

# **Quick reference guide**

Issue date: May 2009

# Low back pain

Early management of persistent non-specific low back pain

## **About this booklet**

This is a quick reference guide that summarises the recommendations NICE has made to the NHS in 'Low back pain: early management of persistent non-specific low back pain' (NICE clinical guideline 88).

## Who should read this booklet?

This quick reference guide is for healthcare professionals and other staff who care for people with low back pain.

# Who wrote the guideline?

The guideline was developed by the National Collaborating Centre for Primary Care. The Collaborating Centre worked with a group of healthcare professionals (including consultants, GPs, nurses and allied professionals), patients and carers, and technical staff, who reviewed the evidence and drafted the recommendations. The recommendations were finalised after public consultation.

For more information on how NICE clinical guidelines are developed, go to www.nice.org.uk

# Where can I get more information about the guideline?

The NICE website has the recommendations in full, reviews of the evidence they are based on, a summary of the guideline for patients and carers, and tools to support implementation (see page 9 for more details).

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NICE clinical guidelines are recommendations about the treatment and care of people with specific diseases and conditions in the NHS in England and Wales.

This guidance represents the view of NICE, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer, and informed by the summary of product characteristics of any drugs they are considering.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

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# Introduction

This guideline covers the early treatment and management of persistent or recurrent low back pain, defined as non-specific low back pain that has lasted for more than 6 weeks, but for less than 12 months.

Non-specific low back pain is tension, soreness and/or stiffness in the lower back region for which it isn't possible to identify a specific cause of the pain. Several structures in the back, including the joints, discs and connective tissues, may contribute to symptoms.

A clinician who suspects that there is a specific cause for their patient's low back pain (see box below) should arrange the relevant investigations.

A key focus is helping people with persistent non-specific low back pain to self-manage their condition. Providing advice and information is an important part of this. The aim of the recommended treatments and management strategies is to reduce the pain and its impact on the person's day-to-day life.

## Specific causes of low back pain (not covered in this guideline)

Malignancy

Fracture

Infection

Ankylosing spondylitis and other inflammatory disorders

# Patient-centred care

Treatment and care should take into account patients' individual needs and preferences. Good communication is essential, supported by evidence-based information, to allow patients to reach informed decisions about their care. Follow Department of Health advice on seeking consent if needed. If the patient agrees, families and carers should have the opportunity to be involved in decisions about treatment and care.

# Care pathway

This guideline refers to the management of non-specific low back pain only. Clinical assessment should exclude people with signs and symptoms suggestive of spinal malignancy, infection, fracture, cauda equina syndrome, or ankylosing spondylitis or another inflammatory disorder.

## Principles of management for all patients

Keep diagnosis under review at all times

#### AND

 Promote self-management: advise people with low back pain to exercise, to be physically active and to carry on with normal activities as far as possible (see box B)

#### AND

 Offer drug treatments as appropriate to manage pain and to help people keep active (see box C)

#### AND

- Offer one of the following treatments (see box D), taking patient preference into account. Consider offering:
  - exercise programme
  - course of manual therapy
  - course of acupuncture

Consider offering another of these options if the chosen treatment does not result in satisfactory improvement

### **Box A Assessment and imaging**

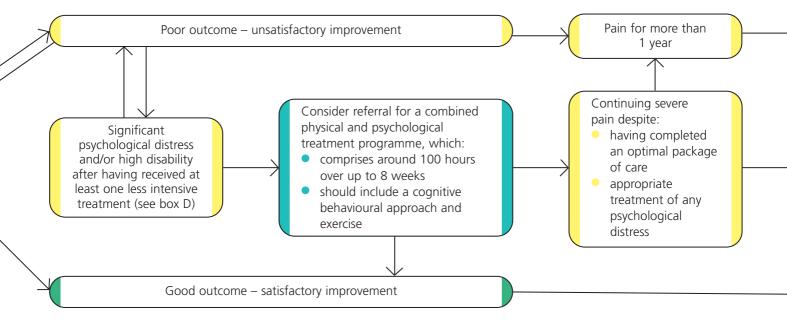
- Do not offer X-ray of the lumbar spine
- Only offer MRI for non-specific low back pain in the context of a referral for an opinion on spinal fusion.
- Consider MRI if one of these diagnoses is suspected:
  - spinal malignancy
  - infection
  - fracture

- cauda equina syndrome
- ankylosing spondylitis or another inflammatory disorder

## **Box B Advice and education**

- Provide advice and information to promote self-management
- Offer educational advice that:
  - includes information on the nature of non-specific low back pain
  - encourages normal activities as far as possible
- Advise people to stay physically active and to exercise
- Include an educational component consistent with this guideline as part of other interventions (but don't offer stand-alone formal education programmes)
- When considering recommended treatments, take into account the person's expectations and preferences (but bear in mind that this won't necessarily predict a better outcome)

COX-2: cyclooxygenase 2; IDET: intradiscal electrothermal therapy; MRI: magnetic resonance imaging; NSAIDs: non-steroidal anti-inflammatory drugs; PIRFT: percutaneous intradiscal radiofrequency thermocoagulation; PPI: proton pump inhibitor; SSRI: selective serotonin reuptake inhibitor; TENS: transcutaneous electrical nerve stimulation.



## Box C Drug treatments<sup>1</sup>

## **Paracetamol:**

Advise regular paracetamol as the first option

When regular paracetamol alone is insufficient (and taking account of individual risk of side effects and patient preference), offer NSAIDs and/or weak opioids

#### **NSAIDs:**

- Give due consideration to risk of side effects, especially in older people and those at increased risk of side effects
- Offer treatment with a standard oral NSAID/ COX-2 inhibitor
- Co-prescribe a PPI for people over 45 (choose the one with the lowest acquisition cost)

#### Weak opioids:

- Give due consideration to risk of opioid dependence and side effects
- Examples of weak opioids are codeine and dihydrocodeine

## **Tricyclic antidepressants:**

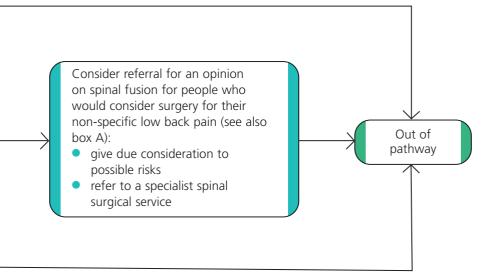
- Consider offering if other medications are insufficient; start at a low dosage and increase up to the maximum antidepressant dosage until:
  - therapeutic effect is achieved or
  - unacceptable side effects prevent further increase

#### Strong opioids:

- Consider offering for short-term use to people in severe pain
- Consider referring people requiring prolonged use for specialist assessment
- Give due consideration to risk of opioid dependence and side effects
- Examples of strong opioids are buprenorphine, diamorphine, fentanyl, oxycodone and tramadol (high dose)

For all medications, base decisions on continuation on individual response

<sup>&</sup>lt;sup>1</sup> No opioids, COX-2 inhibitors or tricyclic antidepressants and only some NSAIDs have a UK marketing authorisation for treating low back pain. If a drug without a marketing authorisation for this indication is prescribed, informed consent should be obtained and documented.



### **Box D Choice of treatments**

Offer one of the following treatment options, taking patient preference into account

Consider offering:

- Structured exercise programme:
  - up to 8 sessions over up to 12 weeks
  - supervised group exercise programme in a group of up to 10 people, tailored to the person
  - one-to-one supervised exercise programme only if a group programme is not suitable
  - may include aerobic activity, movement instruction, muscle strengthening, postural control and stretching
- Manual therapy<sup>2</sup>:
  - course of manual therapy, including spinal manipulation
  - up to 9 sessions over up to 12 weeks
- Acupuncture:
  - course of acupuncture needling
  - up to 10 sessions over up to 12 weeks

If the chosen treatment doesn't result in satisfactory improvement, consider offering another of these options

### Do not offer

- SSRIs for treating pain
- Injections of therapeutic substances into the back
- Laser therapy
- Interferential therapy
- Therapeutic ultrasound
- TENS
- Lumbar supports
- Traction

### Do not refer for

- Radiofrequency facet joint denervation
- IDET
- PIRFT

<sup>&</sup>lt;sup>2</sup> Manual therapy is a collective term that includes spinal manipulation, spinal mobilisation and massage. See page 7, and section 1.4 of the NICE guideline (www.nice.org.uk/CG88), for more details.

# Key priorities for implementation

# Information, education and patient preferences

- Provide people with advice and information to promote self-management of their low back pain.
- Offer one of the following treatment options, taking into account patient preference: an
  exercise programme, a course of manual therapy or a course of acupuncture. Consider offering
  another of these options if the chosen treatment does not result in satisfactory improvement.

# Physical activity and exercise

- Consider offering a structured exercise programme tailored to the person:
  - This should comprise up to a maximum of eight sessions over a period of up to 12 weeks.
  - Offer a group supervised exercise programme, in a group of up to 10 people.
  - A one-to-one supervised exercise programme may be offered if a group programme is not suitable for a particular person.

# Manual therapy<sup>1</sup>

• Consider offering a course of manual therapy, including spinal manipulation, comprising up to a maximum of nine sessions over a period of up to 12 weeks.

# **Invasive procedures**

- Consider offering a course of acupuncture needling comprising up to a maximum of 10 sessions over a period of up to 12 weeks.
- Do not offer injections of therapeutic substances into the back for non-specific low back pain.

# Combined physical and psychological treatment programme

- Consider referral for a combined physical and psychological treatment programme, comprising around 100 hours over a maximum of 8 weeks, for people who:
  - have received at least one less intensive treatment and
  - have high disability and/or significant psychological distress.

continued

<sup>&</sup>lt;sup>1</sup> The manual therapies reviewed were spinal manipulation, spinal mobilisation and massage. Collectively these are all manual therapy. Mobilisation and massage are performed by a wide variety of practitioners. Manipulation can be performed by chiropractors and osteopaths, as well as by doctors and physiotherapists who have undergone specialist postgraduate training in manipulation.

# Key priorities for implementation continued

## **Assessment and imaging**

- Do not offer X-ray of the lumbar spine for the management of non-specific low back pain.
- Only offer an MRI scan for non-specific low back pain within the context of a referral for an opinion on spinal fusion.

# **Referral for surgery**

- Consider referral for an opinion on spinal fusion for people who:
  - have completed an optimal package of care, including a combined physical and psychological treatment programme and
  - still have severe non-specific low back pain for which they would consider surgery.

# **Further information**

# **Ordering information**

You can download the following documents from www.nice.org.uk/CG88

- The NICE guideline all the recommendations.
- A quick reference guide (this document) a summary of the recommendations for healthcare professionals.
- 'Understanding NICE guidance' a summary for patients and carers.
- The full guideline all the recommendations, details of how they were developed, and reviews of the evidence they were based on.

For printed copies of the quick reference guide or 'Understanding NICE guidance', phone NICE publications on 0845 003 7783 or email publications@nice.org.uk and quote:

- N1865 (quick reference guide)
- N1866 ('Understanding NICE guidance').

# Implementation tools

NICE has developed tools to help organisations implement this guidance (see www.nice.org.uk/CG88).

# **Related NICE guidance**

For information about NICE guidance that has been issued or is in development, see www.nice.org.uk

### **Published**

- Managing long-term sickness absence and incapacity for work. NICE public health guidance 19 (2009). Available from www.nice.org.uk/PH19
- Osteoarthritis. NICE clinical guideline 59 (2008). Available from www.nice.org.uk/CG59
- Four commonly used methods to increase physical activity. NICE public health guidance 2 (2006). Available from www.nice.org.uk/PH2

# **Updating the guideline**

This guideline will be updated as needed, and information about the progress of any update will be available at www.nice.org.uk/CG88

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