



Backgrounder and Questions and Answers Re: International Chiropractic Education Collaboration's Position Statement on Clinical and Professional Chiropractic Education

The Canadian Memorial Chiropractic College has officially endorsed the International Chiropractic Education Collaboration's (ICEC) Position Statement on Clinical and Professional Chiropractic Education, joining many other institutions around the world with a similar approach to evidence-based, patient-centred contemporary chiropractic education. On October 19, 2018, the CMCC Board of Governors concluded an almost three-year study and deliberation of the Position Statement, considered the results of a faculty survey demonstrating overwhelming support of the Position Statement, and voted unanimously to become a signatory to the Statement. CMCC opted to wait until the March 2019 World Federation of Chiropractic (WFC)/European Chiropractors' Union (ECU) Berlin conference to formally sign the document in the presence of representatives from many of the other signatory institutions. A formal announcement was made on March 27, 2019.

Primary Reason for Signing:

The major impetus to sign this Position Statement is to make clear to prospective students what to expect from CMCC's educational program. As an educational institution, CMCC has an obligation to accurately portray and promote its educational programs to prospective students and interested future faculty members. Additionally, student protective standards for the Ontario Ministry of Training, Colleges and Universities and the Council on Chiropractic Education (Canada; CCEC) mandate that CMCC's student recruitment materials and practices properly depict the nature of education provided at CMCC. Although all accredited Doctor of Chiropractic programs provide a core educational experience that is in compliance with their respective country's CCE accreditation standards, within the chiropractic profession and its educational institutions there are considerable variations in practice philosophy and educational delivery methods. Whereas some programs identify themselves as providing a vitalistic or metaphysical philosophy deeply rooted in historical constructs from the early years of the emerging chiropractic profession, CMCC has for several decades promoted itself as being an evidence-based program, with a model of care focusing on chiropractic as a primary contact health care profession with expert knowledge in spinal and musculoskeletal health, emphasizing differential diagnosis, patient centred care and research.

Alignment of the Position Statement with CMCC's Strategic Plan

CMCC has been steadily moving forward on evidence-informed, scientific practices over the past several decades guided and supported by our Board of Governors, by our faculty and by our strategic planning process, as well as our national and international collaborative partners

in research and education. The CMCC Strategic Plan framework, developed in consultation with the Board of Governors, staff, faculty, administration, students and stakeholders, establishes a roadmap to guide CMCC through its next phase of growth and development for the period of 2017 to 2021. It identifies six strategic themes/areas of excellence which shape the future of the institution.

- I. Excellence in teaching and learning
- II. Excellence in support and service for students and employees
- III. Excellence in clinical care
- IV. Excellence in collaboration and communication
- V. Excellence in institutional leadership and management
- VI. Excellence in research, scholarship and innovation

By signing the International Chiropractic Education Collaboration Position Statement, CMCC speaks directly to the majority of the themes. The goal with such a bold move as this is to set the record straight on the direction and focus of the institution, continue to evolve the curriculum, to protect the reputation of CMCC, preserve its academic and scientific integrity and improve existing and foster new collaborative and integrative efforts to improve healthcare for the benefit of the patient.

Emphasis of the Position Statement:

The Position Statement reinforces the educational concepts of evidence-based and patient-centred care and stresses the avoidance of certain clinical practices that are not sufficiently supported by scientific rationale or best practices, or which subject the patient to unnecessary procedures. The primary purpose of the Position Statement is to clarify CMCC's educational practices and not address wider professional or regulatory matters. The Position Statement commits to a modern, continually evolving curriculum founded on the principles of evidence-based care and acknowledging the biopsychosocial model of care underpinned by peer-reviewed research. The Position Statement emphasizes the value of providing a DC degree program education that is rich in evidence-based practice concepts and principles, embraces innovative teaching methods, and promotes widely accepted preventative and public health measures (including vaccination).

Subluxation and Vitalism:

A portion of the Position Statement addresses the concept of vertebral subluxation within the curriculum, stating *"The teaching of vertebral subluxation complex as a vitalistic construct that claims that it is the cause of disease is unsupported by evidence. Its inclusion in a modern chiropractic curriculum in anything other than an historical context is therefore inappropriate and unnecessary. [Specifically, the form of vitalism as distinct from holism that proclaims 'If the specific vertebral subluxation is correctly adjusted, interference is released, pressure is eliminated, carrying capacity restored to normal, tissue cell is re-established, and life and health begin to regrow back to normal. All this is directed, controlled, and performed by INNATE INTELLIGENCE' (Ref: BJP Fame and Fortune Vol. XXXIII)]"*. CMCC acknowledges that the terms

referring to “subluxation” and “vitalism” can often be confusing and lack agreed-upon definitions within the chiropractic and other healthcare professions. The Position Statement attempts to place the two terms into a specific context.

It is important to distinguish between the concept of **subluxation** as being primarily a biomechanical dysfunction that may produce secondary local and remote signs and symptoms, and that of the vitalistic concept of subluxation originally described by D.D. Palmer as being a direct cause of neurologic dysfunction resulting in organ system dysfunction and which if not removed will result in a deterioration of health even up to clinical disease and death. A large number of chiropractors in Canada still use the term “subluxation” in the biomechanical sense (i.e., joint or segmental dysfunction), and there is nothing in the Position Statement that specifically discourages that use. It is only the more extreme, vitalistic, context of subluxation that the Position Statement takes exception to because there is presently a lack of supporting evidence to justify its inclusion in the curriculum.

The concept of **vitalism** (or “neo-vitalism”) also widely varies among users of the term, and this debate has gone on for centuries among philosophers and biologists. Few practitioners would deny the very simplest use of the term to describe the human body’s inherent ability to regulate and heal itself. It is when the use of the term expands to include metaphysical connotations of a life force connected to all organisms and which becomes blocked by vertebral subluxation, that most scientists, and the Position Statement, reject the concept.

The astute clinician is ready to dismiss dogmatic beliefs when confronted with new knowledge developed through the scientific method. This is why CMCC engrains in its students a passion for seeking and applying the best available evidence, an understanding of the hierarchies of evidence (including their limitations), the development of a habit of lifelong learning, and a willingness to challenge practices that are poorly supported by scientific evidence or sound biologic or physiologic principles. As an educational institution, CMCC is willing to challenge dogma and practices that are founded primarily on beliefs and which have become invalidated by emerging science.

Research at CMCC:

The CMCC Institutional Strategic Plan is replete with references to research, including performing research in the core elements of chiropractic. These core elements include basic science studies in neurophysiology, mechanotransduction, mechanisms of pain and inflammation, spinal manipulation, biomechanics, and clinical outcomes. One stream of research includes studies in the areas of cellular and molecular biology, immunology, biomechanics, ergonomics, mechanobiology, morphology, and neurophysiology. One of the three research departments is the Life Sciences department that is currently studying autonomic nervous system interactions, and which has just hired a post-doctoral fellow to add strength to this department. CMCC spends a larger proportion of its operating budget on research than any other chiropractic institution in North America, demonstrating its commitment to the continuous development of new knowledge.

MSK vs. NMSK:

In some professional settings, there has been debate over the use of the terms “musculoskeletal” (MSK) vs. “neuro-musculoskeletal” (NMSK) as to whether the former term is too limiting or de-emphasizes the importance of the nervous system. The Canadian Chiropractic Association primarily uses the MSK version in order to provide a consistent message to the public. CMCC similarly most often refers to MSK rather than NMSK, however that should not be interpreted as ignoring the importance of the nervous system. At CMCC, students learn to appreciate the body as a complex, dynamic interconnected web of structures and functions, with continuous interactions between the nervous system and the musculoskeletal system. From a scientific literature perspective, searching the healthcare literature databases using the NMSK term yields only about 1% of the number of publications yielded when using the MSK term, illustrating that the NMSK term is not as widely used.

It should be noted that CMCC does not focus solely on a biomechanical, mechanistic model of care. One need only look at CMCC’s research efforts described above, as well as our core education curriculum that includes extensive training and assessment in the neurosciences, including neuroanatomy, neurophysiology, differential diagnosis, and case management, to appreciate the importance placed on the nervous system by CMCC.

Distinguishing Between Chiropractic Educational Institutions:

It is widely understood within the chiropractic community that there is a considerable variation between the different chiropractic educational programs, however this variation may not be clear to the public and to prospective students. All DC degree programs provide for the development of competencies mandated in the accrediting standards and qualifying students to sit for licensing/registration examinations, but these programs have considerable latitude to implement curricula matching their unique missions and visions. In 2005 and 2013, reports issued by the Institute for Alternative Futures as part of studies commissioned by the National Chiropractic Mutual Insurance Company Foundation, classified the USA schools into those emphasizing a “focused scope” (i.e., emphasizing a subluxation-based practice), “middle scope” (a blend of therapeutic approaches), and “broad scope” (leaning towards primary care and management of MSK and non-MSK disorders with broad range of treatments that might include prescription drugs). Although CMCC was not included in those studies, it would likely fit into the middle scope category and considerably distanced from the focused scope schools embracing neo-vitalism. Most schools in North America promote their programs as being “evidence-based”, so it may be difficult for prospective students to select the program providing the best fit for the student. Through the Position Statement, CMCC is better able to clarify what potential students will and will not receive from their CMCC education. Endorsing the Position Statement will also help CMCC attract the most appropriate and best qualified faculty and researchers, as well as better clarify our educational and practice model to potential institutional partners, other healthcare professions, and the public.

ICEC Position Statement Timeline at CMCC:

In October 2018, the Board unanimously voted to have CMCC sign the Position Statement. This followed several years of discussions. At the June 2015 annual Board Retreat, the Position

Statement was introduced for preliminary discussion. Discussion continued over the next two years as support appeared to grow internationally for the Position Statement and CMCC was invited to become a signatory. At the June 2017 Board Retreat, the Board was supportive of becoming a signatory to the Position Statement but wanted greater faculty input. A faculty poll in 2018 indicated overwhelming support for the Position Statement, and at the October 2018 Board meeting the Board voted unanimously to sign the Position Statement. This was done formally on March 22, 2019 at the WFC/ECU Conference in Berlin in a gathering of representatives of many of the other signatory institutions.

Questions and Answers regarding International Education Position Statement

Q. *How many schools (programs) have signed the Position Statement*

A. As of March 2019, signatories of the agreement are: AECC (England), WIOC (Wales), IFEC-Paris and IFEC-Toulouse (France), SDU-Odense (Denmark), UZ-Zurich (Switzerland), UJ-Johannesburg (South Africa), Durbin University of Technology (South Africa), Macquarie University (Australia), Murdoch University (Australia), the International Medical University (Malaysia), the Madrid College of Chiropractic at the Real Centro Universitario Escorial-María Cristina (Spain), the University of Bridgeport School of Chiropractic (USA) and CMCC (Canada).

Q. *What is CMCC's position on vaccination?*

A. By signing the Position Statement, CMCC has publicly emphasized its support for contemporary public health practices that include immunization. The Statement specifically states that CMCC supports the World Health Organization's "*WHO's vision and mission in immunization and vaccines - 2015-2030*". Although some individual practitioners within the different health professions may take personal exception to this, it is important that as an educational institution we provide our students with an evidence-based curriculum that incorporates public health best practices, including the overall value of vaccination. The chiropractic profession has frequently drawn criticism from scientists and healthcare providers because of the public anti-vaccination stances voiced by some practitioners, and CMCC wants to make clear that it does not condone such positions.

Q. *Why is there inclusion of business practices ("practice styles") in an educational statement?*

A. It is only those business practices that have repeatedly been questioned by the chiropractic community or other healthcare professionals that are mentioned in the Position Statement. These include those practices that potentially expose patients to unnecessary x-rays, may jeopardize patient privacy, or which encourage patient dependency or unnecessary visits. CMCC's curriculum includes training in imaging guidelines, radiation safety, business, jurisprudence, ethics, entrepreneurship and professionalism. The practices mentioned in the Position Statement do not conform to what is taught at CMCC or what CMCC feels is in the best interests of patients.

Q. *Is CMCC fully supportive of the concept of interprofessional education, or would it be better to train chiropractic students solely within a chiropractic setting?*

A. CMCC is absolutely supportive of providing chiropractic students with opportunities to learn from and learn with other healthcare professionals. We strive to develop collaborative relationships with other care providers, researchers, and institutions. Examples of these include the UOIT-CMCC Centre for Disability Prevention and Rehabilitation, our inclusion within the Department of Family and Community Medicine and St. Michael's Academic Family Health Team, our clinic within St. John's Rehab, our involvement in the South Riverdale Community Health Centre and the Sherbourne Health Centre, and our agreements with several other academic institutions. The 2017-2021 CMCC Strategic Plan lists as one of its strategies, "Expand inter-professional and inter-organizational research collaborations." The trend in chiropractic practice is towards interdisciplinary settings, and a key part of preparing our students for this type of practice is to include multiple opportunities to learn in an interprofessional, multidisciplinary setting.

Q. *Will the Position Statement change in the future?*

- A.** The Position Statement was modified slightly in 2017 and will probably change in the future. Changes in the document are reached through a consensus process and thus agreed to by all signatories. As of March 2019, discussion amongst the members of the International Chiropractic Education Collaboration included possible minor wordsmithing in the paragraph on teaching about vertebral subluxation and adding a recommendation about teaching spinal radiography in accordance with established radiographic guidelines. If any changes are adopted by the Collaboration, then a new Position Statement will be released.