The Chiropractic Report

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Professional Notes

Eisenberg confirmed for WFC Congress

The World Federation of Chiropractic and Canadian Chiropractic Association are pleased to announce that Dr. David Eisenberg of Harvard University is confirmed as a keynote speaker for the WFC's 10th Biennial Congress in Montreal, April 30 to May 2, 2009.

Dr. Eisenberg, the Harvard graduate and internist who is internationally famous for his scientific articles concerning the growth and integration of complementary and alternative medicine in health care, will speak on *A Model of Integrative Care Involving Chiropractic and Allopathic Doctors at a Harvard Teaching Hospital*.

Dr. Eisenberg currently serves as Director of the Osher Research Center at Harvard Medical School and Director of the Program in Integrative Medicine at the Brigham and Women's Hospital. In 1979, under the auspices of the National Academy of Sciences, he served as the first US medical exchange student to the People's Republic of China. In 1993 he was the medical advisor to the PBS series *Healing and the Mind* with Bill Moyers.

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Expertise in Spinal Health

Advances in 2008 – An Exceptional Year

A. Introduction

WHEN THE WORLD THINKS of the chiropractic profession it thinks of the spine – and most commonly back pain. Many public surveys in many countries make that clear.

However, when doctors of chiropractic think of the spine they think not only of pain but also of health and wellbeing – of the impact of spinal structural and functional problems on the nervous system – the body's master system – and its ability to regulate health as well as pain.

Accordingly, when the World Federation of Chiropractic (WFC) led an international consultation in 2003-2005 on the most appropriate identity for the profession within the healthcare system, there was agreement that this was DCs as spinal health experts. Not spinal pain, spinal biomechanics, spinal treatment, spinal rehabilitation – but spinal health.[1]

How well can the profession support this claim? Very well, it can be said with confidence, after a generation since the early 1990s in which the research and evidence-based clinical guidelines have increasingly supported the chiropractic approach to non-surgical spine care. Beyond that, however, 2008 has been an exceptional year for the profession as spinal health experts. This issue of The Chiropractic Report reviews advances in:

• Research – any claim of expertise must first and foremost be supported by research. In 2008 chiropractic researchers led interdisciplinary teams that published the leading and state-of-the-art reviews of best clinical management of neck pain [2,3] and chronic low-back pain.[4] There has been much else, from Murphy and Hurwitz's work on improved diagnosis and management of spinal pain to Erwin's leadership in disc biology and isolating the causes of disc degeneration.

• Clinical advances – especially in increased adoption of the biopsychosocial model of spine care that the profession has pioneered, and the greatly increased integration of chiropractic services within mainstream healthcare in Europe, North America and elsewhere.

• Public education – last year the International Bone and Joint Decade 2000-2010 adopted the Straighten Up three minute daily spinal exercise program developed in the US as the official program for its annual Spine Day on October 16, but this year Straighten Up went truly international – supported by national associations of chiropractors around the world from Finland to Cyprus to South Africa to New Zealand to China.

However, not everything is positive for the spine care experts. In the US in particular third party payors and managed care organizations are adopting crudely restrictive practices that conflict with independent evidence-based clinical guidelines, effective care, the patient's interest – and ultimately overall cost-effectiveness. In Maryland this month, DCs are appealing being dismissed from managed care networks if they provide more than eight treatments to patients in spine care.[5] This Report therefore also discusses expert sources and policies that challenge such restrictions as unjustifiable.

B. Research

2. **Chronic Low-Back Pain (CLBP).** There is no debate that CLBP, the single most expensive cause of pain and disability in working age adults, is poorly managed and that there is far too little evidence supporting numerous surgical and non-surgical treatments offered. For example Martin, Deyo et al., report-

ing on expenditures for spine care in the US for the eight year period 1997-2005[6], note:

a) After allowing for inflation there was a 65% increase in spine care costs. The biggest increase was for drugs which went from $7.3 billion per annum to $19.8 billion – an increase of 188%.

b) Total health expenditure for spine problems in 2005 was $85.9 billion. This represents 9% of total national US expenditure on health, and is similar to expenditure for each of arthritis, cancer and diabetes – and only expenditures for heart disease and stroke were significantly higher. The average total health care expenditure per person for those with spine problems was 73% greater than for others.

c) Notwithstanding this cost increase, health status got worse – patients with CLBP who reported physical functional limitations rose from approximately 1 in 5 (20.7%) to 1 in 4 (24.7%).

And there is surprisingly little science and evidence behind the use of medications. Many are used off-label with little or no evidence of efficacy. In the words of Haldeman and Dagenais "clinicians must make a leap of faith that success noted in conditions such as diabetic neuropathy or pain in patients with terminal cancer can be translated to improving the symptoms of CLBP" and there is "very little guidance to clinicians or consumers as to which medication (within a drug class) should be considered beyond the opinion or experience of the prescribing clinician."[7]

Although medical and interdisciplinary clinical guidelines recommend some interventions and recommend against others, numerous approaches are offered to patients and "it is currently impossible for patients, clinicians and third party payors to know what is the best management approach for individual patients in most cases."

3. It was against this background that chiropractic scientists Scott Haldeman, DC MD PhD from the Department of Neurology, University of California at Irvine and Simon Dagenais, DC PhD of the Department of Epidemiology and Community Health, University of Ottawa, Canada, commenced a large state-of-the-art review that was published in *The Spine Journal*, the official publication of the North American Spine Society (NASS) in January 2008.[4] This review includes:

a) Separate papers by different experts on 23 common treatment approaches for patients with CLBP. These include evidence of efficacy and safety but also a description of the treatment approach, comment on practitioners involved and reimbursement, and description of mechanisms of action of treatments and indications and counter-indications. Papers on surgical approaches are by surgeons. Chiropractic researchers write the papers on manipulation/mobilization[8] and medicine-assisted manipulation.[9]

b) An editorial review summarizing all papers by Haldeman and Dagenais.[4] They conclude that best available evidence and guidelines for management are not materially different from 10 years ago. Practice must be "evidence-informed" rather than "evidence-based", because of the limited evidence available. The reviews now published "suggest that a reasonable approach to CLBP would include education strategies, exercise, simple analgesics, a brief course of manual therapy in the form of spinal manipulation, mobilization or massage, and possibly acupuncture".

These should be preferred to more complex and invasive approaches for most patients. "There is clearly no consensus that commonly used diagnostic tests hold any value in the decision-making process before offering a treatment for CLBP" which "brings into question the routine use of laboratory testing, x-rays, CT, MRI, discography, nerve conduction velocity and electromyography."

For online free access to this special focus issue of *The Spine Journal* go to www.sciencedirect.com/science/journal/15299430 and click on Vol. 8 Issue 1. Haldeman and Dagenais' project and conclusions, which now provide all stakeholders with best available management advice, will be influential in directing practice, reimbursement and research decisions. They presented their work in an 8 hour seminar last month at the NASS annual meeting, held in Toronto and attended by 7,000 North American spine specialists.

4. **Neck Pain, Headache, Associated Disorders**. A second major spine care review published in 2008, from an international task force led by chiropractic scientists and even more significant than the one above, is the report of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and its Associated Disorders.[2,3] Task Force President was Haldeman, and one of the two scientific secretaries was David Cassidy, DC PhD, DrMedSci, an epidemiologist from the Department of Public Health Services, Faculty of Medicine, University of Toronto.

Dr. Cassidy was a principal author of the last major task force report on traumatic neck pain, the Quebec Task Force on Whiplash Associated Disorders in 1995.[10] The BJD Task Force Report, published as a 220-page supplement in both *Spine* and the *European Spine Journal*, deals with both traumatic and non-traumatic neck pain and redefines neck pain and its management. It follows seven years of literature review and original research from more than 50 researchers from 19 clinical and scientific disciplines from 9 countries. A *Spine* editorial describes it as "a milestone achievement which will be of major significance and importance for patients, the medical profession, the

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healthcare system, researchers, research funding agencies and insurance companies."[11]

The Task Force deals with all aspects of neck pain and associated headache, arm pain and other symptoms of cervical origin – epidemiology, risk factors, course and prognosis, patient assessment, non-surgical and surgical treatments, and advice to patients, clinicians and third party payors. Key conclusions include:

a) There needs to be a new conceptual model putting patients and their preferences at the center of successful management rather than healthcare providers. Neck pain is a multi-factorial and episodic or recurring problem. Because patients have many but different personal factors underlying their problems, best management requires informing/educating patients on their options and respecting their preferences.

b) All neck pain should be classified according to one system – Grade 1 (neck pain with little or no interference of daily activities), Grade 2 (neck pain that limits daily activities), Grade 3 (neck pain accompanied by radiculopathy) and Grade 4 (neck pain with serious pathology).

c) Most patients have Grade 1 and 2 neck pain. Treatments with similar evidence of safety and effectiveness and recommended are education, exercise, mobilization, manipulation, acupuncture, analgesics, massage and low-level laser therapy. These have a "focus on regaining function."

Treatments not supported by evidence and "unlikely to help" are surgery, collars, ultrasound, electrical muscle stimulation, TENS, most injection therapies including corticosteroid injections for cervical facet joints and radio-frequency neurotoxins.

5. **More Accurate Diagnosis**. More accurate diagnosis and classification of patients with spinal pain has been identified as a research priority. During the past year probably the two most important papers in this area have been presented by Donald Murphy, DC from the Rhode Island Spine Center and the Warren Alpert Medical School, Brown University, Providence, Rhode Island, who is principally a clinician, and Eric Hurwitz, DC PhD, Department of Public Health Sciences, School of Medicine, University of Hawaii, an epidemiologist. These papers present a new model for assessment and non-surgical management of patients with spinal pain – what Murphy and Hurwitz call a diagnosis-based clinical decision rule (DBCDR). The papers are published online at BioMedCentral, giving open access to all.[12,13]

Murphy and Hurwitz suggest the following three essential questions of diagnosis:

i. *Are the symptoms with which the patient is presenting reflective of a visceral disorder or a serious or potentially life-threatening disease?* Any clinician in primary contact with spine patients must be aware of red flag disorders and be able to detect or suspect their presence.

ii. *From where is the patient's pain arising?* Importantly, in asking this question a clinician is not necessarily expecting to determine the precise tissue that is the source of pain – there are many potential pain generators and precision is often elusive. However in this DBCDR certain characteristics and tests allow for a rational treatment plan even when the specific source or sources of pain cannot be determined. The four signs of greatest importance are:

- Centralization signs – detected by end range loading examinations first developed by McKenzie Methods. The examination procedure involves moving the spine to end range in various directions and monitoring the mechanical and symptomatic response to these movements.
- Segmental pain provocation signs – detected through palpation designed to primarily test for pain response rather than movement abnormality.
- Neuro-dynamic signs – again, reproduction of pain, this time from applying stress to neuro structures. These tests can be supported by the patient's history and neurologic examinations.
- Muscle palpation signs – pain reproduction from direct palpation of muscles. Pain referral pattern maps can guide the clinician.

Traditionally, and on the basis of some but not strong evidence, each of centralization, segmental palpation and muscle palpation signs respectively have been thought to identify the disc, joints and myofascial trigger points as sources of pain. Murphy and Hurwitz's point is that it is not necessary to know the precise source to make sound diagnostic and treatment decisions under their model. See their papers for more detail.

iii. *What has gone wrong with this person as a whole that would cause the pain experience to develop and persist?* In answering this question the clinician looks for biomechanical, neurophysiological and psychosocial factors that perpetuate pain and dysfunction. Important factors discussed by the authors include dynamic instability (impaired motor control); ocular motor reflex dysfunction; central pain hypersensitivity; fear; catastrophizing; passive coping; depression.

Here then is a more precise diagnostic method for spine pain patients – not a traditional diagnosis to give a label or name to a disorder, but a collection of signs allowing a working hypothesis for more accurate clinical decisions that can then be tested through treatment.

C. Clinical Advances

6. **Biopsychosocial Model of Care.** The chiropractic profession has grown to prominence in spine care because chiropractors have treated the person rather than the pain – they pioneered a biopsychosocial approach in an era when the medical profession adopted a biomedical model.

Chiropractic management combined the specific and non-specific benefits of spinal adjustment and other manual treatments, encouraged continued activity rather than pain avoidance and rest, and included general health advice (e.g. on posture, diet and other aspects of healthy living). Management involved a course of treatment visits which allowed the development of sufficient trust for patients to confide matters of psychosocial importance to them and therefore of clinical importance in their management.

All spine care is moving to the biopsychosocial model worldwide. This is reflected in evidence-based programs of care being developed by workers' compensation and motor vehicle accident agencies in various countries. A new example of this published in July 2008, and available to all online, is the *Clinical Framework for Health Services*, published by WorkSafe Victoria and the Transport Accident Commission (TAC) in the State of Victoria in Australia (www.workcover.vic.gov.au. Go

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Eisenberg confirmed for WFC Congress

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More recently, Dr. Eisenberg served as an advisor to the US National Institutes of Health, Food and Drug Administration and Federation of State Medical Boards with regard to complementary, alternative and integrative medicine research, education and policy. From 2003 to 2005 Dr. Eisenberg served on a National Academy of Sciences Committee responsible for the Institute of Medicine Report titled *The Use of Complementary and Alternative Medicine by the American Public*.

The WFC Congress is titled *Celebrating Chiropractic in the 21st Century* and one theme relates to integrated care. Other speakers on this theme include:

- Scott Haldeman, DC MD PhD on the BJD Neck Pain Task Force and its new model of management of neck pain.
- Andrew Dunn, DC MSc on chiropractic practice in the military and veterans' health care systems in the USA.
- Amy Freedman, MD and Brian Gleberzon, DC on seniors' quality of life.
- Francis Fontaine, DC MD on practical aspects of inter-referral of patients in medical and chiropractic practice.
- Robert Armitage, DC and Jack Taunton, MD on integration of chiropractic in the sports medicine team at the Vancouver Olympics 2010.

The Congress also features strong tracks on:

- Technique – leading speakers on ART, Diversified for older/osteoporotic patients , instrument adjusting, McKenzie Methods, Graston, Carrick on neurology, upper cervical specific, NET, Kolar Technique, etc.
- Philosophy – in one session Serge Robert, PhD, Professor of Philosophy, University of Quebec at Montreal, Guy Riekeman, DC, President, Life University and Alan Breen, DC PhD, Anglo-European College of Chiropractic speak on philosophical models of healthcare
- Original Research – platform and poster presentation of the best current chiropractic research worldwide

Highlights of the social program include an opening reception, a Thursday night Quebec cultural dinner and show and the Saturday night Gala Banquet and Dance.

Dr. David Eisenberg

All information is at www.wfc.org/congress2009. Mark the dates now – April 30 to May 2, 2009 – and be there to see why the WFC Congress every two years is now recognized as the most exciting event in the chiropractic world.

Whole Systems Research – Nonmusculoskeletal Benefits of Chiropractic Care

A new systematic review reports that there is now sufficient evidence to support the conclusion that chiropractic care – meaning the entire clinical encounter rather than for example spinal manipulation only – "provides benefits to patients with asthma, cervicogenic vertigo and infantile colic."

The evidence is promising, but not yet as strong, for potential benefit "for children with otitis media and elderly patients with pneumonia."

The review is from a team of five researchers with strong research and clinical credentials, led by Cheryl Hawk, DC PhD, Director of Research, Cleveland Chiropractic College, Kansas City, Missouri. Others include Anthony Lisi, DC, from the University of Bridgeport College of Chiropractic and the VA Connecticut Healthcare System and Randy Ferrance, DC MD, of the Riverside Tappahannock Hospital, Virginia.

Importantly, Hawk et al. cast a wider net for evidence than just randomized controlled trials (RCTs). They still adopt strict standards for quality, but include observational studies and case reports, and give high ratings to trials that involve care as delivered in practice rather than those that report on the basis of a more artificial trial protocol.

As Hawk et al. note there is currently "protest within the scientific community against the near-total reliance on RCTs as a source of evidence" and "observational studies reflecting usual practice are gaining credibility" . . . "particularly for complementary and alternative medicine." Problems with relying on RCTs alone include:

- the lack of RCTs for almost everything – including medications for back pain as you will read in the main article in this Report – which means that almost all reviews limited to evidence from RCTs report that "evidence is insufficient."
- "body-based" practices like chiropractic do not lend themselves to blinding of patients as to what treatments they are receiving.
- there is a problem with "model validity" – meaning a conflict between traditional RCT research methodology, which tends to isolate one or two aspects of care, and the paradigm of treatment in a profession such as chiropractic.

All of this has led to the rise of 'whole systems research' (WSR). On one hand this looks at research and evidence through a different and wider lens, on the other hand it still requires rigorous standards. Hawk et al. report on the evidence from a WSR perspective – and find the positive conclusions noted.

(Hawk C, Khorsan R et al. (2007) *Chiropractic Care for Nonmusculoskeletal Conditions: A Systematic Review with Implications for Whole Systems Research,* J Alt & Comp Med 13(5):419-512)

World Notes *(Source: World Federation of Chiropractic)*

Brazil: In response to efforts by the Brazilian Chiropractors' Association (ABQ) to have the government pass legislation to regulate the practice of chiropractic, the physiotherapy profession has mounted an aggressive campaign to have chiropractic

declared a specialty of physiotherapy. Brazil has 360 duly qualified chiropractors, there are over 90,000 physiotherapists. This is therefore a David and Goliath battle and recent developments include:

• In late June the arrest of DCs and students visiting Brazil with a Palmer College Clinics Abroad team on a charge of practising PT without a licence. The police, who explained they were acting only because of persistent complaint by the PT authorities, soon released DCs at the police station when the true facts emerged.

• ABQ success in July in getting an interim injunction stopping the PT weekend courses in chiropractic technique on grounds of misrepresentation and public safety. It was ABQ pressure for this legal action that had caused the arrests mentioned above. The injunction remains in force despite three unsuccessful appeals by the PTs.

• During August/September visits by PT investigators to many DC clinics in Sao Paulo harassing chiropractors and trying to get them to cease practice and sign declarations confessing illegal practice of PT.

Meanwhile the ABQ continues its campaign to get the draft chiropractic legislation passed into law. ABQ President Dr. Juliana Piva expresses most grateful thanks to the international community for vital financial support received during the past year - recently further generous donations from the British Chiropractic Association, American Chiropractic Association, the Chiropractors' Association of Australia and the International Board of Chiropractic Examiners**,** but issues a plea for further support as legal costs grow alarmingly. For more information, donation forms and a list of donors to date go to the Newsroom at www.wfc.org.

Canada: Canada, with 13 sports chiropractors credentialed with the Canadian Olympic Team, either the full team or affiliated with individual sports such as gymnastics, track and field, rowing and sailing, had the largest chiropractic representation of any country at the Beijing Olympics. For team chiropractor Dr. Wilbour Kelsick of Port Moody, British Columbia, this was a 5th Olympics Games. Beijing was a repeat Olympics also for Dr. Mike Murray (rowing) and Dr. Mohsen Kazemi (taekwondo).

This strong chiropractic presence within the Canadian sports medicine team is the result of a strong national sports chiropractic organization, the Chiropractic College of Sports Sciences (Canada), and its postgraduate educational standards which are the highest internationally. A full member or fellow of the CCSS(C) must complete a three year part-time program of course work and clinical experience – clinical requirements exceed 1000 hours. There are future plans to have this program further expanded and credentialed as a university master's degree.

There is already agreement between the Vancouver Olympics Organizing Committee (VANOC) and the International Olympic Committee (IOC) that chiropractic services will be an integral part of the core health services available at the Vancouver Winter Olympics 2010. DCs can learn much about that at the WFC's 10th Biennial Congress in Montreal April 30 to May 2, 2009, where keynote speakers on the opening day are Dr. Jack Taunton, Chief Medical officer, Vancouver Olympics and Dr. Robert Armitage, 2010 Winter Olympic Games Chiropractic Coordinator.

Denmark: Team Denmark had two chiropractors at the Beijing Olympics, Dr. Jan Anders Sørenson and Dr. Dorthe Zieglers. Dr. Sørenson is a former Danish shot-put champion and national coach. He has been sports chiropractor for the Danish track and field team since 2003 and with Team Denmark, which organizes elite sports at the international level, since 2005.

Europe: The European Chiropractors' Union (ECU), led by President Dr. Philippe Druart and the strongest and most effective regional body in chiropractic, reports a number of significant new developments. One is the creation of a European Working Party for Chiropractic, an official Parliamentary Committee of the European Parliament. The Working Party is comprised of 8 European members of parliament who will work to harmonize chiropractic legislation in all countries across Europe.

In a separate but related development the ECU is pursuing CE certification status for the profession of chiropractic in Europe. CE status is available for products and professions, and provides endorsement and credibility across Europe. The ECU is working with the Austrian government in promotion of this initiative which is anticipated to involve a three year process.

Indonesia: The Association of Indonesian Chiropractors (ACI) represents 15 pioneering DCs in Indonesia and is led by Dr. Brilliantono Soenarwo, an Indonesian national, and Dr. David Husband, an expatriate from Australia whose wife is Indonesian. Dr. Husband reports that the ACI has now been formally recognized by the Ministry of Health (DEPKES) and held its annual meeting in Jakarta on October 18.

Iran: There are now 25 DCs in Iran where Dr. Mohsen Khamessipour of Tehran is President of the Iranian Chiropractic Association, and where chiropractic practice is fully recognized and regulated by law.

After difficult early years in the 1980s and 1990s when practice was not recognized and chiropractic clinics were closed with equipment confiscated, the IRCA has now achieved an impressive and strong climate for the practice of chiropractic. DCs have diagnostic rights, including the ordering of advanced imaging such as MRI, that would be the envy of their colleagues in many countries. It is estimated that there are well over 1,000 Iranian DCs practising in North America.

Japan: Japan, which has an unfortunate history of substandard chiropractic education, now has two programs at the international standard, one already accredited and the other seeking accreditation from the Australasian Council on Chiropractic Education (ACCE). The accredited school is the Tokyo College of Chiropractic in Tokyo, formerly known as RMIT University Chiropractic Unit, Japan, and established in 1995 in affiliation with RMIT University, Melbourne, Australia. TCC President is Hiroaki Takeyachi, MD PhD DC, and Head of Education is Yoshihiro Murakami, BSc, a graduate of TCC.

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to Health Care Providers/Allied Health Providers/Clinical Resources/Clinical Framework). There are several noteworthy features that will have clinicians from other countries going to this website:

a) First, and the reason for mention here, one of the five core principles of the clinical framework is that "a biopsychosocial approach is essential for the rehabilitation of the injured clients/workers". All health providers caring for clients/workers must adopt that approach. We have all become used to red and yellow flags. Now WorkSafe and TAC give us:

- Red flags – biological factors
- Yellow flags – psychological factors
- Blue flags – social factors
- Black flags – other factors such as litigation and threats to financial security

b) Second, another core principle is that "measurable treatment effectiveness must be shown." This requires the use of pain scales and patient questionnaires. WorkSafe and TAC then give the largest source of information on outcome measures and how to use them you will find anywhere. This includes for example 36 language versions of the Roland Morris Disability Questionnaire for back pain – including versions in Australian, Canadian, US and British English. It includes outcome measures for risk identification, pain, the upper limb, the lower limb, neck, back, headache, psychosocial factors, etc. There are sections on how to select, interpret and record outcome measure results.

It is noteworthy that this clinical framework calls for defined goals and measured progress towards them tailored to individual patients, rather than a cookbook number of treatments. See more on this below.

7. **Integration of Chiropractic Services.** If the chiropractic model of spine care management has become more fully entrenched in 2008, so has the integration of chiropractic services themselves within mainstream spine care. Examples include:

a) In the USA, the greatly increased integration of chiropractic services in the military and Veterans' Administration hospitals and healthcare systems, and in university and other hospitals – now including the Harvard teaching hospitals. Harvard introduced chiropractic services following a trial there by Eisenberg, Post et al. showing that patients with moderate to severe acute low-back pain had better results when they were able to select and add chiropractic care (or acupuncture or massage) to best medical care.[14]

b) Throughout North America increased integration of chiropractic, medical and physiotherapy services in community spine clinics.

c) In Mexico a new program of state-funded hospital appointments for graduates of the first chiropractic school in that country – at the Universidad Estatal del Valle de Ecatepec (UNEVE) in Mexico City.

d) This September first students entered a new chiropractic school at the University of Zurich, Switzerland where, as at the University of Southern Denmark, chiropractic students study for the first three years together with medical students before completing a master's degree in chiropractic. Chiropractic practice is now more fully integrated with other mainstream healthcare services in Denmark and Switzerland than any other countries.

e) At the Beijing Olympics 15 countries had doctors of chiropractic as official members of their sports medicine teams. In the Philippines Dr. Martin Camara is a member of the the National Olympic Committee. Teams with official chiropractors from Latin America included Brazil, Colombia and Costa Rica, where Team Chiropractor Dr. Yolanda Comacho Kortman is also on the Executive of the Costa Rican Football Association and FIFA for the CONCACAF Region. Canada had 13 DCs with its Olympic team. US team chiropractors included Dr. Mike Reed, one of the two Medical Directors of the Sports Performance Division, US Olympic Committee Training Center, Colorado Springs. This integration of chiropractic services in the world of élite sports medicine is one more example of an accelerating overall trend.

D. Public Education

8. **Straighten Up.** If you google *Straighten Up* this will take you to the website of a deceptively simple but thoroughly researched three minute daily spinal health program that was developed by the American DC Dr. Ronald Kirk and an interdisciplinary Delphi panel five years ago. Straighten Up is experiencing unprecedented success internationally for a spinal health program. This is partly because of its quality, but also because of its adoption:

- Since 2007 by the US National Network and the Swedish International Secretariat of the Bone and Joint Decade 2000-2010 as the official program for World Spine Day October 16.
- In 2008 by numerous member national associations of the World Federation of Chiropractic, encouraged by the WFC's Public Health Committee led by Rand Baird, DC MPH, of Los Angeles (a recent recipient of a Lifetime Achievement Award by the Chiropractic Division of the American Public Health Association) and Dr. Kirk.

Straighten Up has a series of exercises for children or adults to be used daily for spinal health just as one brushes daily for dental health. If you are a DC and are not using it, and don't know what the Stars and the Flying Friends are, go to the internet and get yourself and your community into good spinal health habits now.

Each country has adapted the program to its own culture and needs. Arguably the best web presentation in English is by the British Chiropractic Association at www.straightenupUK.org. The Chiropractors' Association of Australia is also competitive at www.straightenupAustralia.com.au. If you want to experience the program in Finnish go to www.kiropraktiikka.org, the website of the Finnish Chiropractors' Union.

E. Managed Care and Spinal Health

9. Spine care clinicians may be able to alleviate back pain for many patients with acute, uncomplicated pain within a few visits. However they will not succeed with more chronic and complicated cases. And even with acute pain patients they will not be able to create the partnership with the patient that delivers changed spinal health habits – and through this freedom from future problems and greatly improved overall health. Managed care protocols that limit conservative spine care to 6 or 8 or 10 treatments for all patients, regardless of their health status and specific problems, are the major chal-

lenge to chiropractic practice in North America – as similar restricted protocols are challenges for many other health professionals – and there are signs that such unjustified cookbook rules are being exported internationally.

What do evidence-based and patient-centered clinical guidelines say relative to this? Key observations are:

a) They say that the test for duration and frequency of care should be validly measured progress towards specific clinical goals. That is the test for example in the Australian Clinical Framework in the State of Victoria already discussed. It is obvious that the amount of care needed to progress to maximum clinical or medical improvement will vary by patient – from the fit young adult with a first bout of mechanical neck or back pain to a stressed and unfit middle-aged patient with disc and spine degeneration and unsatisfying employment who is now seriously disabled with back and leg pain.

b) An appropriate course of care involving spinal manipulation/mobilization as in chiropractic practice has been defined by an independent, interdisciplinary expert panel selected by the RAND Corporation in California, a research institute respected for its numerous studies on the appropriateness of care. RAND's conclusion in a 1991 report is:

"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".[15]

On a protocol of three treatments per week this amounts to up to 10-12 treatments over four weeks for the most uncomplicated type of back pain and patient – with treatment continuing if there is documented improvement but clinical goals and/or full recovery have not been achieved.

c) This RAND recommendation, which itself drew partly on evidence-based national chiropractic clinical guidelines in the US and Canada, was adopted by a US government-appointed expert interdisciplinary panel for the AHCPR's *Guideline on Acute Low Back Pain in Adults* in 1994[16] and should therefore be seen as authoritative in defining sound and reasonable care in the patient's best interest.

d) In the US today most insurance companies send their chiropractic and medical consultants to the Official Disability Guidelines (ODG) produced by the Work Loss Data Institute for evidence-based recommendations on how to handle frequency and duration of care in claims. ODG Treatment, available online for a fee at www.disabilitydurations.com recommends up to 18 visits over 6-8 weeks "on the basis of objective improvement during the first six visits" and "to facilitate return to normal functional activities" as its basic guideline for care.

e) However, a central point forgotten in these descriptions of manipulation/ mobilization, is that chiropractic spine care is not just joint and soft-tissue manual treatment. It includes patient education and motivation, modification of lifestyle (e.g. leisure and work activities and ergonomics, postures, sleep, diet, cessation of smoking, etc), prescription and supervision of exercises, and patient motivation and education. It is the whole clinical encounter, this sustained package of influence, that gives the patient the understanding, motivation and ability to make the lifestyle changes that lead to future spinal and general health and avoidance of recurring pain and disability. Frankly, the position is that there are three fundamental levels of care:

- Significant over-treatment – some clinicians in all professions including chiropractic, are guilty of that, putting their interests before that of the patient.
- Significant under-treatment – some insurers and managed care organizations are equally guilty of that, putting their interests before that of the patient.
- Appropriate care – governed by individual patient needs, specific clinical goals and objectively measured progress to those goals.

F. Conclusion

10. More than once this report has quoted Scottish orthopedic surgeon Gordon Waddell's respected voice and view that there is a revolution underway in the management of patients with back pain.[17] That revolution is supplanting the biomedical model with the biopsychosocial model, is supplanting pain relief with improved function and health as the goal of care. The escalating cost and ineffectiveness of traditional care as reported by Martin Deyo et al., and the poor state of research in support of it as reported by Haldeman and Dagenais, indicate why the revolution is needed.

This Report reviews significant ways in which the chiropractic profession is continuing to contribute to that revolution – and how, after state-of-the-art achievements in research, clinical practice and public health in 2008 the profession can rightly claim leading expertise in the field of spinal health. TCR

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The second is the Murdoch University International Study Centre in Tokyo. This school has been developed in partnership with the School of Chiropractic and Sports Sciences at Murdoch University, Perth, Australia and graduates receive the same double bachelor's degrees awarded to Australian students. Head of program is Yozo Kawanishi, DC, a Palmer College graduate.

Currently there are three levels of persons providing chiropractic services in Japan, where there is no law to regulate who may practise as a chiropractor. First there are chiropractors with education at the accredited international level – from the above two schools or accredited colleges internationally. Second there are graduates of conversion programs (chiropractic standardization courses or CSCs) who are practitioners trained in Japan and who have then completed further education to reach a bachelor's degree level. Their qualifications are recognized by the Japanese Association of Chiropractors (JAC – the WFC's member association in Japan), the WFC and WHO. Third, there are many thousands of practitioners trained within Japan at lower levels and claiming to provide chiropractic services.

Mexico: The World Congress of Chiropractic Students (WCCS) grows in energy and significance every year. This year its annual meeting was held in August at the La Universidad Estatal del Valle de Ecatepec (UNEVE) in Mexico City, home of Mexico's state-funded school of chiropractic. WCCS President, Dr. Jaime Pinillos of Mexico City reports that there were delegates from most chiropractic schools worldwide and that the meeting was a great success.

Keynote speakers were WFC Past-President Dr. Gerard Clum and WCCS Liaison to WHO, Dr. Molly Robinson (Northwestern, USA) who reported on her three months serving as the chiropractic profession's first intern at WHO in Geneva, Switzerland April to June 2008. The WCCS decided to support Jennifer Nash (CMCC, Canada) as the profession's second intern at WHO in early 2009.

Next year's WCCS annual meeting is to be held at the New Zealand College of Chiropractic in Auckland, New Zealand.

Switzerland: In September first students entered the chiropractic program at the University of Zurich, one of Switzerland's most prestigious universities. This, the first chiropractic school in Switzerland and in German, represents a significant advance for the profession in Europe and internationally. It has been possible because of many years of careful planning and hard work by the Association of Swiss Chiropractors. Particular congratulations are due to ASC President, Dr. Franz Schmid and Past-President Dr. Daniel Muhlemann of Zurich. Leader of the chiropractic program is Dr. Kim Humphreys, formerly Dean of Research and Postgraduate Studies, Canadian Memorial Chiropractic College.

Education will be structured according to the Bologna Accord, which is governing the future of professional education in Europe, and will be similar to chiropractic education at the University of Southern Denmark. Students will receive double degrees – after the first three years where they study alongside medical students, a bachelor's degree in health sciences, and after a final two years a master's degree in chiropractic. From September 2009 all students will receive government funding for fees.