

Applying the Code of conduct

29 June 2022

Advice for chiropractors on the use of radiography (x-rays)

Overview

The aim of this fact sheet is to help chiropractors to carry out chiropractic diagnostic imaging procedures in a safe and responsible manner, within the context of the Health Practitioner Regulation National Law¹ and the Code of conduct.

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.

If you carry out your own radiography you must ensure that you meet your local state and territory requirements by:

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

Good practice includes:

- recognising and working within the limits of your skills and competence when taking and interpreting x-rays
- noting any findings of clinical significance after each x-ray imaging study in the patient's health record,
- ensuring that x-ray images are of diagnostic quality.

For what purposes can chiropractors carry out a radiograph?

You can use radiography to:

- exclude underlying pathological cause (red flags)
- confirm diagnosis/pathology
- · determine appropriateness of care, and
- identify contraindications or factors that would affect or modify the type of treatment/care proposed.

Radiographs should only be used if there is sufficient clinical justification in an <u>evidence-based</u> context. You must weigh the risk against the benefit in deciding to carry out any radiographic investigation.

What is 'evidence-based context' for chiropractic diagnostic imaging?

'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. Good practice includes clinical decision-making that is informed by evidence-based practice so that patients are empowered to make well-informed decisions.

This means that your decision to carry out radiography should be supported by:

up-to-date evidence

¹ As in force in each state and territory

- your professional experience, and
- the consideration of the values and circumstances of the patient.

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

Chiropractors must comply with the provisions of the *Code of Practice for Radiation Protection in the* Application of Ionizing Radiation by Chiropractors (2009) or any subsequent version as published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA Code), and applicable Commonwealth, state or territory laws in relation to best practice (see www.arpansa.gov.au under Regulatory publications).

It is recommended that you note the following points from the ARPANSA Code:

- a) The key purposes of the ARPANSA Code are to:
 - establish the regulatory requirements for the application of ionising radiation, in the context of good practice, to ensure that risks associated with radiation exposure to:
 - the patient are optimised, and
 - staff and other persons are as low as reasonably achievable.
 - establish radiation protection principles (including the necessity to maintain equipment in accordance with applicable state and territory legislation)
 - set the requirements for a comprehensive radiation management plan
 - establish the roles and responsibilities of persons involved in the process, including the chiropractor as the person responsible for the justification and optimisation of the procedure, and
 - establish a process for the management and reporting of radiation incidents.
- b) The key radiation protection principles of the ARPANSA Code are:
 - Justification No practice involving exposure to radiation should be adopted unless it produces sufficient benefit to the exposed individuals or to society to offset the radiation detriment it causes

 the procedure must be justified for that individual patient
 - Optimisation Radiation doses must be kept 'as low as reasonably achievable' (ALARA), and
 - Dose limits Applications of ionising radiation must be managed in a way so as not to exceed dose limits specified in RPS1.

Key points on radiology and radiography procedures in chiropractic practice

In addition to the ARPANSA Code, we would like to clarify and reaffirm the following points:

- a) before you approve or begin a procedure involving exposure of a person to ionising radiation, the indications must be clinically justified in an evidence-based context, and
- b) exposure to radiation should not be adopted unless it produces sufficient benefit to the exposed individuals or to society to offset the radiation detriment it may cause.

You will make the ultimate judgement on the application of any radiation-based procedure in light of all the circumstances presented an <u>evidence-based</u> context.

You must comply with the **Code of conduct**, in particular:

• Principle 1 – Put patients first – Safe, effective and collaborative practice

Chiropractors should practice safely, effectively and in partnership with patients and colleagues, using patient-centred approaches, and informed by the best available evidence to achieve the best possible patient outcomes.

• Principle 6 - Working within the healthcare system

Chiropractors have a responsibility to contribute to the effectiveness and efficiency of the healthcare system and use resources wisely.

• Principle 7 – Minimising risk to patients

Good practice involves putting patient safety, which includes cultural safety, first. Practitioners should minimise risk by maintaining their professional capability through ongoing professional development and self-reflection and understanding and applying the principles of clinical governance, risk minimisation and management in practice.

Five questions a chiropractor should consider before using radiography in clinical practice

To help determine if there is enough clinical reason to carry out a radiographic study on a patient, consider:

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

Further information

The ARPANSA webpage provides links to relevant <u>Commonwealth</u>, <u>State and Territory regulators</u>, which are good resources for information on radiography licences and other regulatory requirements.

Where advice or assistance is required from regulatory authorities, the ARPANSA Code provides contact details of relevant officers in the Commonwealth, State and Territory authorities (see www.arpansa.gov.au for up-to-date list).

The Australian Commission on Safety and Quality in Health Care has further information on the operation of the Diagnostic Imaging Accreditation Scheme for diagnostic imaging practices (see https://www.safetyandquality.gov.au/standards/diagnostic-imaging).

Case study

Case summary

Jamie is a chiropractor practising in a multi-disciplinary clinic, along with other allied health practitioners.

A new patient consulted with Jamie. The patient agreed to a clinical assessment and Jamie provided the patient with an explanation of their examination findings and developed a treatment plan in partnership with the patient.

The patient then asked Jamie to refer them for an x-ray of their lumbar spine to find out what is actually causing their low back pain. Jamie knows that referring patients who have low back pain with no red flags for radiography is not best practice. However, the patient continued to insist on having an x-ray.

Applying in practice

Jamie recalled that the Chiropractic Board has a fact sheet for radiography, which prompts chiropractors to consider five questions before using radiography in clinical practice. Jamie knows that in accordance with the Code of conduct, it is their responsibility to minimise risk to patients (Principle 7) and that working within the healthcare system requires effective and efficient use of healthcare resources (Principles 6).

Jamie explained to the patient that x-rays for low back pain are not recommended as they provide little diagnostic benefit. Jamie took time to discuss their clinical reasoning so that the patient can make an informed decision based on the best available evidence.

Jamie told the patient that they are committed to working in partnership with them to achieve the best possible outcome, which included supporting their right to seek a second opinion.

Outcome

Although the patient had a strong initial view on being referred for x-ray imaging, the detailed information provided by Jamie supported the patient to understand the benefits and harms involved with the procedure.

The patient felt reassured that Jamie had offered to refer them to another allied health practitioner in the practice for a second opinion if they wanted.

The patient and Jamie agreed to a brief trial of treatment and then to reassess the need for an x-ray depending on the clinical outcome.