

GCC Registrant Guidance

Diagnostic Imaging

March 2022

Introduction

1. This guidance from the General Chiropractic Council (GCC) is designed to assist chiropractors with their decision-making on the use of diagnostic imaging. It should be read together with the [GCC Code](#), which sets out the standards of conduct, performance and ethics for chiropractors. The guidance should also be read in conjunction with regulations relating to ionising radiation.
2. This guidance has been developed to help protect patients and the public, as well as promote the best use of imaging for the effective assessment and care of patients. The guidance is based on the principles of evidence-based practice and informed consent.
3. Evidence-based practice means basing clinical decisions, including those about diagnostic imaging, on the best available evidence, eg. systematic reviews and randomised controlled trials, practitioner judgement and experience, and the preferences and circumstances of individual patients.

Background

4. This guidance was produced following a review of imaging in chiropractic. Background documents informing the review and this guidance are available from the GCC [Registrant Resource Centre](#) (Guidance and toolkits - Diagnostic Imaging tab).
5. Deciding which diagnostic tests may determine certain pathological conditions, and subsequent treatment options, can be a matter of analysing sometimes incomplete information, and weighing the probabilities of how good a particular test is at detecting a condition.
6. To understand those probabilities, a chiropractor must remain fully competent at diagnosis, keeping up to date with all developments.
7. Ultimately, clinical judgement plays the greatest part in the use of diagnostic testing, relying on sound information and knowledge, alongside the application of accepted protocols and standards.
8. Chiropractors, osteopaths, physiotherapists and medical practitioners all utilise diagnostic imaging in the care 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 on the best use of clinical imaging services. Referral guidelines, such as iRefer, should inform decision-making by the chiropractor. NICE guidance relating to musculoskeletal conditions is also an important reference point.

9. Chiropractors, like other registered healthcare professionals, must comply with the Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) 2017 [in Northern Ireland, 2018], and the Ionising Radiation Regulations 2017 – as employer, referrer, practitioner or operator. This guidance must be read alongside IR(ME)R and information relating to those requirements (See [GCC Registrant Resource Centre](#), Guidance and toolkits - Diagnostic Imaging tab).
10. Chiropractors must consider all cultural, equality and diversity matters related to diagnostic imaging. The specific objectives for imaging and the characteristics of the individual must be considered prior to exposure. This includes, but is not limited to, considering the needs and information requirements for trans people, pregnant women and a patient's religious or personal beliefs, eg. undressing.

Prior to referring a patient for images

11. Chiropractors have a duty to protect the welfare and best interests of their patients (in partnership with the patient), often exercising their clinical judgement in challenging circumstances.
12. Prior to the use of diagnostic imaging, the chiropractor must obtain a patient's detailed case history, and undertake a safe and appropriate physical examination. Only after this assessment can the chiropractor determine whether diagnostic imaging will either benefit the clinical decision-making process or change the management of a condition. Diagnostic imaging may be the best and necessary course of action.
13. If diagnostic imaging is required, the chiropractor must decide which form of imaging (including ultrasound, X-ray, MRI, CT) is the most appropriate. It is expected that following the assessment, the chiropractor will formulate a list of differential diagnoses. The purpose of diagnostic imaging is to assist the chiropractor in determining which of these differentials is the correct diagnosis, excluding contraindications or factors that may modify the proposed management of the patient.
14. Questions that a chiropractor should ask, when determining the clinical indications for diagnostic imaging, include:
 - Has the assessment elicited any “red flags,” ie. signs or symptoms suggesting the potential for serious underlying pathology, such as malignancy, fracture or inflammatory arthropathies, which require immediate action, including medical referral?
 - Has the patient already received imaging or other diagnostic tests that may provide the necessary diagnostic information without the need for new imaging?

- Is diagnostic imaging the most appropriate form of investigation for distinguishing between potential differential diagnoses, or may other forms of investigation be appropriate?
 - Having weighed the risks and benefits, are there other clinical indications in addition to “red flags” that the chiropractor must consider, using the best available evidence?
 - Once the need for diagnostic imaging has been identified, which type of imaging will provide the required diagnostic information for the clinical circumstances?
 - Is the information obtained through diagnostic imaging likely to impact the management of the patient in any significant way, ie. determining the most appropriate care options, including onward referral to another healthcare professional?
 - Has the patient been fully informed about why diagnostic imaging is required, its risks, eg. exposure to ionising radiation, and if any alternative forms of imaging are available; to enable them to provide informed consent?
15. Determining the requirements for diagnostic imaging is a clinical judgement that the chiropractor must be able to justify, with the involvement of a fully informed patient providing consent. Chiropractors may refer a patient to their General Practitioner, a third-party imaging service, or have an in-house facility. In all circumstances, chiropractors must have in place and available their referral guidelines as the evidence base for making a referral.
16. The referrer has a duty to supply sufficient medical data to enable the diagnostic imaging practitioner to decide whether there is a sufficient net benefit for the exposure. If the referral is to a radiology service, the justification and authorisation process will be undertaken by either a radiologist or a radiographer.
17. Sufficient net benefit for X-ray imaging must be evident, ie. the diagnostic or therapeutic value of the imaging weighed against the risk of exposure to ionising radiation, with principles on the dosage of ionising radiation applied (as low as reasonably practicable). This will include determining which projections may best demonstrate the relevant anatomical structures, and the minimum number of exposures to adequately visualise them. Composite imaging may be appropriate, however may affect quality and adequate visualisation. This is a matter for clinical judgement.

After receiving images

Evaluation

18. It is a statutory requirement for all X-ray exposures to be evaluated. They may be evaluated by a chiropractor or a medical professional with expertise in interpreting X-rays and writing X-ray reports.

Communication

19. Chiropractors have a duty to report to their patients, in a language that they will understand, the outcomes of their clinical assessments, including those from X-ray investigations. This will enable a plan of care to be developed and applied with the full agreement from the patient; an important component of obtaining informed consent. Chiropractors may also use external sources of information, such as the NHS or organisations established to inform and support patients with particular conditions.
20. When chiropractors are reporting the outcomes of X-ray and/or other examinations, it is important they recognise the impact that their words may have on the patient. Current best-practice evidence suggests 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 scientific literature. Indeed, evidence suggests¹ that exaggeration of the clinical relevance of such findings and the routine use of diagnostic imaging, can negatively impact clinical outcomes.^{2,3,4,5}
21. It is important that chiropractors manage patient expectations in relation to diagnostic imaging. Diagnostic imaging may not definitively confirm the source of a patient's presenting symptoms. For example, 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.
22. Where it is clinically appropriate, chiropractors should reassure patients that findings are normal or within normal limits. It can be helpful to explain the diagnostic pathway and how imaging has helped to confirm or rule out a clinical suspicion. Where the results from imaging, discussion of the results, or the management of the patient lies outside their expertise, chiropractors must make a referral to an appropriate healthcare professional.

Further imaging

23. The background to this guidance notes some chiropractic technique systems that recommend and promote protocols for the use of plain film radiography, and advocate more routine and repeat X-ray examinations at prescribed intervals.

24. Routine, that is pre-determined or scheduled, repeat imaging during or after a course of the care for musculoskeletal disorders is likely to be considered rarely appropriate, may breach statutory UK regulations on the use of ionising radiation and contravene the [GCC Code](#).
25. Where follow-up imaging is undertaken, it is generally limited to serious conditions such as fractures, malignancy, scoliosis and some arthropathies where there is potential for progression over time. Repeat X-ray examinations must be justified on clear clinical indications accepted across the range of musculoskeletal health professions.

Documentation

26. Chiropractors must fully record all interactions with their patient, including documenting a full record of the clinical history, justification criteria for diagnostic imaging, consent of the patient, and a record of the evaluation from the images obtained.
27. Good records are essential in guiding decisions about clinical management, by both chiropractors and other healthcare professionals with whom they work or 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.
28. Chiropractors should regularly review the effectiveness of their approaches to assessment and care, to ensure that they continue to provide evidence-based, effective management of patients. This applies to procedures relating to their use of diagnostic imaging. A clinical audit is a useful tool, which improves the quality and safety of patient care, and can be part of a chiropractor's continuing professional development.

The GCC Code

29. The following parts of the GCC Code are relevant to the consideration of diagnostic imaging.
 - A1** ...You must not put any pressure on a patient to accept your advice.
 - A5** You must prioritise patients' health and welfare at all times when carrying out assessments, making referrals or providing or arranging care.
 - B6** You must avoid placing any undue financial pressure on a patient to commit to any long-term treatment that is not justified.
 - C8** You must ensure that investigations, if undertaken, are in the patient's best interest and minimise risk to the patient. All investigations must be consented to by the patient. You must record the rationale for, and the outcomes of, all investigations. You must adhere to all regulatory standards applicable to an investigation which you perform.

- D1** You must not abuse the position of trust which you occupy as a professional...
- E1** You must share with the patient accurate, relevant and clear information to enable the patient to make informed decisions about their health needs and relevant care options. You must also take into consideration a patient's capacity to understand.
- E2** You must obtain and record consent from a patient prior to starting their care and for the plan of care.
- E4** You must ensure that the consent of a patient is voluntary and not under any form of pressure or undue influence.
- F1** You must explore care options, risks and benefits with patients, encouraging them to ask questions. You must answer fully and honestly, bearing in mind patients are unlikely to possess clinical knowledge.
- G1** You must keep your knowledge and skills up to date, taking part in relevant and regular learning and professional development activities, that aim to maintain and develop your competence and improve your performance and the quality of your work.
- G2** You must maintain your knowledge to ensure it is up to date and accurate in terms of the law, regulations relevant to your work and GCC guidance.
- G3** You must recognise and work within the limits of your own knowledge, skills and competence.
- H3** You must ensure your patient records are kept up to date, legible, attributable and truly representative of your interaction with each patient.

References

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3. Djais N, Kalim H. The role of lumbar spine radiography in the outcomes of patients with simple acute low back pain. *APLAR journal of rheumatology*. 2005;8(1):45-50.
4. Brownlee SM, Chalkidou KMD, Doust JP, Elshaug AGP, Glasziou PP, Heath IF, et al. Evidence for overuse of medical services around the world. *The Lancet (British edition)*. 2017;390(10090):156-68.

5. Buchbinder R, van Tulder M, Öberg B, Costa LM, Woolf A, Schoene M, et al. Low back pain: a call for action. The Lancet (British edition). 2018;391(10137):2384-8.

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