

# Chiropractic Competencies & Skills Management of Low Back & Radicular Pain



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### **Chiropractic Competencies and Skills:**

## **Management of Low Back and Radicular Pain**

#### Introduction

In the UK, chiropractic is a statutorily-regulated *profession* and should not be regarded as a treatment or mono-therapy. Chiropractors are trained to assess and triage patients with musculoskeletal conditions, to formulate a diagnosis and prognosis, to provide a treatment plan taking into account the patient's views and, where appropriate, to refer to other health care professionals.

Chiropractors provide a wide range of interventions that may include, but are not limited to, manual therapy techniques (including spinal manipulation and mobilisation), exercise rehabilitation and self-care advice. Dry needling/medical acupuncture may also be offered. Chiropractors can deliver these treatments within psychologically-informed programmes of care. Chiropractic, like other healthcare professions, is informed by the evidence base and develops accordingly. Since chiropractors have a broad clinical remit in the field of manual therapy, the evidence-base for the care they provide is the same as that for the care provided by physiotherapists and osteopaths.

#### Evidence

The care provided by chiropractors has been shown to be effective for a wide range of conditions (Bronfort et al, 2010; Clar et al, 2014).

In relation to low back pain, The UK Beam Trial Team (2004a) estimated the effect of adding exercise classes, spinal manipulation or manipulation followed by exercise to "best care" in general. Exercise improved disability more than "best care" at three months and, for manipulation, there was an additional improvement at three months and 12 months. For manipulation followed by exercise, there was an additional improvement at three months and 12 months, although a related study found that manipulation alone provides better value for money than manipulation followed by exercise (UK Beam Trial Team, 2004b). A care package that includes spinal manipulation, as provided by chiropractors, was subsequently recommended in the evidence-based NICE guidelines for the treatment of persistent low back pain (NICE, 2009). Tsertsvadze et al (2014) established that manual therapy techniques (e.g. osteopathic spinal manipulation, physiotherapy manipulation and mobilisation techniques, and chiropractic manipulation with or without other treatments) are more cost-effective than usual GP care alone or with exercise, spinal stabilisation, GP advice, advice to remain active or brief pain management for improving low back pain/disability.

In relation to low back and radicular pain, Santilli et al (2006) found that, compared with sham manipulation, active spinal manipulation is more effective at six months at relieving local or radiating pain in people with acute back pain and sciatica with disc protrusion. A recent network meta-analysis of the many different treatment strategies for sciatica found that spinal manipulation is one of the interventions that provides significant improvement compared to conservative

therapy (Lewis et al, 2015). In 2013, Peterson et al demonstrated similar effectiveness and a cost benefit of employing spinal manipulation as opposed to nerve root injections for patients with symptomatic MRI-confirmed lumbar disc herniation.

#### Pathfinder pathway of care

NHS England's national 'Pathfinder' Pathway of Care for Low Back and Radicular Pain (NHS England, 2014) provides a generic pathway for the management of low back and radicular pain, as agreed by all stakeholders. It specifically recognises the role of chiropractors in early clinical triage and initial treatment. It also defines the competencies and skills required for: ongoing intervention for low risk patients, identifying red flags, radiculopathy assessment and initial management, further 'triage and treat', delivering core therapy for back pain, specialist triage review following core therapies, provision of combined physical and psychological treatment plus subsequent triage and provision of conservative therapy for lumbar radiculopathy, and these closely match the core competencies and skills of chiropractors.

Thus, chiropractors are suitably trained and well-placed to assess and manage low back and radicular pain in the community. Table 1, below, outlines the competencies and skills typically exhibited by chiropractors in private practice. The lists provided are not necessarily exhaustive and are not intended to define the professional scope of chiropractic practice within the field of managing low back and radicular pain. With each clinical encounter, chiropractors invariably employ many of the skills and competencies described within a package of care.

Table 1. Chiropractic competencies and skills in the management of low back and radicular pain in primary care

COMPETENCIES	SKILLS
Generic	
<ul> <li>Excellent communication skills</li> <li>Creative problem solving</li> <li>Understand the therapeutic relationship</li> </ul>	<ul> <li>Use of voice to reassure and inspire trust, adapt tone of voice to match the situation, deliver clear information, assertive to guide the interview</li> <li>Use of non-verbal techniques to put patient at ease, develop rapport and facilitate dialogue</li> <li>Use of open questioning to encourage patients to give the information they feel is pertinent</li> <li>Sensitive to identify and manage emotion, pick up unspoken cues and evaluate the capability of the patient</li> <li>Able to teach and facilitate problem solving</li> <li>Able to develop the therapeutic relationship</li> </ul>

COMPETENCIES SKILLS

#### **Clinical assessment**

- Clinical screening for serious pathologies: cauda equina syndrome, tumour, infection, major neurological deficit, osteoporotic collapse, inflammatory disease
- Diagnosing radicular pain, neurogenic claudication, spinal deformity and nonspecific low-back pain
- Identification of presentations suggestive of vascular or abdominal origin
- ♦ Referring emergency symptoms
- Assessment of severity of symptoms tolerable/non-tolerable
- Psychosocial assessment for risk of persisting pain-related disability
- Understanding and identification of pain as a primary condition
- Identification of patients with good prognosis who can self-manage
- Formulate a working and differential diagnosis and prognosis
- Monitor and re-assess patient while under care

- Able to take a clear history distinguishing leg pain from back pain
- Able to undertake a physical, orthopaedic and neurological examination, including:
  - ➤ lower limb neurological examination
  - assessment of weakness and longtract signs
  - assessment of vital signs, palpation of abdomen and lower limb pulses
- Able to diagnose lumbar radicular pain, myelopathy and neurogenic claudication
- Able to identify and refer "red flag" pathologies
- Able to undertake a bio-psychosocial assessment of the patient
  - Identify and understand psychosocial obstacles to recovery (yellow flags) using screening tools and through interview including: fear avoidance beliefs, catastrophisation, and low pain related self efficacy
  - Prognostic screening using instruments such as STarT Back Tool
  - Assessing and eliciting social issues related to the presenting condition including those related to home and work life
  - identify and understand procedural barriers to return to work
- Able to advise patients with radicular pain, about the signs and symptoms of a developing Cauda Equina Syndrome and what actions that they should take (medical emergency)
- Able to identify pain as a primary condition
- Able to communicate the diagnosis and prognosis
- Able to deliver appropriate advice and sign posting
- Able to synthesise auditory information to create a picture of the patients problem
- Able to identify & manage complex patient expectations

COMPETENCIES SKILLS

#### **Cooperative working and referral**

- Recognise the need to work within scope of practice
- Understanding of interdisciplinary working
- Knowledge and understanding of relevant clinical care pathways (i.e. for back pain, sciatica and neurogenic claudication)
- ♦ Referral for diagnostic tests
- Interpretation of scans in conjunction with a radiologist's report
- Referral for diagnostic and/or therapeutic spinal injections nerve root block/epidural
- ♦ Referral for surgical opinion
- ♦ Referral for psychological assessment
- Recommend for review with pharmacist
- Understand when psychological factors are the dominating presentation or are beyond own ability to manage
- Understand when medication review with community pharmacist or other clinician is appropriate

- Able to select and refer patient to appropriate services
- ♦ Understanding referral pathways
- Able to request diagnostics including MRI scans, nerve root blocks, CT scans and bloods
- Working knowledge of language relating to non physical barriers to recovery
- Able to use and understand language related to recording and reporting psychological and social factors

#### **Treatment**

- Involve patients in decisions about their care, and in setting goals and objectives of care
- Obtain informed consent from the patient, including explaining the options for care, the purpose of procedures, the benefits, risks and potential complications
- Review management and pain control
- Advise patients on appropriate pain management strategies
- Discuss medication effectiveness and identify side effects, adherence, dependency or misuse
- Deliver a package of care that may include advice, self-management, manual therapies including manipulation, mobilisation and softtissue work, dry needling/medical

- Able to facilitate shared decision making
- Able to discuss the risks and benefits of appropriate treatment options and facilitate patient choice through shared decision making
- Able to assess progress and keep diagnosis under review
- Able to facilitate pharmacology review/prescription of pain relief
- Able to communicate diagnosis and care plan to patients and colleagues as required
- Able to undertake specific Patient Reported Outcome Measures (PROMs) and understand the significance of these
- ♦ Able to motivate and reassure
- Able to apply principles of behavioural change including basic CBT principles
- Using active interviewing to help patients

- acupuncture, tailored exercise approaches and psychologically-informed care
- Understand and evaluate the quality of care delivered
- Assess and advise patients on the appropriateness of undertaking exercise, being physically active and continuing normal daily activities as far as possible
- Assess and advise patients on the appropriateness of remaining in work
- Understanding of simulated work activities and work adaptation including graded return and fit notes

- reflect on and change unhelpful behaviours
- Able to design and implement a exercise programme tailored to the individual (delivered in group)
- ♦ Able to set patient-specific goals
- Able to teach and apply principles of pacing
- ♦ Able to teach and deliver relaxation
- Able to design simulated work activities and facilitate return to work
- Able to agree and communicate a graduated return to work plan
- ♦ Able to facilitate helpful coping strategies
- Able to issue fit notes and liaise with the employer as necessary

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