The 1999 Edition of the NZ Acute Low Back Pain Guide

1999 Update on the Natural History of Acute Low Back Pain

• Recovery and relapse is a fluctuating course in many people. For people with relapses or recurrences, a similar course is predicted and it is expected that the episodes will resolve rapidly within a period of a few weeks or months.

• Relapses differ from recurrences in that the patient has not become asymptomatic before an increase in activity limitation or pain is experienced.

• A small proportion of cases may become chronic. This emphasises the need to identify those at risk of developing long-term problems, and focuses on the prevention of chronicity.

• The evidence-based recommendations outlined in the NZ Acute Low Back Pain Guide should be adopted for all patients without Red Flags, including those who experience relapses or recurrences.

1999 Update on the Assessment of Acute Low Back Pain

• There is insufficient evidence to justify the use of a wide range of specific diagnoses that are often offered to patients with acute low back pain. It is not necessary or helpful to make a precise diagnosis. Patients do require explanations for their symptoms, and these should be consistent with the recommendations in the Guide. The use of conflicting explanations by various treatment providers may cause considerable confusion for patients.

• It is suggested that the most appropriate terminology to use with patients, in the absence of serious disease or Red Flags, is “acute low back pain (Acute Low Back Pain)”.

• The 1997 Edition of the Guide noted that about 30% of people without low back symptoms would have significant abnormalities on MRI. Long-term follow-up studies confirm that the proportion of these abnormalities in asymptomatic individuals increases, and it is 50% by the age of 60.

In applying the Guide to clinical assessment the goals are to:

• exclude serious disease
• provide reassurance to the patient
• obtain an accurate baseline of the level of function or activity, so that this may be used to determine progress or necessary modifications
• provide the patient with explicit information that it is safe to remain active, and to continue working with appropriate temporary modifications.

1999 Update on the Treatment and Management of Acute Low Back Pain

A number of research studies investigating treatment options for acute low back pain have been published in the last two years, and very few of these are randomised controlled trials. Systematic review of this research indicates that there is no modification required to the table outlining the management options, or to the figure outlining the best management in the 1997 edition of the Guide.

Preventing chronicity, long-term disability, and work loss is the primary goal.
New Zealand Acute Low Back Pain Guide

This guide provides an evidence based approach to the assessment and treatment of acute low back pain, for the prevention of chronic pain and disability. It follows an extensive review of the international literature, and wide consultation with professional groups in New Zealand. The guide is to be used in conjunction with the Guide to Assessing Psychosocial Yellow Flags in Acute Low Back Pain: Risk Factors for Long-Term Disability and Work Loss.
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Background

This guide has been developed from the comprehensive publication Clinical Practice Guideline - Acute Low Back Problems in Adults: Assessment and Treatment, which was distributed by ACC and the National Health Committee in January 1996. The participation of various professional groups, through submissions and a health professionals' hearing, enabled an expert panel to develop this guide. The guide reflects current best practice in New Zealand and will be reviewed as new evidence becomes available. The expert panel recommends that this guide should have its first review within 2 years of publication.

Any further comments and submission of new evidence for the National Health Committee and ACC should be made through the appropriate professional association.

No references are provided in this document. Comprehensive lists of references are available in the documents detailed in the acknowledgement at the end of this guide.

Acute low back pain is

• common
• self-limiting in most people
• best managed by good assessment, explanation (and reassurance), advice about staying active and expecting recovery
• best managed (where necessary) with simple analgesics and/or manipulation
• best managed by advice against bed rest for more than 2 days

Recurrent low back pain is

• fairly common
• probably best treated in a similar way to acute low back pain episodes

Chronic low back pain is

• a major cause of disability that can leave a person miserable and unemployable
• very difficult to treat
• almost certainly easier to prevent than treat
• often associated with psychosocial risk factors
This guide:

promotes better management of acute low back pain to prevent chronicity
simplifies the history and examination of people with acute low back pain making it easier to identify:
• people without signs of serious disease, who should be reassured, treated symptomatically and encouraged to remain active
• people who should be referred for appropriate specialist opinion on the basis of Red or Yellow Flags
suggests timeframes for recovery from an acute episode of low back pain, so that people not fitting this ‘normal’ pattern can be identified
identifies psychosocial risk factors for chronic back pain
suggests strategies for better management for people at risk of chronic low back pain or those not recovering as expected
aims to change the attitudes of treatment providers and the public about acute low back problems. Excess disability can result from:
• reliance on a narrow medical model of pain
• discouragement of self care strategies and failure to instruct the patient in self management
• sanctioning of disability and not providing interventions that will improve function
• over-investigation and perpetuation of belief in the ‘broken part hypothesis’

Evidence

This guide is based on a review of the best available scientific evidence for improved clinical outcomes, in accordance with the approach to systematic reviews recommended by the international Cochrane Collaboration.

The advice in the guide is based on “at least moderate research evidence”, where moderate research evidence is defined as one relevant high quality scientific study or multiple adequate scientific studies of an acceptable design. Randomised controlled trial studies of therapy or prospective cohort studies of assessment and natural history, meeting specific criteria, are internationally recognised as acceptable evidence.

Evidence for some treatment options such as biofeedback is unlikely to become available in view of their cost and limited application to the management of acute low back pain. Acceptable evidence may become available for some other treatment options and will be described in future editions of the guide.
**Figure 1: Management of acute low back pain**

**Initial presentation**
- History and examination
  - Assess for Red Flags
  - Note Yellow Flags

**Any RED FLAGS?**
- NO
  - Assurance and explanation
  - Advice to continue usual activities, including work if appropriate
  - Analgesics and/or manipulation if required
  - Avoid bed rest
  - Review in 7 days if required

**NO**

**Review as required**

**4 weeks**
- Full reassessment:
  - History and examination
  - Screen for Red and Yellow Flags
  - Investigations as appropriate
  - Consider ongoing treatment requirements

**Any RED FLAGS?**
- NO
  - Explain, reassure, encourage continuation of usual activities and return to work
  - Consider continuation of effective treatments

**NO**

**6 weeks**
- Full reassessment

**Recovered?**
- YES

**YES**

**Consider referral to appropriate specialist and/or investigations**

**YES**

**Consider referral to appropriate specialist**

**YES**

**Consider referral to multidisciplinary assessment and care if available**
**Best practice advice**

The 'best practice' advice given in the Management of Acute Low Back Pain Flowchart (Figure 1) and in the Summary of Management Options (Figure 4) is not intended to be read as a rigid prescription. The advice is intended to offer flexibility and choice, so that clinical judgement can be made according to patients' circumstances, supported by the best available evidence for improved clinical outcome.

**Definitions**

Acute low back problems:
activity intolerance due to lower back or back and leg symptoms lasting less than 3 months

Chronic low back problems:
activity intolerance due to lower back or back and leg symptoms lasting more than 3 months

Recurrent low back problems:
episodes of acute low back problems lasting less than 3 months but which recur after an interval free of low back symptoms sufficient to restrict activity or function

**Natural history**

Most severe back pain and severe activity limitation improves considerably in a few days or at most a few weeks, but milder symptoms may persist longer, often for a few months.

**Initial assessment**

A good history must be taken to identify:

- the risk factors for serious disease (Red Flags, see next page)
- how limiting the symptoms are
- similar previous episodes
- any factors that might limit an early return to usual activities, including work (this includes screening for Yellow Flags - see page 7 and accompanying booklet)

The clinical examination aims to identify any neurological deficit (note that over 90% of all clinically significant lower limb radiculopathy due to disc herniation involves the L5 or S1 nerve root at the L4/5 or L5/S1 disc level). Pointers in the history may indicate the need for a more general examination, particularly if Red Flags for serious or systemic disease (such as cancer) are suspected.

*Revised May 1999*  
*January 1997 edition of New Zealand Acute Low Back Pain Guide*
Red Flags

The following approach to investigations and referral is recommended:

- Patients with persistent neurological deficit and pain should be referred to the appropriate specialist.
- Patients with Red Flags should be investigated appropriately and referred if investigations are abnormal. Referral may still be appropriate at 4 weeks, even if investigations are normal.
- Patients with no Red Flags and normal neurological examination should only have full blood count, ESR and plain X-rays of the lumbar spine if they have not recovered at 4 - 6 weeks or if there are other indications. Abnormal investigations may justify referral to an appropriate specialist.
- At 6 weeks, patients with no Red Flags, normal investigations and persistent symptoms should be referred to a specialist or specialist team if available. Multidisciplinary Teams may be more effective in preventing pain and disability.

Intervention between 4 and 8 weeks after acute low back problems start is most likely to help prevent chronic low back problems. Patients with low back symptoms persisting beyond 12 weeks have a rapidly reducing rate of return to normal activity.

Figure 2: Red Flags for potentially serious conditions

- Features of cauda equina syndrome (especially urinary retention, bilateral neurological symptoms and signs, saddle anaesthesia) - this requires very urgent referral
- Significant trauma
- Weight loss
- History of cancer
- Fever
- Intravenous drug use
- Steroid use
- Patient aged over 50 years
- Severe, unremitting night-time pain
- Pain that gets worse when patient is lying down

Note: Yellow Flags

It may be useful to conduct a preliminary screening for important psychosocial factors (Yellow Flags) at the time of initial presentation. Potential Yellow Flags should be more comprehensively and formally assessed at the 4 and 6 week full reassessments, if the patient is not making expected progress. Refer to page 7 and the booklet, ‘Guide to Assessing Psychosocial Yellow Flags in Acute Low Back Pain’.
Investigations

A full blood count and ESR should be performed only if there are any Red Flags. Other tests may be indicated depending on the clinical situation.

Plain X-rays of the lumbar spine are indicated if any of the Red Flags are present but not otherwise in the first 4 weeks. The value of plain X-rays to some treatment providers in developing a management plan must be balanced against the radiation exposures involved.

As 30% of people without low back symptoms will have significant abnormalities on MRI and CT scans of the lumbar spine, these investigations should be reserved for people being worked up for surgery or where a specific pathology (such as cancer or infection) is strongly suspected.

Assurance and explanation

It is important to let the patient know that, if a full history and examination have uncovered no suggestion of serious problems, no further investigations are needed. They should be advised to stay as active as possible and continue usual daily activities.

Activity alteration and work activities

Bed rest for more than 2 days should be discouraged, as it has been shown to impair recovery. It is recommended that patients should increase physical activity progressively according to a timetable rather than be guided by pain level. Activities and postures may need to be modified in the short term, and suitable advice provided.

It is important to discuss work activities, especially those involving heavy lifting, bending or twisting, that may have contributed to the original problems. Alternative duties and/or workplace design may need to be discussed with the worker and/or employer.

Symptom control

Effective interventions to control symptoms of acute low back pain include:

- Analgesics
  If patients need their pain symptoms controlled, paracetamol and non-steroidal anti-inflammatory drugs have been shown to be effective.

- Manipulation
  Manual loading of the spine using short or long leverage methods is safe and effective in the first 4-6 weeks of acute low back symptoms.

Treatments to relieve low back pain that do not include an appropriate emphasis on return to usual activity may inadvertently encourage the patient to fear moving or using their back. It is important to combine symptom control with encouragement to promote activity, including returning to work.
Advice on staying active

Advice to continue ordinary activity usually results in more rapid symptomatic recovery from an acute episode, and leads to less chronic disability and less time off work when compared to ‘traditional’ medical treatment. Traditional medical treatment has inappropriately focused on analgesics only as required, advice to rest and ‘let pain be your guide’ for return to usual activity. All of these have been shown to delay recovery.

Progressive reactivation over a short period of days or a few weeks, combined with behavioural management of pain, makes little difference to the rate of initial recovery of pain and disability, but leads to less chronic disability and work loss.

Advice on a planned return to normal work within a short time may lead to shorter periods of work loss and less time off work.

Education

Educating patients about low back symptoms provides assurance. This can lead to improved feelings of well-being, reduced health service use and improved use of self-management strategies. Education as part of a ‘back school’ at the workplace may be effective. The efficacy of back schools in non-occupational settings has yet to be demonstrated by randomised controlled trials.

Review

The clinician is responsible for making sure that the episode resolves as expected. Follow-up will depend on the clinical situation, including the severity of symptoms, the presence of any neurological deficit, history of previous episodes and other medical and/or psychosocial factors. A reasonable approach for most patients is a review by the end of the first week, unless symptoms have completely resolved. It may be appropriate to arrange an earlier review, to reinforce the message to keep active and avoid prolonged bed rest.

Yellow Flags

Yellow Flags and Red Flags can be thought of as:

- Yellow Flags = psychosocial risk factors
- Red Flags = physical risk factors

Yellow Flags are factors that may increase the risk of developing, or perpetuating, long-term disability and work loss associated with low back pain. Identification of risk factors can inform appropriate cognitive and behavioural management strategies to achieve functional outcome goals.
The accompanying Guide to Assessing Psychosocial Yellow Flags in Acute Low Back Pain provides:

- a method of screening for psychosocial factors that are likely to increase the risk of an individual with acute back pain developing prolonged pain and disability causing work loss and associated loss of quality of life
- a systematic approach to assessing psychosocial factors, including a screening questionnaire
- suggested strategies for better management by primary care treatment providers for those with acute back pain who are At Risk

The primary aim of management is to control pain and prevent disability. Identifying At Risk individuals makes prevention of long-term problems possible in most cases, with benefits far outweighing the risks of over-identification.

The presence of psychosocial risk factors does not mean that the back pain is any less real nor does it reduce the need for symptom control.

Most At Risk individuals can be effectively managed by their usual treatment provider, without the need for referral to a psychologist. These patients will require strategies that are effectively integrated with requirements for analgesia and physical modalities to enable them to remain active and return to ordinary activities.

**Figure 3: Psychosocial Yellow Flags - main categories**

Clinical assessment of Yellow Flags may identify the risk of long-term disability, distress and work loss due to:

- Attitudes and beliefs about back pain
- Behaviours
- Compensation issues
- Diagnostic and treatment issues
- Emotions
- Family
- Work

**Referral**

All patients with symptoms and/or signs of cauda equina syndrome should be referred urgently to an appropriate specialist. The presence of Red Flags and/or abnormal tests indicates the need to consider referral or at least fuller investigation. Certain Red Flags (such as severe pain at night or weight loss) should lead to full investigation and/or referral being considered, even if the tests are normal.

**Leg pain**

Patients with pain radiating from the back down one leg as far as the ankle, with or without neurological signs, have a higher chance of a disc herniation as the cause of their low back problems. Nevertheless, the natural history of back-related leg pain is benign in most patients and these patients should be managed as shown in Figure 1 unless there is unremitting, severe pain or increasing neurological deficit. Caution should be exercised in advising manipulation if there is any neurological deficit.
Surgery

Surgery is not indicated for non-specific low back pain. Where there is no improvement, some patients with back-related leg pain and a defined disc lesion may recover more rapidly with surgery. Note that the long-term results of surgery for back-related leg pain are no better than conservative management. Patient preferences will be important in any decision about surgical intervention.

Full reassessment

Most patients with episodes of acute low back pain should have largely recovered within 4 weeks. Some studies suggest that as many as 90% of affected people will have resumed their normal activities in this time. All patients who have not regained usual activity after 4 weeks should be formally reassessed and again at 6 weeks. The assessment should include retaking the history and examination, looking for Red or Yellow Flags, neurological deficit and any evidence of systemic disease. Treatment providers must consider whether continuing treatment will accelerate recovery or simply prolong the ‘traditional’ medical model.

Comment on Multidisciplinary Teams

There is clear evidence that Multidisciplinary Teams or networks are effective in managing chronic back pain. The evidence for their effectiveness in unresolved episodes of acute low back pain is yet to be determined. The expert panel has recommended the use of Multidisciplinary Team management for episodes of acute low back pain unresolved at 6 weeks in line with international opinion.

Who might be in the Multidisciplinary Teams?

They might include health professionals with appropriate training in musculoskeletal disorders, psychosocial assessment, vocational management and other relevant specialities. These teams may not be embodied in a discrete organisation, but may reflect a close collaborative team approach for the assessment and comprehensive management of At Risk patients by professionals from various disciplines with specific skills working together. This is particularly true of rural areas where access to specialist teams would otherwise be a treatment barrier to those needing prompt specialist intervention.

What is the role of Multidisciplinary Teams?

The lead treatment provider may require support from a multidisciplinary team to integrate all components of the comprehensive evaluation and management plan. This support could provide input into key clinical decisions and promote service coordination. Multidisciplinary Teams are able to:

1. make an objective review of progress to date and a comprehensive evaluation of the presenting problem, emphasising the early identification of barriers to progress that have so far gone unnoticed.
2. develop a comprehensive management plan including:
   • integration of all components of the evaluation into the decision-making process
   • an outline of expected milestones with time frames
   • incorporation of strategies for dealing with any barriers that are identified
   • options for continued lack of progress.

3. provide treatment, only for the most complex or resistant cases.

**Recommended treatment options**

Figures 4a and 4b provide a summary of management options based on the available evidence for improved clinical outcomes. The evidence was reviewed by an expert panel who felt that it was more helpful to focus on the availability of evidence rather than to make recommendations about the treatments that must or must not be used.

Caution should be exercised in recommending treatment options for which the evidence of improved clinical outcomes is lacking or inconclusive. Treatment providers who wish to provide best practice care can now choose treatments for which there is good evidence for improved clinical outcomes.
**Figure 4a. Summary of management options for an episode of acute low back pain based on the evidence available at present**

<table>
<thead>
<tr>
<th>At least moderate research evidence for improvement in clinical outcomes</th>
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<tbody>
<tr>
<td>• Advice to stay active and continue usual activities</td>
</tr>
<tr>
<td>• Paracetamol</td>
</tr>
<tr>
<td>• NSAIDs (non-steroidal anti-inflammatory drugs)</td>
</tr>
<tr>
<td>• Manipulation - in the first 4 to 6 weeks only</td>
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</table>

<table>
<thead>
<tr>
<th>At least moderate research evidence of no improvement in clinical outcomes</th>
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<tbody>
<tr>
<td>• Bed rest for more than 2 days</td>
</tr>
<tr>
<td>• TENS (= transcutaneous electrical nerve stimulation)</td>
</tr>
<tr>
<td>• Traction</td>
</tr>
<tr>
<td>• Specific back exercises</td>
</tr>
<tr>
<td>• Education pamphlets about low back symptoms</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>At least moderate research evidence of potential harm from the treatments below which should not be used for an episode of acute low back pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use of narcotics or diazepam (especially for more than 2 weeks)</td>
</tr>
<tr>
<td>• Bed rest with traction</td>
</tr>
<tr>
<td>• Manipulation under general anaesthesia</td>
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<tr>
<td>• Plaster jacket</td>
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</tbody>
</table>

**Figure 4b. Insufficient research evidence for any improvement in clinical outcomes**

| • Conditioning exercises for the trunk muscles |
| • Aerobic conditioning |
| • Epidural steroid injections |
| • Workplace back schools |
| • Acupuncture |
| • Shoe lifts |
| • Corsets |
| • Biofeedback |
| • Physical agents and passive modalities (includes ice, heat, short wave diathermy, massage, ultra sound) |
The New Zealand Acute Back Pain Guide involved:

1 Expert Panel

Peter Gow* Rheumatologist
Robin Griffiths* National Health Committee
Philippa Grimes Physiotherapist
Nicholas Kendall* Clinical Psychologist
Harry McNaughton Rehabilitation Medicine
Ross Nicholson Orthopaedic Surgeon
David Scott General Practitioner
Robin Taylor Chiropractor

Project Managers
Jenny Shieff ACC (Accident Rehabilitation and Compensation Insurance Corporation)
Margaret Youmans ACC (Accident Rehabilitation and Compensation Insurance Corporation)
Robin Griffiths* National Health Committee

* member of the original Core Services Committee group, which began the process of developing a guideline for acute low back pain.

2 International team developing the Yellow Flags questionnaires

Steve Linton Orebro Medical Centre, Sweden
Chris Main Hope Hospital, Salford and University of Manchester, UK
Nicholas Kendall Clinical Psychologist (convening)

3 Contributing professional bodies

NZ Society of Physiotherapists
School of Physiotherapy, University of Otago
NZ Manipulative Therapists' Association
NZ Private Physiotherapists' Association
NZ General Practitioners' Association
Royal NZ College of General Practitioners
NZ Chiropractors' Association
Australasian Faculty of Rehabilitation Medicine
NZ Pain Society
NZ Register of Acupuncturists
NZ Register of Osteopaths
Department of Musculoskeletal Medicine, Christchurch School of Medicine
NZ Orthopaedic Association
Acknowledgement

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A comprehensive list of all references reviewed during this project is available on request.

Suggested citation

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email nhc@MOHWN.synet.net.nz

Phone ACC (Accident Rehabilitation and Compensation Insurance Corporation) 0-4-460 7700

National Health Committee 0-4-496 2000

ISBN 0 - 478 - 10238 - 0

Internet http://www.nhc.govt.nz
Your notes
Acute Low Back Pain Screening Questionnaire

(Linton & Halldén, 1996)

Name ____________________________ ACC Claim Number _______________________

Address ____________________________ Telephone (__) ______________________ (home)

Job Title ____________________________ Date stopped work for this episode __ / __ / ___

These questions and statements apply if you have aches or pains, such as back, shoulder or neck pain. Please read and answer each question carefully. Do not take too long to answer the questions. However, it is important that you answer every question. There is always a response for your particular situation.

1. What year were you born? 19 ___

2. Are you:  male  female

3. Were you born in New Zealand?  yes  no

4. Where do you have pain? Place a ✓ for all the appropriate sites.
   - neck
   - shoulders
   - upper back
   - lower back
   - leg

5. How many days of work have you missed because of pain during the past 18 months? Tick (✓) one.
   - 0 days [1]
   - 1-2 days [2]
   - 3-7 days [3]
   - 8-14 days [4]
   - 15-30 days [5]
   - 1 month [6]
   - 2 months [7]
   - 3-6 months [8]
   - 6-12 months [9]
   - over 1 year [10]

6. How long have you had your current pain problem? Tick (✓) one.
   - 0-1 weeks [1]
   - 1-2 weeks [2]
   - 3-4 weeks [3]
   - 4-5 weeks [4]
   - 6-8 weeks [5]
   - 9-11 weeks [6]
   - 3-6 months [7]
   - 6-9 months [8]
   - 9-12 months [9]
   - over 1 year [10]

7. Is your work heavy or monotonous? Circle the best alternative.
   - 0 1 2 3 4 5 6 7 8 9 10
   - Not at all
   - Extremely

8. How would you rate the pain that you have had during the past week? Circle one.
   - 0 1 2 3 4 5 6 7 8 9 10
   - No pain
   - Pain as bad as it could be

9. In the past three months, on average, how bad was your pain? Circle one.
   - 0 1 2 3 4 5 6 7 8 9 10
   - No pain
   - Pain as bad as it could be

10. How often would you say that you have experienced pain episodes, on average, during the past 3 months? Circle one.
    - 0 1 2 3 4 5 6 7 8 9 10
    - Never
    - Always

11. Based on all the things you do to cope, or deal with your pain, on an average day, how much are you able to decrease it? Circle one.
    - 0 1 2 3 4 5 6 7 8 9 10
    - Can’t decrease it at all
    - Can decrease it completely

12. How tense or anxious have you felt in the past week? Circle one.
    - 0 1 2 3 4 5 6 7 8 9 10
    - Absolutely calm and relaxed
    - As tense and anxious as I’ve ever felt

13. How much have you been bothered by feeling depressed in the past week? Circle one.
    - 0 1 2 3 4 5 6 7 8 9 10
    - Not at all
    - Extremely

January 1997 edition
14. In your view, how large is the risk that your current pain may become persistent? Circle one.

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<td>No risk</td>
<td>Very large risk</td>
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15. In your estimation, what are the chances that you will be working in 6 months? Circle one.

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<td>No chance</td>
<td>Very large chance</td>
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16. If you take into consideration your work routines, management, salary, promotion possibilities and work mates, how satisfied are you with your job? Circle one.

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<td>Not at all satisfied</td>
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Here are some of the things which other people have told us about their back pain. For each statement please circle one number from 0 to 10 to say how much physical activities, such as bending, lifting, walking or driving would affect your back.

17. Physical activity makes my pain worse.

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<td>Completely disagree</td>
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18. An increase in pain is an indication that I should stop what I am doing until the pain decreases.

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19. I should not do my normal work with my present pain.

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Here is a list of 5 activities. Please circle the one number which best describes your current ability to participate in each of these activities.

20. I can do light work for an hour.

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21. I can walk for an hour.

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22. I can do ordinary household chores.

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23. I can go shopping.

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24. I can sleep at night.

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Sum
Differentiate acute, recurrent, and chronic low back pain

**Acute low back problems**: activity intolerance due to lower back or back and leg symptoms lasting less than three months.

**Chronic low back problems**: activity intolerance due to lower back or back and leg symptoms lasting more than three months.

**Recurrent low back problems**: episodes of acute low back problems lasting less than three months duration but recurring after a period of time without low back symptoms sufficient to restrict activity or function.

**Key goal**

To identify risk factors that increase the probability of long-term disability and work loss with the associated suffering and negative effects on patients, their families, and society. This assessment can be used to target effective early management and prevent the onset of these problems.

**The acute pain screening questionnaire**

Useful for quickly screening large numbers. Interpret the results in conjunction with the history and clinical presentation. Be aware of, and take into account, reading difficulties and different cultural backgrounds.

**Clinical assessment**

There is good agreement that the following factors are important, and consistently predict poor outcomes:

- presence of a belief that back pain is harmful or potentially severely disabling
- fear-avoidance behaviour and reduced activity levels
- tendency to low mood and withdrawal from social interaction
- an expectation of passive treatment(s) rather than a belief that active participation will help

**Suggested questions (to be phrased in your own style)**

- Have you had time off work in the past with back pain?
- What do you understand is the cause of your back pain?
- What are you expecting will help you?
- How is your employer responding to your back pain? Your co-workers? Your family?
- What are you doing to cope with back pain?
- Do you think that you will return to work? When?

This Quick Reference Guide to Assessing Psychosocial Yellow Flags in Acute Low Back Pain is to be used in conjunction with the full document. You are strongly advised to read that first.
Deciding how to assess Psychosocial Yellow Flags

Initial presentation

Initial presentation of **acute** low back pain - note Yellow Flags

2-4 weeks

Making expected progress (eg 2 to 4 weeks)?

- **NO**
  - Use screening questionnaire (Table 1)
  - Proceed directly to further assessment if there are significant factors

- **YES**
  - Initial presentation of **acute** low back pain

At Risk

- Clinical assessment of psychosocial factors (Table 2)

Not At Risk

- Do you have the skills and resources required to develop and implement a management plan?
  - **YES**
    - Proceed with modified management
    - Target specific issues to **prevent** long-term distress, reduced activity and work loss
  - **NO**
    - Monitor progress
      - satisfactory restoration of activities?
      - returning to work?
      - satisfactory response to treatment?

  - Refer to suitable clinician
  - Specify date for progress report

January 1997 edition
Management of Acute Low Back Pain

**Initial presentation**

- History and examination
  - Assess for Red Flags
  - Note Yellow Flags

**4 weeks**

- Full reassessment:
  - History and examination
  - Screen for Red and Yellow Flags
  - Investigations as appropriate
  - Consider ongoing treatment requirements
- Any RED FLAGS?
  - Assurance and explanation
  - Advice to continue usual activities, including work if appropriate
  - Analgesics and/or manipulation if required
  - Avoid bed rest
- Review in 7 days if required

**6 weeks**

- Full reassessment
- Recovered? YES
- Consider referral to health professional with expertise in acute low back pain
  - Consider referral to appropriate specialist
  - Consider referral to appropriate specialist and/or investigations

**Recovery**

- Any RED FLAGS?
- Any YELLOW FLAGS?
  - Unsatisfactory restoration of activities?
  - Failure to return to work?
  - Unsatisfactory response to treatment?
- Explain, reassure, encourage continuation of usual activities and return to work
- Consider continuation of effective treatments
- Consider referral to multidisciplinary assessment and care if available

January 1997 edition
Revised May 1999
## Evidence of improved clinical outcomes

- Advice to stay active and continue usual activities
- Paracetamol
- NSAIDs (non-steroidal anti-inflammatory drugs)
- Manipulation – in the first 4 to 6 weeks only

## Evidence of no improvement in clinical outcomes

- Bed rest for more than 2 days
- TENS (= transcutaneous electrical nerve stimulation)
- Traction
- Specific back exercises
- Education pamphlets about low back symptoms

## Evidence of potential harm from the treatments below which should not be used

- Use of narcotics or diazepam (especially for more than 2 weeks)
- Bed rest with traction
- Manipulation under general anaesthesia
- Plaster jacket

## Insufficient research evidence of any improvement in clinical outcomes

- Conditioning exercises for the trunk muscles
- Aerobic conditioning
- Epidural steroid injections
- Workplace back schools
- Acupuncture
- Shoe lifts
- Corsets
- Biofeedback
- Physical modalities (includes ice, heat, short wave diathermy, massage, ultrasound)