



## Diagnostic Imaging

**The Canadian National Alliance for Chiropractic (CNAC) position statement on the use of radiographic evaluation in chiropractic practice.**

### Introduction:

The practice of chiropractic has strong supporters as well as strong opposers. Research on the benefits and risks of chiropractic, and the modalities used within its practice such as X-rays, is just as varied along this scale. A citation can be found to support any argument, for or against chiropractic care, tools, techniques and outcomes.

A rising topic of polarity in the chiropractic realm is the use of radiographic evaluation in chiropractic practice.

Position statements are offered by the CNAC to contribute to a mutual understanding within Canada on the organization's stance on a particular topic. This paper provides a further look into the research, support and opposition to the use of X-rays in chiropractic; and jurisdictions to watch for potential precedence. Concepts from other countries, as well as the individual provinces in Canada are reviewed and taken into consideration when developing a position that represent the views of the members of the CNAC.

### Position statement:

**The CNAC supports the use of diagnostic imaging by chiropractors and acknowledges radiographic analysis and evaluation as an important diagnostic tool. The CNAC recognizes the chiropractor's formal education, including training in radiology and clinical expertise in making an informed recommendation for the inclusion and frequency of radiographic analysis or other diagnostic imaging, along with the patient's history, physical examination, and available research, to determine a care plan that is in the best interest of the patient's individual needs and clinical presentation.**

### Key Points:

The CNAC is strong in its commitment to promoting the full scope of chiropractic practice, recognizing the uniqueness and diversity of the chiropractic profession.

Diagnostic imaging, including X-ray analysis, is a valid and important component of the chiropractor's scope of practice. Proper evaluation of all relevant evidence should be considered before major scope of practice changes are made.

Doctors of chiropractic are spine and musculoskeletal (MSK) system experts specifically trained to diagnose the underlying cause, treat and recommend options to relieve pain, restore mobility and prevent reoccurrence so people can lead healthy active lives. Diagnostic imaging is a key component of this process.

In addition to physical assessment and history, X-rays are the only way to truly see anomalies and hindrances in the structures comprising the MSK system including bones, muscles, cartilage, tendons, joints, connective tissues and the nervous system.

Patients have the right to informed choice that considers scientific evidence, doctor experience, and patient preference.

Using radiographic imaging in chiropractic practice to identify spinal dysfunction and subluxation is taught in all accredited chiropractic colleges in Canada and is a fundamental aspect of a chiropractor's practice.

### **Analysis:**

The Canadian chiropractic association recognizes that X-rays can play an important role in diagnosis and are taken only when a need has been determined after taking a patient's case history and conducting a physical examination. Governments in every province have recognized the training and competence of chiropractors to take and interpret X-rays and have granted them this right. (1)

The provision of health care is a provincial matter and each local association works with their provincial government and relevant legislation to serve the best interest of the public through regulation and advancements in care and adopt evidence-informed clinical decision making and advancing the profession by integrating the practitioner's professional expertise with the best available scientific evidence.

All educational programs in Canada are accredited by the Council on Chiropractic Education Canada (CCEC) of the Federation of Canadian Chiropractic (FCC). The FCC has established the standards for Doctor of Chiropractic Programs (DCP) in Canada. These standards set out the minimum requirements for entry into an accredited educational program. The standards for DCPs are established by the CCEC. These standards lay out the educational requirements and accredited programs that follow and meet these standards. In the two programs currently accredited by the CCEC, students receive training in radiology. This training covers a range of topics from radiation biophysics and protection to clinical X-ray interpretation and diagnosis. (2)

As representatives of the public, Health Action Network Society (HANS) and Canadians for Chiropractic (CFC) are concerned that amendments to current X-ray guidelines are likely to have unintended consequences to the health of patients who depend on the full scope of chiropractic practice. (3)

In the abstract, X-Ray Imaging is Essential for Contemporary Chiropractic and Manual Therapy Spinal Rehabilitation: Radiography Increases Benefits and Reduces Risks, authors note that radiation protection advice to minimize radiation exposures has spread to the chiropractic profession. Acceptance of recommendations to eliminate, delay, or otherwise constrain radiography would be very detrimental to the quality of the treatment to patients who suffer from spine-related ailments. Radiographs are essential to accurately diagnose the causes of pain, muscle weakness, and impaired movement and to monitor the progression of the changes resulting from the manual therapy. It is very important to examine the basis for the radiation protection recommendation to restrict radiography. (4)

In the *2020 Practice Analysis of Chiropractic* (5) by the National Board of Chiropractic Examiners, radiology use and reports were reported for United States chiropractors and noted:

- 53% of chiropractors had the ability to offer radiography in their offices

- 56.2% of patients were radiographed in practice
- 15.6% of patients were referred for outside reports
- 21.9% of patients were referred for outside radiography
- Obtaining and reading radiographs the chiropractors did not take themselves occurred:
  - Once per week - 29%
  - Once per month - 28.5
  - Between one and six times per year - 20.6%
- 33% reported reviewing radiographic images to determine the possible presence of a spinal listing and/or subluxation. Of those reporting reviewing radiographic images to identify or rule out fracture, dislocation and other pathology:
  - About once per month - 25.8%
  - About once per week - 24.6%
  - Between one and six times per year - 18.3%
  - Several times per day - 20.2%
  - About once per day- 13.4%
  - About once per week - 13.1%
  - About once per month - 11.1%
- For those who obtained repeat/follow-up radiographic examinations to monitor a patient's progress or response to care:
  - One to six times per year - 35.7%
  - About once per month - 12%

Potential changing scope of practice in diagnostics is a key area to monitor to understand how changes may occur in Canada. While the majority of associations, colleges and regulatory bodies worldwide support the use of X-rays by chiropractors, the province of British Columbia is facing resistance, including legal action on a planned change to the chiropractor's practice in the province.

### ***British Columbia – a case to watch***

On February 4, 2021, the Board of the College of Chiropractors of British Columbia (CCBC) approved amendments to the Professional Conduct Handbook regarding diagnostic imaging. These amendments state that *“Routine or repeat X-rays used as a regular protocol during the evaluation and diagnosis of patients are not clinically justified.”* (6,7)

The College also recognizes the importance of X-ray as a tool of which chiropractors are competent to apply and interpret, and supports the use of radiography by chiropractors where appropriate. (8)

This BC vote to ban the use of radiographs for the evaluation and assessment of vertebral subluxation was not unanimous, and as an event split between voting chiropractic members. (Four DCs voted for the change and four voted against it. Three other non-DC voting members, supported the ban).

Following the vote, a petition was circulated with the intent to “send a clear and strong message to the CCBC that you, a member of the public who may or may not be a patient of chiropractic, have the right to your practitioner of choice's full scope of practice and the safe and standardized tools that support it.” (9)

The petition, that closed September 2020, was based on concerns that amendments to X-ray guidelines are likely to lead to unintended consequences to the health of patients who depend on the full scopes of chiropractic practice.

The CNAC financially supported the legal action by chiropractors in British Columbia against the changes to X-ray utilization and will continue to strongly advocate for the full scope of chiropractic in Canada.

### Conclusion:

Evidence-based research in the field of chiropractic tends to be limited. Research in areas of chiropractic tends to yield many papers on both sides of the equation on many issues, including the use of diagnostic imaging. A commonality between most published articles, regardless of the topic, is the conclusion that more research on the topic is needed. It is no different in the area of the use of radiographic evaluation in chiropractic practice.

Regulatory authorities are responsible for granting a licence to practice chiropractic in their jurisdiction, establishing standards of practice, and protecting the public interest. The regulatory process includes continuing education requirements, investigating complaints, and disciplining practitioners who fail to meet provincial licensing standards.

Chiropractic is a regulated health profession, governed in the same manner as other regulated professions such as dentistry or nursing. In Canada, each province has a regulatory and licensing authority established in provincial legislation. The boards of the regulatory authorities include members of the public appointed by the province.

The CNAC will work with provincial and national regulators to ensure the viewpoints of its members are shared on this and other elements of chiropractic practice.

### References:

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