



# FAQ: chiropractic diagnostic imaging

## Are chiropractors able to take and interpret their own radiographs (X-Rays)?

Radiographic imaging (X-ray) is part of the suite of diagnostic procedures used by chiropractors, either in a chiropractic office or through referral.

Chiropractors receive training in radiology and radiography as part of their chiropractic education.

Chiropractors undertaking their own radiography must ensure that they meet their local state and territory requirements by:

- holding the required radiography licence(s), and
- ensuring that their equipment is approved and registered by the appropriate authorities.

## What are the purposes for which chiropractors can obtain radiographs?

Chiropractors can use radiography for several purposes following the identification of various history and examination findings. These include:

- excluding underlying pathological cause (red flags)
- confirmation of diagnosis/pathology
- determining appropriateness of care, and
- identifying contraindications or factors that would affect or modify the type of treatment/care proposed.

Radiographs should only be obtained if there is sufficient clinical justification in an evidence based context. Practitioners must weigh the risk against the benefit in deciding to undertake any radiographic investigation.

## What is evidence based context?

An 'evidence based context' is the integration of the best available evidence with professional expertise to make decisions, in conjunction with patient preference, values and circumstances.

This means that a chiropractor's decision to undertake radiography should be supported by:

- up to date evidence
- the practitioner experience, and
- the consideration of the values and circumstances of the patient.

## What are the requirements for chiropractors in relation to radiography?

Chiropractors must comply with the provisions of the *Code of practice for radiation protection and the application of ionizing radiation by chiropractors* (2009) (ARPANSA Code) (or any subsequent version as published by the Australian Radiation Protection and Nuclear Safety Agency), and applicable commonwealth, state or territory laws in relation to best practice (see [www.arpansa.gov.au](http://www.arpansa.gov.au) under *Publications*).

This is in addition to their obligations under the Health Practitioner Regulation National Law, as in force in each state and territory (National Law).

The ARPANSA Code relates to the end exposure to radiation and therefore applies to both the decision to obtain radiographic imaging and the taking of radiographic images. The aim of the guidelines is to ensure that the radiation dose received by a chiropractic patient is as low as possible.

This means that radiographic imaging must only be undertaken when the benefits outweigh the harms, and that it is administered at the lowest dose possible.

Therefore, before a procedure involving exposure of an individual to ionising radiation is approved or commenced, the indications for it must be clinically justified in an evidence based context by the chiropractor.

## What is the clinical justification for the use of radiography in clinical practice?

The process for determining whether there is enough clinical reason to undertake a radiographic study on a patient can be simplified into asking the following five questions.

1. Is the potential benefit of the x-ray outweighed by the potential harm?
2. Is there appropriate evidence to support taking an x-ray in this case?
3. Is a decision to take an x-ray in this case supported by my clinical experience?
4. Will an x-ray significantly impact my management of this case?
5. Once informed of the answers to questions 1 to 4 above, does the patient still consent to the investigation?

## What are some useful resources in determining the evidence for undertaking radiographic investigations in chiropractic practice?

A number of good quality studies and papers have been undertaken on the clinical utility of radiography in chiropractic practice. Some useful references include:

- The American College of *Radiologists' appropriateness criteria*<sup>1</sup>
- *Diagnostic imaging practice guidelines for musculoskeletal complaints in adults – An evidence based approach* – Andre Bussieres 2008<sup>2</sup>, and
- *Diagnostic imaging pathways – Cervical spine injury* – WA Department of Health<sup>3</sup>.

<sup>1</sup> [www.acr.org/Quality-Safety/Appropriateness-Criteria](http://www.acr.org/Quality-Safety/Appropriateness-Criteria)

<sup>2</sup> Bussieres AE, Taylor JA, Peterson C. Diagnostic imaging practice guidelines for musculoskeletal complaints in adults – an evidence based approach – part 3: spinal disorders. JMPT 2008 Jan; 31(1):33-38 & <http://w3.palmer.edu/rtatum/rad2/Radiology%20Guidelines%203.pdf>

<sup>3</sup> [www.imagingpathways.health.wa.gov.au/includes/dipmenu/cspine/chart.html](http://www.imagingpathways.health.wa.gov.au/includes/dipmenu/cspine/chart.html)