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Submission to Senate Community Affairs Committee

Inquiry into the National Registration and Accreditation Scheme for Doctors and other Health Workers

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10 July, 2009

The Chiropractors' Association of Australia (National) Limited is the peak body representing chiropractors with a membership of 2,400.

The CAA welcomes the Senate Community Affairs Committee Inquiry into the National Registration and Accreditation scheme and acknowledges the importance of this scrutiny to ensure the legislation and regulation will result in maximum safety for the public and the highest standards of healthcare delivery.

In this submission to the Senate Community Affairs Committee the CAA is commenting specifically on the impact of the scheme on patient care and safety which is item (b) of the Terms of Reference for the Senate Community Affairs Committee Inquiry.

For your information, the following is a broad overview of chiropractic practice:

Chiropractors are required to complete 5 years of university education as a pre-requisite to registration to practice. Australian chiropractic programs require over 4,200 face-to-face instruction training of which 60% is discipline specific to chiropractic and spinal manipulation. In addition to attaining competence in the safety and effective performance of manipulation the training includes the development of capabilities in diagnosis to determine not only the clinical indicators for manipulation or referral, but also the capabilities to determine and deliver the most effective manipulation in any given patient.

Chiropractic practice involves a general and specific range of diagnostic methods, including skeletal imaging, laboratory tests, orthopaedic and neurological evaluations, as well as observational and palpatory assessments. Patient management involves spinal adjustment and other manual procedures, rehabilitative exercises, supportive and adjunctive measures, patient education and counselling.

As a primary health care practitioner the chiropractor has specific, comprehensive and specialised skills in manipulation of the spine and extremities, including the identification of indications and contraindications as well as the highly skilled delivery of therapeutic intervention to and about the spine taking account of the patient's age and clinical presentation.

Chiropractors are also trained to take radiographic views of the spine and extremities and to interpret these views in a manner that supports the safe and effective provision of manipulation.

Any person undertaking spinal manipulation should be able to demonstrate equivalence of competency in order to have the skills to perform spinal manipulation in a safe and effective manner.

COAG has maintained that the new national registration and accreditation scheme will improve patient safety.

Patient safety and quality of care is dependent on a system that ensures the highest standards for health professional education and training, as well as demonstrated life-long competency in areas of expertise. The CAA and the chiropractic profession demands this of themselves and emphasizes that in the absence of consistency of standards and competencies for specific health modalities, the system is more likely to fail rather than to protect the Australian people.

Exposure Draft of Bill B

The CAA is of the opinion that the legislation proposed in Bill B has seriously compromised patient safety and quality of care and, as a result, will permit unnecessary increased risks to Australians.

The CAA is referring to the absence of restrictions on who can perform spinal manipulation and the scope of the restriction being placed on cervical (neck) manipulation. The following is the pertinent extract from the Exposure Draft of Bill B – page 67:

"137. Restrictions on spinal manipulation

(1) A person must not perform manipulation of the cervical spine unless the person:

(a) is registered in an appropriate health profession, or

(b) is a student who performs manipulation of the cervical spine in the course of activities undertaken as part of an approved program of study in an appropriate health profession, or

(c) is a person, or a member of a class of persons, prescribed under a regulation as being authorised to perform manipulation of the cervical spine.

Maximum penalty: $30,000.

(2) In this section:

appropriate health profession means any of the following health professions:

(a) chiropractic,

(b) osteopathy,

(c) medical,

(d) physiotherapy.

manipulation of the cervical spine means moving the joints of the cervical spine beyond a person's usual physiological range of motion using a high velocity, low amplitude thrust."

The key question raised in the consultation paper for Bill B was "*whether there is any evidence to suggest that the community is more vulnerable in those jurisdictions where no restrictions apply, compared with those where restrictions apply. It may be that the more serious risks associated with spinal manipulation relate mainly to manipulation of the cervical spine, and that if a restricted act is to be included in the legislation, it should be narrowly framed.*"

Stakeholders were asked to consider the following:

1. Is there any evidence to suggest that the community is more vulnerable in those jurisdictions where no restrictions apply, compared with those where restrictions apply?
2. Should the restricted act if included be narrowly framed eg manipulation to the cervical spine?
3. The need, if any, for inclusion in the national legislation of a restricted act with respect to spinal manipulation? If so, how broad or narrow framed?

4. What definition should be adopted?

The CAA put forward a submission relating to the need to restrict the practice of spinal manipulation (copy is attached as Appendix I and an Executive Summary of that as Appendix II).

Following the lodgement of this submission the CAA was advised by a policy writer that specific legislative advice had been provided to them in regard to restricting spinal manipulation. This advice, we understand, was that there was insufficient evidence that restricting spinal manipulation reduces public risk.

It is not unreasonable to assume that there would be little evidence available as injuries to citizens resulting from care provided from unregulated practitioners performing unrestricted practices would not necessarily be reported to a regulating authority. In many cases too, such practitioners would not be covered by professional indemnity insurance.

Despite the CAA's submission, and the fact that chiropractors are five-year university trained as a pre-requisite for registration to practice in the specific area of spinal health, we were not consulted at any time by policy writers, nor were we able to procure a copy of their legislative advice on the subject.

Although there is little evidence available to suggest that the community is more vulnerable in those jurisdictions where no restrictions apply, compared with those where restrictions do apply, the CAA asserts strongly that the public should be legally protected from persons who are unskilled, unqualified, insufficiently trained and not competent to undertake manipulation of the spine.

CAA was advised that in the development of Bill B Exposure Draft the Registration and Accreditation Implementation the Project team considered the current arrangements with respect to the regulation of spinal manipulation across the States and Territories. Six of the eight jurisdictions restrict the practice of spinal manipulation to the spine or spine and pelvis. The two states which have no restriction on the practice of spinal manipulation are WA and Victoria.

The first object of the Health Practitioner Regulation National Law states:
The object of this Law is to protect the public by:

(a) Establishing a national scheme for the regulation of health practitioners that ensures health practitioners registered under this Law are suitably qualified and competent, and maintain appropriate standards of practice.

A further objective states:
"…….provide for the protection of the public by ensuring that only health practitioners who are suitably trained and qualified to practice in a competent and ethical manner are registered."

The draft legislation which is proposing that there be no restriction on spinal manipulation is difficult to justify to consumers in terms of their public safety given that it is a reduction of legislated safety standards which are currently in place for the majority of Australians. The CAA and the chiropractic profession is at a loss to understand the logic behind the Health Ministers

agreeing to reduce safety procedures and thereby promoting increased risks which potentially could have a huge impact on the safety, health and wellbeing of individual Australian citizens.

The CAA asserts that significant risks face citizens and could result in serious injury to them if they were in the hands of unskilled, unregulated persons performing spinal manipulation.

Serious risks to public safety occurring as a consequence of limited or sub-standard training are a concern to the chiropractic profession and certainly should be of major concern to Commonwealth, State and Territory Health Ministers, as well as to consumers.

In its original submission the CAA strongly advocated that manipulation of the spine and extremities be restricted to registered chiropractors and osteopaths, or those other registered health practitioners who can demonstrate equivalency of competence by appropriate, accredited, prescribed and clearly identified post-graduate training – eg musculo-skeletal physiotherapists. Medical practitioners have no relevant training for spinal manipulation in their undergraduate training and should also be required to demonstrate equivalency of competence via appropriate prescribed post-graduate training.

In its original submission the CAA further strongly advocated that if a decision was made **not** to restrict spinal manipulation that at the very least cervical manipulation be restricted as outlined in the paragraph above.

However, the CAA does not support the separation of cervical manipulation from the term spinal manipulation in regard to restriction of practice, as serious injury may result from manipulation of all areas of the spine, including cervical, lumbar and low back. Evidence of these injuries are included in the attached papers.

Statistics must be viewed within the context of the frequency of performance of lumbar spine manipulation as compared to cervical spine manipulation. Approximately 65% of all patients presenting to chiropractors do so for lumbar spine complaints and approximately 15% for cervical spine related disorders. This suggests that the application of lumbar spine manipulation is potentially four times higher than that of cervical spine manipulation.
It must therefore be questioned as to whether or not lumbar spine manipulation presents more of a risk in relation to potential complications than cervical spine manipulation. The litigation experience in Australia confirms a bias in relation to claims related to alleged lumbar spine injury and/or aggravation of existing conditions. Therefore, there would be little objective reason to single out cervical spine manipulation for special restrictive legislation.

CAA believes that consumers should not only expect, but be given the highest quality health care available to them which is delivered by well-informed, suitably trained and qualified, competent, skilled professionals.

To ensure that this happens the CAA believes that Bill B should be amended to reflect that:

manipulation of the spine and extremities be restricted to registered chiropractors and osteopaths, or those other registered health practitioners who can demonstrate equivalency of competence by appropriate, accredited, prescribed and clearly identified post-graduate training

The CAA also emphasizes the need to legislate the following definition of Spinal Manipulation:

"Spinal manipulation means the rapid application of a force (whether by manual or mechanical means) to any part of a person's body that affects a segment of the vertebral column or other joints".

The CAA strongly urges the members of the Senate Community Affairs Committee to consider the recommendations of the CAA. We also request that the Committee read the attached documents to support this submission.

Provision of Chiropractic services about the jaw

There is a concern that the Dental restricted practice in Bill B "Subdivision Practice Protections 135 Restricted dental acts" needs to be clarified so that the normal scope of chiropractic practice is not restricted.

Chiropractors provide services where the chiropractor examines, diagnoses, provides treatment in/around/to the mouth, jaw, musculature of the jaw, TMJ, and cranial regions.

The CAA thanks the Committee for the opportunity to meet with them and invites them to contact the Chief Executive Officer should they wish to raise any matters for further discussion.

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APPENDIX 1

TO CHIROPRACTORS' ASSOCIATION OF AUSTRALIA (NATIONAL) LIMITED'S SUBMISSION ON CONSULTATION PAPER ON PROPOSED REGISTRATION ARRANGEMENTS FOR THE NATIONAL REGISTRATION AND ACCREDITATION SCHEME

8.5 Restrictions on spinal manipulation

The CAA agrees that the legislation supporting the new national registration and accreditation scheme should be based on the safety of the public being paramount and that high quality care be encouraged.

The CAA believes that legislated restrictions on practice should only be included where the benefits to the community as a whole outweigh the costs, or potential costs to the consumer. These comments relate to potential risks to patients' health and wellbeing.

This document addresses the four points raised in the Consultation Paper "Proposed Registration Arrangements, Section 8.5 – namely:

5. Is there any evidence to suggest that the community is more vulnerable in those jurisdictions where no restrictions apply, compared with those where restrictions apply?
6. Should the restricted act if included be narrowly framed eg manipulation to the cervical spine?
7. The need, if any, for inclusion in the national legislation of a restricted act with respect to spinal manipulation? If so, how broad or narrow framed?
8. What definition should be adopted?

Spinal Manipulation

The foundation of chiropractic care is built on the premise that the patient's safety and their health and well-being is paramount.

Irregardless of the availability or not of evidence to suggest that the community is more vulnerable in those jurisdictions where no restrictions apply, compared with those where restrictions do apply, the CAA is of the view that consumers should not only expect, but be afforded the highest quality health care available to them which is delivered by well-informed, suitably trained and qualified, competent, skilled health professionals.

The CAA believes that the public should be legally protected from health workers who are unskilled, unqualified, insufficiently trained and incompetent and whose health service delivery could potentially cause harm to their patients.

It is the CAA's opinion that spinal manipulation be extended to incorporate extremity joint manipulation.

The CAA strongly advocates that manipulation of the spine and extremities be a restricted act within the national legislation.

Secondly, the CAA strongly advocates that manipulation of the spine and extremities be restricted to registered chiropractors and osteopaths, or those other registered health practitioners who can demonstrate equivalency of competence by appropriate, accredited, prescribed and clearly identified post-graduate training – eg Musculoskeletal/Manipulative Physiotherapists.

A restricted act within the national legislation would prevent health workers (both registered and unregistered) from undertaking manipulation of the spine and extremities if they are not adequately trained nor competent to do so, resulting in their prosecution if they breach the provision of the legislation.

There is considerable information in the literature relating to injuries or other adverse events that have occurred in jurisdictions where spinal manipulation is not restricted. Below is a list of some examples:

Mendez Gonzalez M, Garcia C, Suarez E, Fernandez Diaz D, Blazquez Menes B. Wallenberg's syndrome secondary to dissection of the vertebral artery caused by chiropractic manipulation. Rev Neurol. 2003:37(9): 837-9.
The patient suffered serious injury in Spain, a jurisdiction without restriction. The professional who performed the manipulation was not a chiropractor and the term chiropractic manipulation was used inappropriately.

Markovitch H. Chiropractic causes leak of CSF. BMJ 2003; 326:1353
Serious injury caused to patient in Germany. Blamed on chiropractor, practitioner was not a chiropractor. Jurisdiction with no restriction.

Neetu R, Chandra MS, Rashmi M. Cervical Spinal epidural hematoma with acute Brown-Sequard presentation [Letter to editor]. Neurology India 2006;54;107-108
The authors attribute an injury to a patient to "chiropractic manipulation". It was subsequently confirmed that the "chiropractic manouvre" was not carried out by a qualified person. India is a jurisdiction with no restriction.

Wenban, Adrian B. Inappropriate use of the title chiropractor: Reasons for concern? [Letter to editor] Clinical Neurology and Neurosurgery 2008 (formally accepted for publication October 2008 – date published not available)
This letter was in response to Gouveia Lo, Castanho P, Ferreira JJ, Guedes MM, Falcao F, Melo TP. Chiropractic manipulation: Reasons for concern? Clin Neurol Neurosurg 2007[Epub ahead of print].

In his letter to the editor Dr Wenban states that the principal author of the case series confirmed that "she and her co-authors had no knowledge of the qualifications of those referred to as chiropractors in their case series and that their basis for using the title chiropractor was the patient's report of the techniques used."

Through researchers outside the chiropractic community using the term "chiropractic manipulation" in a generic sense, it has been revealed that there have been very serious injuries to patients in countries in which chiropractic is not regulated by law and "chiropractic manipulation" has not been carried out by a chiropractor.

Terrett AGJ. Misuse of the literature by medical authors in discussing spinal manipulative therapy injury. J Manip Physiol Ther 1995; 18(4):203-10.
Terrett concluded, "the words chiropractic and chiropractor have been incorrectly used in numerous publications dealing with SMT injury by medical authors, respected medical journals and medical organizations" Most of the injuries were blamed on chiropractic (spinal manipulation) but the practitioners involved were not chiropractors

In 2004 a prominent chiropractor researcher, Dr Adrian Wenban, B.Sc., B.App.Sc., M.Med.Sc., reviewed a total of 24 European peer-reviewed biomedical papers relating to chiropractic and manipulation. The results of this review revealed that the terms chiropractor and chiropractic manipulation had been inappropriately used. In 20 cases involving injury attributed to

chiropractors, the principal researcher was unable to confirm that the providers were qualified chiropractors but subsequently conceded that they were not.

The World Federation of Chiropractic (WFC) www.wfc.org.au in its policy statement "Use of the Title Chiropractor" addresses situations where persons without a formal and acceptable chiropractic education practice as chiropractors in countries where the practice of chiropractic is not regulated by law. It also addresses persons who have frequently taken brief instruction in treatment techniques at unofficial schools or courses claiming to offer chiropractic education. The WFC policy states:

> *"The title chiropractor, doctor of chiropractic and titles derived from them should only be used by duly licensed or registered chiropractors or graduates of chiropractic educational programmes that are formally accredited by a chiropractic accreditation agency or an alternative government-recognised accreditation process in the country in question."*

It goes on further to state that the term chiropractic and terms derived from it, in so far as they are used in an **educational** context or a **professional** context to describe a job, service, or treatment purporting to be chiropractic practice, *"should only be used by chiropractors or doctors of chiropractic who have graduated from chiropractic educational institutions formally accredited by a recognized process in the country in question."*

Bateman W, Pollard H, Vemulpad S. Spinal Manipulation in Australia: To What Extent Does Australian Legislation Protect the Public and the Professions? Chiropr J Aust 2004;34:129-135

ABSTRACT: *Objectives:* To examine the extent the Australian legislation protects (a) the professions that have spinal manipulation as a core practice, (b) the public from untrained manipulators. To consider the strengths, weaknesses and effectiveness of current Australian legislative approaches. *Data Sources:* The Library of the Supreme Court of New South Wales, Macquarie University Library, American and Australian state parliamentary and legislative web sites, relevant professional association web sites, World Federation of Chiropractic web site, Federation of Chiropractic Licensing Boards and MEDLINE databases were used. ***Conclusion:*** **Many authorities agree that there is a need to protect the public from untrained manipulators. In recent years the NSW Department of Health, after public submissions and research, determined that the risk to the public of untrained manipulators was such that it overrode the anticompetitive aspects of federal legislation. There are several possible approaches to protecting the public from untrained spinal manipulators, and to protect the professions by restricting the use of certain professional titles to practitioners who meet certain regulatory requirements in Australian jurisdictions at an appropriate level of training and education.**

The most in-depth and authoritative review into the chiropractic profession and the practice spinal manipulation in Australasia remains the report of the New Zealand Commission of Inquiry into Chiropractic which was published in 1979. (1) Though this review is now nearly 30 years old, it was undertaken by the New Zealand government and as such remains an independent examination of the Chiropractic profession and spinal manipulation carried out by other professions.

The commission's opportunity to gather and examine evidence was extremely wide, since there were no restraints on time, and both medicine and chiropractic worldwide saw this as the test case for chiropractic. Consumer, chiropractic, medical and physiotherapy witnesses from the United States, Europe, Canada and Australia gave evidence at the New Zealand hearings. The inquiry extended over 18 months.

One of several government commissions to investigate the chiropractic profession, the New Zealand Commission of Inquiry is regarded as having delivered the most detailed and exhaustive report.

Many of the findings of this Commission of Inquiry remain as valid today as they did when they were published in 1979 perhaps with the exception of recommendations No 3 and 4 which states that chiropractors are the only health practitioners who are necessarily equipped by their training to carry out spinal manipulative therapy and that GPs and physiotherapists have no adequate training in spinal manual therapy. It would be true to say that in 2008, physiotherapists with post-graduate spinal manipulative training are now duly qualified practitioners of the art. As far as we are aware, there remains no training in manual spinal therapy or spinal manipulation within the undergraduate training of a GP.

The Commission determined that "spinal manual therapy (SMT) in the hands of a registered chiropractor is safe".

The Commission commented on the provision of spinal manual therapy by medical practitioners as follows:

> *"It is wrong that the present law, or any medical ethical rules, should have the effect that a patient can receive spinal manual therapy which is subsidized by a health benefit, only from those health professionals least well qualified to deliver it."* (1)

The Inquiry further states:

> *"The responsibility for spinal manual therapy training, because of its specialized nature, should lie with the chiropractic profession. Part time or vacation courses in spinal manual therapy for other health professionals should not be encouraged."* (1)

The Commission found that "….*to acquire a degree of diagnostic and manual skill sufficient to match chiropractic standards, a medical graduate would require up to 12 months full-time training* …"

Serious risks to public safety occurring as a consequence to such limited training are a concern to the chiropractic profession and certainly should be of major concern to Commonwealth, State and Territory Health Ministers, as well as consumers.

In Australia a correspondence course on spinal manipulation for doctors carried the accreditation of The Royal Australian College of General Practitioners. There was one optional practical weekend workshop and the mail-order course was followed by a "formal assessment by correspondence". Given the known risks of spinal manipulation, practice based on such a such a low standard of training should not be permitted. According to Henderson et al (14), as quoted in the WHO Guidelines on basic training and safety in Chiropractic" causes of complications and adverse reactions are:-

- Lack of knowledge
- Lack of skill
- Lack of rational attitude and technique

It is hard to imagine the medical practitioners could acquire the knowledge, skill, attitude and technique for safe performance of spinal manipulation via correspondence, weekend or other short and inadequate training.

A judgement handed down by a NSW Medical Tribunal in 1986 expressed concern over the dangers of spinal manipulations carried out by practitioners without recognised expertise or under conditions where expert assistance was not available. The case related to a medical doctor who had performed spinal manipulation on a patient who subsequently died. In its conclusions the Medical Tribunal stated "To the extent to which cervical manipulation is carried out by unregistered and unsupervised persons, we can only say the prospect is frightening and the public should be warned." (45-46)

Deficiencies in musculoskeletal competence amongst general medical practitioners have been highlighted in published literature. In 2002 Vlahos, et al concluded that "Musculoskeletal knowledge among recent medical graduates has again been found wanting. The need for further musculoskeletal education has been established." (2) This was an Australian study and it seems unlikely that practitioners with such training would be able to identify the contraindications to spinal manipulation and, as spinal manipulation is not taught at the undergraduate level in medical schools, they would not be able to perform it on the basis of their undergraduate education. Yet current laws permit them to do so.

These deficiencies in Australia followed an American study which found that 82% of new medical residents at the University of Pennsylvania School of medicine failed a musculoskeletal medicine knowledge exam. (3)

In the United States a study was conducted in 2000 to "determine whether training primary care physicians in techniques of limited manual therapy would result in improved outcomes for their patients with acute low back pain." (4) The authors trained 31 primary-care-MDs in "a sequence of eight standard manual therapy techniques." Two hundred and ninety-five patients were randomized into two treatment groups. One group received what was termed "enhanced care;" the other received "enhanced care with manual therapy." The main outcome measures included the "Roland-Morris functional disability scale measured over time and patient-reported time to functional recovery, time to complete recovery, and satisfaction with care."

The conclusion was: "Limited training in manual therapy techniques offers very modest benefits, compared with high-quality (enhanced) care for acute low back pain. (4)

Currently the NSW Public Health Act 1991 No. 10, Part 2A, Divison 2, Section 10AC restricts persons engaging in spinal manipulation, classifies spinal manipulation as a "restricted health service", and defines spinal manipulation. See wording below:

……..

Public Health Act 1991 No 10

Current version for 8 August 2008 to date (accessed 29 October 2008 at 18:26)

10AC Spinal manipulation

1) A person must not engage in spinal manipulation in the course of providing a health service unless the person:

(a) is a registered chiropractor, or a chiropractic student acting under the appropriate supervision of a registered chiropractor, or

(b) is a registered medical practitioner, or a medical student acting under the appropriate supervision of a registered medical practitioner, or

(c) is a registered osteopath, or an osteopathy student acting under the appropriate supervision of a registered osteopath, or

(d) is a registered physiotherapist, or a physiotherapy student acting under the appropriate supervision of a registered physiotherapist.

Maximum penalty: 50 penalty units or imprisonment for 12 months, or both.

(2) For the purposes of this Division, spinal manipulation is a restricted health service.

(3) An authorised person or inspector appointed under any of the following Acts is authorised to ascertain whether this section is being complied with:

(a) Chiropractors Act 2001,

(b) Medical Practice Act 1992,

(c) Osteopaths Act 2001,

(d) Physiotherapists Act 2001.

(4) In this section:

***spinal manipulation** means the rapid application of a force (whether by manual or mechanical means) to any part of a person's body that affects a joint or segment of the vertebral column.*

……..

By way of background, manipulation differs considerably from mobilisation. Mobilisation is a movement with very little force carried out within the available range of joint motion to the limits of potential joint motion.

A joint manipulation is a manual procedure involving directed thrust to move a joint past the physiological range of motion, without exceeding the anatomical limit. (5) It is therefore imperative that health professionals delivering manipulation of the spine and extremities are suitably trained and qualified to do so.

Manipulations and chiropractic adjustments both involve thrusting techniques directed at improving the joint and neurophysiological function.

There are numerous methods or techniques employed by clinicians who practice spinal manipulation. Factors to consider in the application of manipulation/adjustment of the spine and extremities relate to velocity - whether the thrust is high or low velocity in terms of its activating force; whether the range is small or great; the specificity – whether a single joint or multiple joints are the target of or affected by the thrust; the direction of the thrust; and whether it is a long lever (a long bone is used as a lever to exert force into the spine) or short lever (the practitioner's hand or instrument contact is on part of the target joint). These dynamic and

complex methods require careful and skilful use. To ensure patient safety and high quality care they should only be undertaken by suitably qualified health professionals.

The World Health Organization "Guidelines on basic training and safety in Chiropractic" (5) encourages and supports the proper use of the practice of SMT (Spinal Manipulation) including the understanding of the significance and detection of contraindications for such care. WHO discusses the need to facilitate safe and qualified practice as well as protect the public and patients by:

- Providing minimum requirements for education
- Reviewing contraindications; minimizing the risk of accidents; advise on the management of complications arising during treatment; and to promote safe practice.

Spinal manipulation (SMT) involves the forceful passive movement of the joint beyond its active limit of motion and as such practitioners providing this care must identify the risk factors that contraindicate this modality.

Contraindications

Contraindications to SMT range from a non-indication for such an intervention, where SMT may do no good, but should not cause any harm, to an absolute contra-indication, where SMT is life-threatening and/or catastrophic. The haphazard application of SMT by non-regulated individuals and untrained is dangerous.

There are a number of contraindications to joint manipulation (especially spinal), which have been reviewed in practice guidelines developed by the chiropractic profession and in the general chiropractic literature (6-12).

An extensive list of absolute and relative contraindications can be found in the WHO document "Guidelines on basic training and safety in Chiropractic" (13).

Complications

A discussion of contraindications, accidents and adverse reactions is found in the WHO document as detailed above. (13) According to Henderson et al (14) causes of complications and adverse reactions are:-

- Lack of knowledge
- Lack of skill
- Lack of rational attitude and technique

Henderson gives examples of inappropriate practices and a description of serious adverse outcomes to all spinal regions (15-27). SMT is generally regarded as safe, effective and conservative, however although rare, accidents have been reported. As with all therapeutic interventions, complications can arise. Serious neurological and vascular complications have been reported and in some instances catastrophic. Examples of reported incidences are as follows:-

Cervical Region

- Vertebrobasilar accidents (6-9, 11-12, 15, 19, 27-30)
- Horner's syndrome (16)
- Diaphragmatic paralysis (17)

- Myelopathy (18)
- Cervical disc lesions (24)
- Pathalogical fractures (19,20)

Thoracic Region
- Rib fracture and costochondral separation (21)

Lumbar Region
- Lumbar disc rupture (25)
- Lumbar artery aneurysm (26)
- Cauda equine syndrome (25)

Miscellaneous Neuro Conditions Reported to have occurred following SMT. (31)
- Upper brachial plexus paralysis
- Axillary nerve lesion
- Long thoracic nerve lesion
- Spinal accessory neuropathy
- Diaphragmatic paralysis – phrenic N.
- Femoral neuropathy
- Spinal Haemotoma (31)

Reports of neurological complications following SMT fall into four major categories;-

1. Cerebrovascular accidents or incidents as a consequence of arterial dissections resulting in specific stroke syndromes.
2. Lumbar disc syndromes including radiculopathy and cauda equine syndrome.
3. Cervical disc syndromes including radiculopathy and myelopathy
4. Miscellaneous and often unexplained post-manipulation symptoms. (31)

Cerebrovascular Accidents (CVA)
Estimates of the incidence of serious cerebrovascular syndromes following cervical SMT based on clinical surveys range from 1 in 400,000 to 1 in 2 million dependent upon various authorities.

In the example of arterial dissection, there are no highly reliable clinical tests to determine this possibility, however, practitioners are on the “look-out” for various initial symptoms which may or may not be present; eg “thunder-clap” headaches and any brain-stem related signs and symptoms – dizziness, drop attacks, visual problems, speech difficulties, coordination difficulties, one-sided numbness, etc. The lay-person does not have the knowledge and clinical skills to assess the patient properly. In such instances, if SMT was utilized the underlying arterial dissection could be further aggravated leading to a significant condition.

Disc Syndromes
In the case of a presenting cervical or lumbar disc injury, the trained professional understands the underlying disc and nerve anatomy, understands the pathology, can clinically assess the patient for signs and symptoms of a nerve root lesion (muscle strength, sensory loss, reflexes and nerve tension tests) and therefore in appropriate cases would desist from treatment and refer for appropriate imaging versus aggravating the pathology with the possible need of urgent surgery.

Prevention of Complications from manipulation

Complications that can arise from SMT can often-times be prevented by careful appraisal of the patient's history and examination findings. Information must be sought about coexisting diseases and the use of medications, including long term steroid and anticoagulant therapy. A detailed and meticulous examination must be carried out. The use of appropriate technique is essential and the practitioner must avoid techniques known to be potentially hazardous. (32)

Trained professionals are required to obtain Informed Consent which includes a discussion and explanation of both positive and negative outcomes, a list of options, and the knowledgeable ability to answer and explain any questions the patient might have. How can the layperson be able to provide this requirement without sufficient formal training and expertise?

Regulated trained professionals are required to have adequate public indemnity insurance when performing SMT. This allows patients access to funds in the event of a proven injury. How could laypersons using SMT receive this form of insurance from insurers without adequate tertiary training?

It would be unsatisfactory to allow uninsured laypersons to perform a therapeutic method which can have serious/lethal consequences, without the injured person having access to financial aid which may be required for daily living.

Furthermore regulated practitioners expertly educated and trained in these procedures are taught courses in first aid as well as instructions for those occasions where adverse incidents occur. There are further professional expectations and requirements for Continuing Professional Development program which include regular risk management re-education including the need for continual first aid updates.

Chiropractors are required to complete 5 years of university education to receive double degrees at the Bachelor and Masters levels in order to be deemed competent to undertake manipulation of the spine and extremities and to be registered as a chiropractor. In contrast Physiotherapists complete a four year undergraduate degree.

Chiropractic practice involves a general and specific range of diagnostic methods, including skeletal imaging, laboratory tests, orthopaedic and neurological evaluations, as well as observational and tactile assessments. Patient management involves spinal adjustment and other manual therapies, rehabilitative exercises, supportive and adjunctive measures, patient education and counselling. (5)

The outcomes of an accredited Chiropractic program include being a primary health care practitioner with specific, comprehensive and specialised skills in manipulation of the spine and extremities, including the identification of indications and contraindications as well as the highly competent delivery of therapeutic intervention to and about the spine taking account of the patient's age and clinical presentation.

By way of a guide the Australian chiropractic programs require over 4,200 hours of face-to-face instruction training to produce an entry-level chiropractor eligible for registration. Typically around some 60% of that training is discipline specific to chiropractic and spinal manipulation. Within this students will learn clinical decision making including diagnosis and management that supports the safe and competent delivery of manipulation of the spine and extremities.

The student chiropractor's education does not relate solely to the psychomotor skill of manipulation. In addition to attaining competence in the safety and effective performance of manipulation the training includes the development of capabilities in diagnosis to determine not only the clinical indicators for manipulation or referral, but also the capabilities to determine and deliver the most effective manipulation in any given patient.

Diagnosis includes training in the use of discipline specific skills as well as the generic diagnostic skills common to primary contact health care professionals such as the taking of blood pressure, vital signs and auscultation of heart and lung sounds.

Chiropractors are also trained to take radiographic views of the spine and extremities and to interpret these views in a manner that supports the safe and effective provision of manipulation.

In contrast the training provided to Osteopaths does not equip them to possess licensure as a radiographer. For example in NSW chiropractors are licensed for supervision and licensed for use for chiropractic radiography under the NSW Radiation Control Act 1990. If they own x-ray equipment, they are also required to hold a Certificate for Xray Equipment under the NSW Radiation Control Act 1990.
Within Australian chiropractic programs the extensive amount of clinical training includes 1000 hours of supervised clinical practice and this training is currently not funded by the Federal Government.

It is recommended that practice restriction should be based upon:

- public safety
- the need for practitioners with demonstrated practical and cognitive skill in the application of spinal manipulative therapy
- the need for formal education with minimum standards and requirements as detailed within the WHO document (13). (only the chiropractic and osteopathic professions meet this requirement within the entry-level programs in Australia). The WHO document recommends that other health practitioners would need a further 12 months instruction in SMT.
- a professional code of practice to include (a) the need for health professionals to administer and provide interventions of demonstrated competence, and (b) the minimum educational standard necessary for the provision of SMT.
- the need to recognise and understand the significance of contraindications, the ability to minimize risk, the ability to administer first and provide appropriate advice and management in the event of a serious complication.
- the ability to provide genuine Informed Consent
- the availability and regulated requirement of public indemnity and malpractice insurance.
- Ongoing life-long continuing professional education and development.

Definitions of Spinal Manipulation

The CAA considers that a definition of Spinal Manipulation be included in the legislation.

The CAA suggests the following definition of Spinal Manipulation:

> ***spinal manipulation*** *means the rapid application of a force (whether by manual or mechanical means) to any part of a person's body that affects a segment of the vertebral column or other joints.*

Manipulation of the cervical spine

The CAA does not support the separation of cervical manipulation from the term spinal manipulation in regard to restriction of practice, as serious injury, such as rib fracture or cauda equina syndrome, may result from manipulation of other areas of the spine.

As serious injury, such as rib fracture or cauda equina syndrome, may result from manipulation of other areas of the spine, the CAA strongly advocates that manipulation of the spine (including the cervical spine) and extremities be restricted to registered chiropractors and osteopaths, or those other registered health practitioners who can demonstrate equivalency of competence by appropriate, accredited, prescribed and clearly identified post-graduate training. – eg Musculoskeletal/Manipulative Physiotherapists

However if spinal manipulation is not restricted the CAA strongly advocates that cervical manipulation should definitely be restricted to registered chiropractors and osteopaths, or those other registered health practitioners who can demonstrate equivalency of competence to undertake cervical manipulation by appropriate, accredited, prescribed and clearly identified post-graduate training. - eg Musculoskeletal Manipulative Physiotherapists.

Prof Kathryn M Refshauge in a paper published in 2002: "Professional responsibility in relation to cervical spine manipulation", which relates predominantly to physiotherapists and physiotherapy, states: (33)

"Given the wide discrepancy in educational standards, and because of our responsibility to maximise safety and care for our patients, the profession should consider the required level of education for cervical spine manipulation. A minimum requirement could be completion of a university postgraduate program in manipulative physiotherapy, or of a short (eg three months) formal continuing education course accredited by the APA. Alternatively, the teaching of cervical spine manipulation could be included in all undergraduate physiotherapy programs. Such changes would need to be prescribed either in the relevant Registration Acts or in a professional code of practice. or require review of university curricula. The relative merits of each of these approaches should be debated.

The first option is that completion of a Graduate Diploma or Masters degree in Manipulative Physiotherapy be considered the required level of education for the performance of cervical, spine manipulation. The knowledge and skills of graduates from these courses is likely to

exceed that of graduates from entry-level programs. The graduate courses include not only teaching of the practical skill of manipulation, but also an exploration of the relevant neuroanatomy and biomechanics in addition to the clinical reasoning required for appropriate selection of patients and manipulative techniques."

This paper implies that cervical spine manipulation is not taught in all undergraduate four year Physiotherapy programs.

The World Health Organisation (WHO) Guidelines on basic training and safety in chiropractic (5) states that "vascular accidents are responsible for the major criticism of spinal manipulative therapy". They point out that "critics of manipulative therapy emphasize the possibility of serious injury, especially at the brain stem, due to arterial trauma after cervical manipulation. It has required only the very rare reporting of these accidents to malign a therapeutic procedure that, in experienced hands, gives beneficial results with few adverse side effects."(34)

The WHO document further states "In very rare instances the manipulative adjustment to the cervical spine of a vulnerable patient becomes the final intrusive act which, almost by chance, results in a very serious consequence" (35-38)

Further the WHO document states that "While it is understood that the actual incidence of cerebral vascular injury could be higher than the number of reported incidents, estimates from recognized authorities in research in this area have varied from as little as one fatality in several tens of millions of manipulations (39), one in 10 million (40) and one in one million (41) to the slightly more significant 'one important complication in 400,000 cervical manipulations". (42)

Cassidy, et al undertook a study to investigate associations between chiropractic visits and vertebrobasilar artery (VBA) stroke and to contrast this with primary care physicians (PCP) visits and VBA stroke. (43). Cassidy et al concluded that "VBA stroke is a very rare event in the population. The increased risks of VBA stroke associated with chiropractic and PCP (primary care physicians) is likely due to patients with headache and neck pain from VBA dissection seeking care before their stroke. They found no evidence of excess risk of VBA stroke associated chiropractic care compared to primary care."

Arterial Dissections Following Cervical Manipulation: The Chiropractic Experience

. Scott Haldeman S, Carey P, Townsend M, Papadopoulos C.*CMAJ* 2001;165(7):905-6.

A paper published in the October 2 2001 issue of the *Canadian Medical Association Journal (CMAJ*) by Scott Haldeman, DC, MD, PhD, Paul Carey, et al. ("Arterial Dissections following Cervical Manipulation: the Chiropractic Experience") reports that the chances of arterial dissection after cervical manipulation is approximately 1 in 5.85 million manipulations.

Specifically, the authors state:

"The likelihood that a chiropractor will be made aware of an arterial dissection following cervical manipulation is approximately **1:8.06 million office visits, 1:5.85 million cervical manipulations, 1:1430 chiropractic practice years and 1:48 chiropractic practice careers."**

Risk Factors and Precipitating Neck Movements Causing Vertebrobasilar Artery Dissection After Cervical Trauma and Spinal Manipulation.

Haldeman and Kohlbeck. Spine Vol 24 No 8, 1999 page 785-794.

This paper reviewed 367 case reports of Vertebrobasilar arterial dissection or occlusion. The following is a summary of his findings:
Vertebrobasilar artery dissections have been classified as:

- Spontaneous, 160 or 43% of this group.
- Post-manipulative, 115 or 31% of this group.
- Associated with Trivial Trauma, 58 or 15.6% of this group.
- Associated with Major Trauma, 37 or 10% of this group.

Trivial trauma includes almost any action that occurred just prior to the stroke occurring, such as swimming, walking, wall papering, sneezing, archery, yoga, turning head whilst driving, etc.

There is not a great deal of literature pertaining to the complications associated with manipulation of the lower back. One study quoted by S Haldeman in his text book Principles and Practice of Chiropractic, 2nd Edition, 1992, reviewed the results of over half a million lumbar spine manipulations performed by 406 medical practitioners. Increased frequency of low back pain was reported in 1 in 4000 manipulations, radicular pain reported 1 in 62,000, and radicular syndromes 1 in 188,000.

Terrett AG ; Kleynhans AM Complications from manipulation of the low back.
***Chiropractic J Aust* 1992 Dec;22(4):129-40**
"Practitioners of spinal manipulation should ensure that their therapy is as safe as possible for patients. Past attention to complications from manipulation centred mainly on the more serious vascular accidents of the cervical spine. The less life-threatening complications from manipulation of the lumbar spine have been largely overlooked. This descriptive analysis of such cases reported in the literature provides a basis for the development of diagnostic and therapeutic approaches designed to minimise complications."

This review of the literature between 1911 and 1991 for disc related complications from low back spinal manipulative therapy revealed 65 cases, 44% of which were associated with medical manipulation under anaesthetic. The balance was made up of a variety of practitioner groups including Osteopaths, Chiropractors, Naturopaths, Physiotherapists and a collection of unknowns (25%).

When one considers the statistical incidents of serious complications associated with spinal manipulation, an immediate comparison should be made between the incidence of lumbar spine disc lesions with or without Cauda Equina syndrome following lumbar spine manipulation and alleged cervical vessel dissection following cervical spine manipulation.

Most estimates of these complications are made on retrospective analyses of case literature, insurance statistics and extrapolations from various sample sizes. Accepting the limitations of all these methodologies, the likelihood of a vascular accident occurring following cervical spine manipulation would appear to be approximately 1 in one million neck manipulations, (with estimates ranging from one in 400,000 to less than 1 in over 5 million). The likelihood of a serious complication resulting from lumbar spine manipulation would appear to be

approximately 1 in 200,000 with some estimates ranging as low as 1 and 3.7 million lumbar spine manipulations.

Clearly the rates of complications in either the cervical or lumbar spine in association with spinal manipulation are not known but are merely best estimates.

These statistics must be viewed within the context of the frequency of the performance of lumbar spine manipulation as compared to cervical spine manipulation. Approximately 65% of all patients presenting to chiropractors do so for lumbar spine complaints and approximately 15% percent for cervical spine related disorders. This suggests that the application of lumbar spine manipulation is potentially four times higher than that of cervical spine manipulation.

Whilst death following cervical spine manipulation has been recorded the extreme rarity of this occurring renders any attempt to calculate a statistical instance of its likelihood as meaningless. (figures published by Alan Terrett in 2001 (44) (indicate 37 deaths internationally over a 65 year period between 1934 and 1999, which involved all professionals manipulating the cervical spine including chiropractors, medical practitioners, osteopaths, naturopaths and others.)

It must therefore be questioned as to whether or not lumbar spine manipulation presents more of a risk in relation to potential complications than cervical spine manipulation. The litigation experience in Australia confirms a bias in relation to claims related to alleged lumbar spine injury and/or aggravation of existing conditions. Therefore, there would be little objective reason to single out cervical spine manipulation for special restrictive regulation.

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29 October 2008

APPENDIX 11

TO CHIROPRACTORS' ASSOCIATION OF AUSTRALIA (NATIONAL) LIMITED'S SUBMISSION ON CONSULTATION PAPER ON PROPOSED REGISTRATION ARRANGEMENTS FOR THE NATIONAL REGISTRATION AND ACCREDITATION SCHEME

8.5 Restrictions on spinal manipulation

KEY POINTS

The CAA agrees that the legislation supporting the new national registration and accreditation scheme should be based on the safety of the public being paramount and that high quality care be encouraged.

The CAA believes that legislated restrictions on practice should only be included where the benefits to the community as a whole outweigh the costs, or potential costs to the consumer. These comments relate to potential risks to patients' health and wellbeing.

This document addresses the four points raised in the Consultation Paper "Proposed Registration Arrangements, Section 8.5 – namely:

9. Is there any evidence to suggest that the community is more vulnerable in those jurisdictions where no restrictions apply, compared with those where restrictions apply?
10. Should the restricted act if included be narrowly framed eg manipulation to the cervical spine?
11. The need, if any, for inclusion in the national legislation of a restricted act with respect to spinal manipulation? If so, how broad or narrow framed?
12. What definition should be adopted?

1. We wish to respond to Question 3. first, as the answers to the other questions flow from it.

1.1 We firmly believe that there is a need for the inclusion in the national legislation of a restricted act with respect to spinal manipulation and extremities. Our reasons are as follows:

1.1.1 **<u>There are known contraindication to and risks associated with spinal manipulation.</u>**
These are classified as nonindications, relative contraindications and absolute indications. A list can be found in the World Health Organisation's Guidelines on Basic Training and Safety in Chiropractic. (1)

The WHO Guidelines state:

'When employed skilfully and appropriately, chiropractic care is safe and effective for the prevention and management of a number of health problems. There are, however, known risks and contraindications to manual and other treatment protocols used in chiropractic practice.' (p19)

In the interests of patient safety a person considering performing spinal manipulation must be able to recognise and consider this wide range of conditions, some of which are rare. Such recognition requires appropriate and specialised training. Most health care practitioners do not receive such training.

The known risks, complications and adverse reactions to spinal manipulation are also listed in the Guidelines, as follows:

'5. Accidents and adverse reactions

5.1 Causes of complications and adverse reactions

See Henderson (42):

• lack of knowledge
• lack of skill
• lack of rational attitude and technique.

5.2 Examples of inappropriate practices

See Henderson (42):

• inadequate diagnostic habits
• inadequate diagnostic imaging evaluation
• delay in referral
• delay in re-evaluation
• lack of interprofessional cooperation
• failure to take into account patient tolerances
• poor technique selection or implementation
• excessive or unnecessary use of manipulation.

5.3 Serious adverse consequences

Manipulation is regarded as a relatively safe, effective and conservative means of providing pain relief and structural improvement of biomechanical problems of the spine. As with all therapeutic interventions, however, complications can arise. Serious neurological complications and vascular accidents have been reported, although both are rare (43).

5.3.1 Cervical region

• vertebrobasilar accidents (see part 2, section 3.3 above)
• Horner's syndrome (44)
• diaphragmatic paralysis (45)

• myelopathy (46)
• cervical disc lesions (25:66)
• pathological fractures (47, 48)

5.3.2 Thoracic region

• rib fracture and costochondral separation (49)

5.3.3 Lumbar region

• an increase in neurological symptoms that originally resulted from a disc injury (50)
• cauda equina syndrome (51, 52)
• lumbar disc herniation (52)
• rupture of abdominal aortic aneurysm (53)

5.4 Vascular accidents

Understandably, vascular accidents are responsible for the major criticism of spinal manipulative therapy. However, it has been pointed out that "critics of manipulative therapy emphasize the possibility of serious injury, especially at the brain stem, due to arterial trauma after cervical manipulation. It has required only the very rare reporting of these accidents to malign a therapeutic procedure that, in experienced hands, gives beneficial results with few adverse side effects" (43).

'In very rare instances, the manipulative adjustment to the cervical spine of a vulnerable patient becomes the final intrusive act which, almost by chance, results in a very serious consequence (54, 55, 56, 57).'

1.2 Given the seriousness of some of these potential injuries, and the listing of their causes as involving lack of knowledge, lack of skill and lack of rational attitude and technique, it seems obvious that in the interests of the safety of the public require inclusion in the national legislation of a restricted act with respect to spinal manipulation.

1.3 It should also be noted that, should such a serious injury occur, the patient involved may need extended and expensive rehabilitative care and other support. This could be very expensive and the major potential source of money to finance this support would be the involved practitioner's professional indemnity insurance. If spinal manipulation was not a restricted act under legislation, a lay person performing such manipulation may not have such insurance.

2. **We now respond to Question 2, 'Should the restricted act be included but narrowly framed eg manipulation to the cervical spine?**

2.1 Given that the WHO Guidelines, as quoted above, list possible serious adverse consequences from manipulation of not only the cervical spine, but also the thoracic and lumbar spines, it again seems clear that the restricted act should apply to these regions also.

2.2 Given that the sacrum and coccyx are anatomically part of the lumbar spine, and that manipulation of these structures is frequently achieved via contact on and leverage via the structures of the pelvis, it is clear that the restricted act should apply to the pelvic structures also.

2.3 Further, given that the forces used in spinal manipulation are similar to those used in extremity joints, it is clear that the restricted act should apply to extremity joints also. These would include the joints of the chest, shoulders, arms, hands, hips, knees, ankles and feet.

3. **We now respond to question 1. Is there any evidence to suggest that the community is more vulnerable in those jurisdictions where no restrictions apply, compared with those where restrictions apply?**

3.1 It is not possible to offer any such evidence with regard to Australia, as restrictions apply in this country. We do however note the injuries resulting from spinal manipulations carried out by non-chiropractors in jurisdictions in which no restrictions apply and reported in medical journals in other countries.

- **Mendez Gonzalez M, Garcia C, Suarez E, Fernandez Diaz D, Blazquez Menes B. Wallenberg's syndrome secondary to dissection of the vertebral artery caused by chiropractic manipulation. Rev Neurol. 2003:37(9): 837-9**.
  The patient suffered serious injury in Spain, a jurisdiction without restriction. The professional who performed the manipulation was not a chiropractor and the term chiropractic manipulation was used inappropriately.

- **Markovitch H. Chiropractic causes leak of CSF. BMJ 2003; 326:1353**
  Serious injury caused to patient in Germany. This was blamed on chiropractor, although the practitioner was not a chiropractor. Jurisdiction with no restriction.

- **Neetu R, Chandra MS, Rashmi M. Cervical Spinal epidural hematoma with acute Brown-Sequard presentation [Letter to editor]. Neurology India 2006;54;107-108**
  The authors attribute an injury to a patient to "chiropractic manipulation". It was subsequently confirmed that the "chiropractic manouvre" was not carried out by a qualified person. India is a jurisdiction with no restriction.

- **Wenban, Adrian B. Inappropriate use of the title chiropractor: Reasons for concern? [Letter to editor] Clinical Neurology and Neurosurgery 2008 (formally accepted for publication October 2008 – date published not available)**
  This letter was in response to Gouveia Lo, Castanho P, Ferreira JJ, Guedes MM, Falcao F, Melo TP. Chiropractic manipulation: Reasons for concern? Clin Neurol Neurosurg 2007[Epub ahead of print].

  In his letter to the editor Dr Wenban states that the principal author of the case series by Gouveia et al confirmed that "she and her co-authors had no knowledge of the qualifications of those referred to as chiropractors in their case series and that their basis for using the title chiropractor was the patient's report of the techniques used."

- Through researchers outside the chiropractic community using the term “chiropractic manipulation” in a generic sense, it has been revealed that there have been very serious injuries to patients in countries in which chiropractic is not restricted by law and so called “chiropractic manipulation” has not been carried out by a chiropractor.

- **Terrett AGJ. Misuse of the literature by medical authors in discussing spinal manipulative therapy injury. J Manip Physiol Ther 1995; 18(4):203-10.**
  Terrett concluded, “the words chiropractic and chiropractor have been incorrectly used in numerous publications dealing with SMT injury by medical authors, respected medical journals and medical organizations”. Most of the injuries were blamed on chiropractic (spinal manipulation) when the practitioners involved were not chiropractors.

- In 2004 a prominent chiropractor researcher, Dr Adrian Wenban, B.Sc., B.App.Sc., M.Med.Sc., reviewed a total of 24 European peer-reviewed biomedical papers relating to chiropractic and manipulation. The results of this review revealed that the terms chiropractor and chiropractic manipulation had been inappropriately used. In 20 cases involving injury attributed to chiropractors, the principal researcher was unable to confirm that the providers were qualified chiropractors but subsequently conceded that they were not.

3.2 We are aware of a correspondence course in spinal manipulation that has been offered to medical practitioners in Australia. This course was composed of 10 short lessons, some of which were one page long. This contrasts sharply with the New Zealand Commission of Inquiry finding that *“It is wrong that the present law, or any medical ethical rules, should have the effect that a patient can receive spinal manual therapy which is subsidized by a health benefit, only from those health professionals least well qualified to deliver it.”* (2)

3.3 The Commission further found :

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

The Commission found that “….*to acquire a degree of diagnostic and manual skill sufficient to match chiropractic standards, a medical graduate would require up to 12 months full-time training…”*

3.4 We are also aware of the Cameron case, in which a Sydney man died after receiving neck manipulations from Chatswood medical practitioner Robert Bosenquet, who was struck off. In handing down its judgement, the NSW Medical Disciplinary Tribunal expressed concern over the dangers of spinal manipulation being carried out by practitioners without recognized expertise. It stated, ‘ To the extent to which cervical manipulation is carried out by unregistered and unsupervised persons we can only say the prospect is frightening and the public should be warned.’ (3-4)

4. Serious risks to public safety occurring as a consequence to limited training in spinal manipulation are a concern to the chiropractic profession and certainly should be of major concern to Commonwealth, State and Territory Ministers.

5. It is unsatisfactory to allow inadequately trained registered and unregistered health professionals to perform spinal manipulation which may lead to serious/lethal consequences for patients.

6. **To minimize the risk of serious injury to patients the CAA strongly recommends that spinal manipulation be restricted to practitioners who have received adequate training in it. This would include 5 year trained chiropractors and osteopaths and physiotherapists and medical practitioners who have completed a minimum of one year post graduate diploma in manual therapy. Medical practitioners and physiotherapists who have not completed such training should not be permitted to perform spinal manipulations.**

7. It is recommended that readers of these key points also read the CAA's full submission "Restrictions on spinal manipulation" which is Appendix I to the Consultation Paper on Proposed Registration Arrangements for the National Registration Scheme.

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