' health.

Chiropractors use neither drugs nor surgery, but refer to relevant specialists where appropriate. They are regulated by law, and practise autonomously within the healthcare community, promoting co-operative relationships with other healthcare professionals, both within and outside of the healthcare system, for the benefit of the patient."

As an opening position statement for the public, most of whom have no direct experience of or inherent interest in your profession, what do you think of that? TCR

### References

- 1. The Future of Chiropractic: Optimizing Health Gains (1998). Institute for Alternative Futures, Monograph for NCMIC Insurance Company, Des Moines, Iowa.
- 2. Cooper RA and McKee HJ (2003) *Chiropractic in the United States: Trends and Issues*, The Milbank Quarterly 81(1):107-138.
- 3. *Philosophy in Chiropractic Education* (2000), Conference Proceedings, World Federation of Chiropractic, Toronto.
- 4. Peters D (2003) *Is There A Scientific Basis for Vitalism?* in Proceedings of the WFC 7th Biennial Congress, World Federation of Chiropractic, Toronto, 117-131.
- 5. Proceedings from a Conference on Chiropractic Clinical Education (2002), World Federation of Chiropractic, Toronto.
- 6. Hasselberg PD (1979). *Chiropractic in New Zealand: Report of the Commission of Inquiry*. Wellington, New Zealand: Government Printer.
- 7. Wardwell WI (1980) *The Present and Future Role of the Chi*ropractor, Chapter 2 in *Modern Developments in the Principles* and *Practice of Chiropractic*, ed. Haldeman S, Appleton-Century-Crofts, New York.