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**Comments on Low back pain: acute management of patients with chronic
(longer than 6 weeks) non specific low back pain.
Full guidelines**

General

We welcome the NICE report on the acute management of patients with chronic non specific low back pain.

The terms of reference focus on patients with pain for greater than 6 weeks and less than one year. We are unaware of evidence that states that patients with pain for greater than one year should be treated any differently than those with pain for greater than 6 weeks. The European guidelines (your reference 1) do not make this distinction. The situation is complicated by the realisation that any episode of pain may be a first episode, a recurrent episode, or an acute exacerbation of chronic back pain. Thus in a hospital-based cohort study (with mostly chronic low back pain patients) the total duration of pain was 9.5 years whilst the episode duration was merely 2.5 years (Frank et al. 2000).

We would advise that: The terms of reference be extended to the treatment of chronic low back pain (Back pain greater than 6 weeks) as the current title is obtuse and liable to misinterpretation.

Chapter 4 Assessment

Box 1 page 15 and Box 1 Page 49

We would strongly disagree that rheumatoid arthritis is a cause of low back pain.

We would advise that: There is no evidence to support this statement – indeed a study of 667 consecutive referrals with low back pain to a district hospital rheumatology service did not report a single patient with rheumatoid arthritis (Frank, De Souza, McAuley, Sharma, & Main 2000).

Box 1 page 15 and Box 1 Page 49

The term other inflammatory disorders is vague.

We would advise that: ankylosing and related Spondyloarthritides might be more concise

Box 1 page 15 and Box 1 Page 49

No mention is made of referred pain from retroperitoneal structures eg Leaking aortic aneurysm or lymphoma

We would advise that: These are included in this box

This section ignores the literature on 'red flags' which is widely used in the training of doctors in both primary and secondary care settings (Clinical Standards Advisory Group - Chairman Prof M Rosen. 1994). Your box also ignores the role of metabolic bone disease which may reflect Vitamin D deficiency. This was the commonest 'specific' cause of low back pain reported in a cohort of 667 patients presenting in north west London, where there are large immigrant populations with a range of risk factors for Vitamin D deficiency – vegetarians with dark skin, dress habits of covering the skin etc (Frank, De Souza, McAuley, Sharma, & Main 2000).

Page 50 lines 1,2&3

There is no guidance on a structured approach to the diagnosis of back pain before arriving at the diagnosis of non-specific back pain.

We would advise that: Advice is given for the appropriate investigation of low back pain. This would make it clear that MRI may be indicated in the assessment of a patients with low back pain and that chronic conditions such as 'ankylosing spondylitis and chronic spinal tumours have been appropriately excluded before the patient is given the diagnosis of 'Non-specific back pain'.

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We would agree that plain Lumbar X-ray for Non-specific back pain is usually not indicated but should be considered for the diagnosis of spondylolysis/spondylolisthesis. This is not mentioned as a cause of chronic low back pain

Evidence; **Evaluation of Specific Stabilizing Exercise in the Treatment of Chronic Low Back Pain With Radiological Diagnosis of Spondylolysis or Spondylolisthesis.**

Clinical Studies – Diagnosis Spine. 22(24):2959-2967, December 15, 1997. *O'Sullivan, PB; Twomey, LT; Allison, GT.*

Page 58

We would agree that MRI should only be performed to exclude underlying pathology and where surgery is thought to be indicated. MRI has also been shown to polarise a clinician's diagnosis thus facilitating management (Murray V and AK Dixon personal communication).

Chapter 5 Information education and patient treatment preferences.

We feel that the recommendations are appropriate. Although the need for non anatomical advise could be stressed more.

Evidence: **A Randomized Controlled Trial of Intensive Neurophysiology Education in Chronic Low Back Pain.** Clinical Journal of Pain. 20(5): 324-330. 2004.

Moseley, GL; Nicholas, MK; Hodges, PW.

Chapter 6 Exercises

We agree that evidence suggests that exercise is important but that the type of exercise remains uncertain. The concept of 'reactivation' rather than any particular exercise or reconditioning regime is appealing.

Evidence: **The association of physical deconditioning and chronic low back pain: a hypothesis-oriented systematic review.** Disabil Rehabil. 2006 Jun 15;28(11):673-93. Smeets RJ, Wade D, Hidding A, Van Leeuwen PJ, Vlaeyen JW, Knottnerus JA.

Chapter 7 Manual Therapies

It should be noted that The BEAM study, The Andersson study, the Deyo study, all studies that this document rely on, recruited patients with acute back pain of less than 3 months standing and not strictly relevant to the chosen patient group for this study. It is probable that manipulation has only a very limited part to play in chronic back pain and that the treatment effect is at its greatest in the first 3 weeks of an episode of acute low back pain.

Evidence: Mathews, JA; Mills, SB; Jenkins, VM; Grimes, SM; Morkel, MJ; Mathews, W; Scott, CM; Sittampalam, Y. Back pain and sciatica: controlled trials of manipulation, traction, sclerosant and epidural injections. *Br J Rheumatol.* 1987 Dec;26(6):416–423.

Chapter 8 Non-pharmacological therapies

We agree that there is no evidence to support routine use of electrical therapies, lumbar supports or traction in chronic low back pain. However, indications for the use of corsets have been suggested (Frank & Hills 1989), and should be considered for that group of patients for whom manual therapies and exercise have failed; and to facilitate early return to work for those particularly with heavy manual jobs.

Chapter 9 Psychological interventions and combined physical and psychological interventions.

We agree that combined physical and psychological programmes for patients with intractable pain should be recommended. We would hope that the final draft of this document would make more specific recommendations concerning content and minimum time required, as intensive programmes may be needed for satisfactory outcomes.

Evidence: J Guzmán R Esmail, K Karjalainen, A Malmivaara, E Irvin, C Bombardier, Multidisciplinary rehabilitation for chronic low back pain: systematic review. *BMJ* 2001;322:1511-1516. The ingredients of such programmes have been reviewed (Carter & Birrell 2000).

Chapter 10 Pharmacological therapies

A mention that a dramatic response to non-steroidal anti-inflammatory medication should raise the possibility of previously unsuspected ankylosing spondylitis might be helpful.

Evidence: clinical experience.

A more cautionary approach to the use of opioids in chronic low back pain would be appropriate. The papers quoted are short term and do not record the rate of long-term addiction. There are few trials looking at this problem and until there is a good body of evidence to support this approach considerable caution should be recommended. The review also failed to comment on the need for long-acting medication to be prescribed, particularly at night time to facilitate a better night's sleep. The distressing effects of disturbed sleep in acute and chronic back pain have been described (De Souza & Frank 2007) and longer acting medications have been recommended as standard practice for many years (Frank & Hills 1989). Currently, long-acting preparations of Dihydrocodeine and Tramadol exist and are valuable for this purpose in severe pain disturbing sleep. It has been reported that pain played a smaller role in the prediction of daily functioning than sleep disturbance (McCracken & Iverson 2002).

Chapter 11 Invasive procedures

We would disagree that the quoted papers give strong enough evidence for acupuncture to be singled out for routine use.

Chapter 12 Surgery

Spinal fusion for low back pain is probably no better than intensive rehabilitation (Fairbank et al). We would recommend that no-one is recommended for surgery unless they have exhausted all forms of conservative treatment including an intensive multidisciplinary combined physical and psychological programme.

For an example of disappointing surgical outcomes see: **Long-Term Functional Outcome of Pedicle Screw Instrumentation as a Support for Posterolateral Spinal Fusion: Randomized Clinical Study With a 5-Year Follow-up.**

Randomized Trial. *Spine*. 27(12):1269-1277, June 15, 2002. *Bjarke CF; Stender HE; Laursen, M; Thomsen, K; Bunger, CE.*

Additional points

I am concerned that the economics is discussed purely in relation to the cost of the therapy provided. There is good evidence that indirect costs account for 90% of the total costs of back pain to society (Norlund & Waddell 2000). If the evidence is lacking about the true costs of treatment because sickness absence is not recorded adequately, then it should be noted that further research is needed.

This review should not encourage use of the term 'sciatica', even though it will have been used in some of the studies. Leg pain or radicular pain are both valuable terms whilst 'sciatica' implies radicular pain when it may be referred e.g. from a facet joint (Frank 1993).

The guidelines appreciate the importance of psychological factors in management whether practiced by psychologists or other health professionals. The key psychological obstacles to successfully overcoming an attack of back pain (yellow flags) have been formulated and widely

agreed (Kendall, Linton, & Main 1997) and emphasize 'an expectation that passive treatments rather than active participation will help'. Both manipulation and acupuncture are 'passive' treatments, whilst exercise is 'active' and requires the patient to change their lifestyle as a form of secondary prevention of further back pain. The evidence-based cognitive behavioral principles (Linton 2000; Norlund & Waddell 2000) endorsed by the guidelines discourage passivity and encourage increasing activity. Greater weight should be given to active rather than passive treatments; and this should be reflected in the guidelines with exercise given more weight than acupuncture or manipulation alone.

Rehabilitation physicians embrace all elements in assisting those with back pain back to return to normal lives, and thus it is the combination of modalities that are used (medical, physical, environmental and psychological (British Society of Rehabilitation Medicine 2004)). Analgesia is not an end in itself. It is the means to enable individuals to become active and regain normal activities, including work. Professor Black has recently emphasized the need for a return to work to become an endpoint in medical research (Black 2008). Thus analgesia needs to be linked to active treatments and is not an end in itself. Effective analgesia from medication or injections provide a window of opportunity in which to re-educate lifestyles. Both NSAIDs and opioids have a limited lifespan, with lessened efficacy and increased risk of side effects with prolonged use. The guidelines need to emphasize this in their commentary about the evidence reviewed.

The introduction should avoid suggesting that the only sources for back pain are pathological. Invasive procedures find the precise anatomical cause for back pain in over 60% of patients (Bogduk N personal communication). However, the risks and costs of such invasive investigations do not justify their use. The guidelines should refer to pathological processes producing low back pain or use 'red flag' terminology.

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