

# **GCC Registrant [DRAFT] Guidance**

## **Diagnostic Imaging**

**Review on the use of diagnostic imaging in chiropractic**

October 2021

## Introduction

1. The following GCC guidance is designed to assist chiropractors in their decision-making around the use of diagnostic imaging. It has been developed to help protect patients and the public as well as promoting the best use of imaging for the effective assessment and care of patients. The guidance is based on the principles of evidence-based practice<sup>1</sup> and informed consent.
2. Chiropractors, osteopaths, physiotherapists, and medical practitioners all utilise diagnostic imaging in the case of patients. iRefer: making the best use of clinical radiology, published by the Royal College of Radiologists, is a synthesis of evidence-based guidelines from UK and international sources and provides recommendations for the best use of clinical imaging services.
3. In the Background to this document, it is noted that some chiropractic technique systems and organisations recommend and promote protocols for the use of plain film radiography. These advocate more routine x-ray examination and repeat investigations at prescribed intervals. This conflicts with statutory UK regulations on the use of ionising radiation. Where they have not been subject to a formal guideline development process or recommended by UK specialist agencies, it is unlikely that they can be justified and therefore it is not recommended that such diagnostic imaging protocols are used by chiropractors. Doing so runs a risk of contravening the GCC Code and extant guidance, and risks breaching the Ionising Radiation (Medical Exposure) Regulations 2017 (IR(ME)R).

## Prior to referring for images

4. Chiropractors have a duty to act in the best interests of their patients. Prior to considering investigations such as undertaking X-ray, they must obtain a case history and undertake an appropriate physical examination. Only after this assessment can a chiropractor determine whether diagnostic imaging will either benefit the clinical decision-making process or change the management of a condition as a result, and lead to the best patient care.
5. If it is decided that diagnostic imaging is indicated, a chiropractor must decide which form of imaging is most appropriate. It is expected that, following the assessment, a chiropractor will formulate a list of differential diagnoses. The purpose of diagnostic imaging is to assist in determining which of these differentials is the correct diagnosis and to exclude contraindications or factors that may modify the proposed management of the patient.

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<sup>1</sup> Evidence-based practice consists of basing clinical decisions, including those about diagnostic imaging, on the judicious use of best available evidence (systematic reviews, randomised controlled trials, etc.), practitioner judgement and experience

6. Questions that a chiropractor may ask in determining the clinical indications for diagnostic imaging include the following:
  - Has the assessment elicited any red flags (signs of symptoms suggesting the potential for serious underlying pathology, such as malignancy or inflammatory arthropathies)?
  - Has the patient already had imaging (or other diagnostic tests) that could provide the necessary diagnostic information without the need for new imaging?
  - Is imaging the best form of investigation for distinguishing between potential differential diagnoses, or may other forms be more appropriate?
  - Once the need for diagnostic imaging has been identified, what type of imaging will best provide the required diagnostic information in the clinical circumstances?
  - Is information obtained through imaging likely to impact the management of the patient in a significant way (such as determining the most appropriate care options, including onward referral to another health care professional)?
  - Has the patient been fully informed about the need for diagnostic imaging, any risks of exposure to ionising radiation and any available, alternative forms of imaging that may involve less or no exposure to ionising radiation, to enable them to provide informed consent?
7. Once a chiropractor has determined that sufficient net benefit exists (the diagnostic or therapeutic value of the imaging, weighed against the risk of exposure to ionising radiation), then the ALARA (As Low As Reasonably Achievable) principles on dosage of ionising radiation must be applied. This will include determining which projections may best demonstrate the relevant anatomical structures and the minimum number of exposures to visualise them adequately.

## After receiving images

### Evaluation

8. It is a statutory requirement that all X-ray exposures are evaluated. Depending in which facility the x-ray examination is undertaken, they may be evaluated by a chiropractor or by a medical professional with expertise in interpreting X-rays and writing X-ray reports.

### Communication

9. Chiropractors have a duty to report to the patient the outcomes of their clinical assessments, including the outcomes of X-ray investigations, in language that patients can understand. This allows a plan of care to be developed and applied in full agreement with the patient and is an important component of obtaining informed consent. Chiropractors may also use external sources of information,

such as NHS web pages or from organisations established to inform and support patients with particular conditions.

10. When chiropractors are reporting the outcomes of X-ray or other examinations to patients, it is important they recognise the impact their words may have on patients. Current best practice evidence (1) indicates that emphasis should not be placed on age-related degenerative changes or mild postural deviations from normal as their clinical relevance has not been established in the scientific literature. Exaggeration of the clinical relevance of such findings as well as routine use of imaging has been shown in a growing body of evidence (2) (3) (4) (5) to negatively impact clinical outcomes.
11. It is important for chiropractors to manage patient expectations in relation to diagnostic imaging. Diagnostic imaging may not definitively confirm the source of a patient's presenting symptoms. The presence of common X-ray findings relative to a patient's age must not be used to over-emphasise the gravity of a patient's health status, nor be used to justify protracted programmes of care.
12. Where possible, chiropractors should reassure patients that findings are normal or within normal limits. At this stage it can be helpful to explain the diagnostic pathway and how imaging has helped to strengthen or rule out a clinical suspicion.

### **Further imaging**

13. Repeat imaging during or after a course of chiropractic care is not appropriate. Where follow-up imaging is undertaken, it is generally limited to serious conditions like fractures, malignancy, and scoliosis when there is potential for progression over time. It is considered that the justification for follow-up x-rays in a chiropractic setting would be rare. Repeat X-ray examination to measure postural change, functional joint dysfunction, or degenerative change (osteoarthritis) are not justified in the absence of significant developments in the patient's clinical presentation.

## **Documentation**

14. Chiropractors must document their interaction fully with each patient and this includes documenting a full record of the clinical history, justification criteria for diagnostic imaging, the consent of the patient and a record of the evaluation of images obtained.
15. Good records are key to guiding decisions about clinical management, both by chiropractors and any other health professional with whom they work or to whom they might refer. They also provide useful information if a patient should question the quality of their care, either directly or through a complaint to the GCC.

16. Chiropractors should regularly review the effectiveness of their approaches to assessment and care to ensure that they continue to provide evidence-based, effective patient management. This applies to procedures relating to their use of diagnostic imaging. Clinical audit is a useful tool that improves the quality and safety of patient care and can also be used as part of a chiropractor's continuing professional development (CPD).

## References

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