

This tool provides information to facilitate the management of recent onset and persistent low back pain for adults

## Focused Examination



### 1. Patient History

- Assess level of concern for major structural or other pathologies. If required, refer to an appropriate healthcare provider.
- Identify and assess other conditions and co-morbidities. Manage using appropriate care pathways.
- Address prognostic factors that may delay recovery (e.g., using the [STarTBack](#) tool).

Major structural or other pathologies may be suspected with certain signs and symptoms (red flags) including:

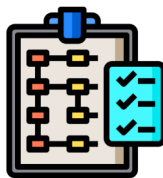
- Cancer (history of cancer, unexplained weight loss, nocturnal pain, age >50), vertebral infection (fever, intravenous drug use, recent infection), cauda equina syndrome (urinary retention, motor deficits at multiple levels, fecal incontinence, saddle anesthesia), osteoporotic fractures (history of osteoporosis, use of corticosteroid, older age), ankylosing spondylitis (morning stiffness, improvement with exercise, alternative buttock pain, awakening due to back pain during the second part of the night, younger age), inflammatory arthritis (morning stiffness, swelling in multiple joints)

Examples of other conditions/co-morbidities:

- Physical conditions: neck pain, headache
- Psychological conditions: depression, anxiety
- Co-morbidities: diabetes, heart disease

Examples of prognostic factors that may delay recovery:

- Symptoms of depression or anxiety, passive coping strategies, job dissatisfaction, high self-reported disability levels, disputed compensation claims, somatization



### 2. Physical Examination

- Assess level of concern regarding major structural and other pathologies.
- Assess for neurological signs.
- Identify type of low back pain.
- Avoid routine imaging.

**Non-specific low back pain:** pain not caused by specific pathologies (e.g., fracture, dislocation, tumor, or systemic disease)

**Low back pain with radiculopathy (sciatica):** spine-related symptoms or deficits, interference with function or activities of daily living and focal pathology compromising neural structures

### 3. Management

- Offer information on nature, management, and the course of low back pain (i.e., most low back pain is benign and self-limiting). See patient handouts for more information to provide to patients.
- Discuss the range of effective interventions with the patient and, together, select a therapeutic intervention.

### 4. Reevaluation and Discharge

- Reassess the patient at every visit to determine if: (1) additional care is necessary; (2) the condition is worsening; or (3) the patient has recovered.
- Monitor for any emerging factors for delayed recovery.

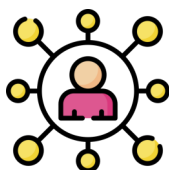
Incorporate one or more valid and reliable outcome measurements when assessing and monitoring patients

- [Self-rated Recovery Question](#)
- [Patient-specific Functional Scale](#)
- [Rolland Morris Low Back Pain and Disability Questionnaire](#)
- [Oswestry Low Back Pain Disability Questionnaire](#)
- [World Health Organization Disability Assessment Schedule](#)
- [Pittsburgh Sleep Quality Index](#)

Visit our website for more [outcome measurements](#)

### 5. Referrals and Collaboration

- Refer the patient to an appropriate healthcare provider for further evaluation at any time during their care if they develop worsening symptoms, or new physical or psychological symptoms.



## Therapeutic Recommendations—Recent onset (0-3 months symptom duration) non-specific low back pain

**Provide** structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and any of the following therapeutic interventions\*:

**Consider** exercise (strengthening/range of motion, aerobic, mind-body or a combination of approaches); group-based or individual, supervised or home-based

**Consider** manipulation

**Consider** multimodal care<sup>†</sup>

- combination of exercise and cognitive behavioral therapy (CBT) (for patients who have high levels of disability or significant distress) with or without manual therapy (spinal manipulation, mobilization or soft tissue techniques)
- combination of exercise and manual therapy (spinal mobilization or soft tissue techniques) with or without psychological therapy

**Consider** muscle relaxants

**Consider** non-steroidal anti-inflammatory drugs (short course for pain only, assess pain relief and discontinue if lack of clinical benefit)

**Do not offer** massage alone

**Do not offer** traction

**Do not offer** passive physical modalities (PENS, TENS, ultrasound, interferential therapy, belts or corsets, foot orthotics, rocker sole shoes)

**Do not routinely offer** opioids, paracetamol, selective serotonin reuptake inhibitors, serotonin–norepinephrine reuptake inhibitors or tricyclic antidepressants, anticonvulsants

## Therapeutic Recommendations - Persistent (4-6 months symptom duration) non-specific low back pain

**Provide** structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and any of the following therapeutic interventions\*:

**Consider** exercise (strengthening/range of motion, aerobic, mind-body or a combination of approaches); group-based or individual, supervised or home-based

**Consider** manipulation or mobilization

**Consider** clinical or relaxation massage

**Consider** needle acupuncture

**Consider** multimodal care<sup>†</sup>

- exercise and cognitive behavioral therapy (CBT) (for patients who have high levels of disability or significant distress) with or without manual therapy (spinal manipulation, mobilisation or soft tissue techniques)
- exercise and manual therapy (spinal manipulation, mobilisation or soft tissue techniques) with or without psychological therapy

**Consider** non-steroidal anti-inflammatory drugs (short course for pain only, assess pain relief and discontinue if lack of clinical benefit)

**Do not offer** passive physical modalities (PENS, TENS, ultrasound, laser, interferential therapy, belts or corsets, foot orthotics, rocker sole shoes)

**Do not offer** traction

**Do not offer** botulinum toxin injections

**Do not offer** paracetamol, selective serotonin reuptake inhibitors, serotonin–norepinephrine reuptake inhibitors or tricyclic antidepressants, anticonvulsants, epidural injections of local anaesthetic and steroid, epidural injections for neurogenic claudication

\*Interventions are recommended if guidelines used terms such as ‘recommended for consideration’ (e.g., ‘offer’, ‘consider’), ‘strongly recommended’, ‘recommended without any conditions required’, or ‘should be used’. Recommendations from low-quality evidence are not listed.

<sup>†</sup>Multimodal care: treatment involving at least two distinct therapeutic modalities, provided by one or more health care disciplines.

## Therapeutic Recommendations - Recent-onset (0-3 months symptom duration) lumbar disc herniation with radiculopathy

**Provide** structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and any one of the following therapeutic interventions\*:

**Consider** manipulation

**Consider** multimodal care†

- Combination of manipulation and exercise

## Therapeutic Recommendations - Persistent (4-6 months symptom duration) lumbar disc herniation with radiculopathy

**Provide** structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and:

- Refer to appropriate healthcare provider for consideration of further investigation of the neurological deficits

\*Interventions are recommended if guidelines used terms such as 'recommended for consideration' (e.g., 'offer', 'consider'), 'strongly recommended', 'recommended without any conditions required', or 'should be used'. Recommendations from low-quality evidence are not listed.

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## Examples of exercises for low back pain



### Cat stretch

Kneel on all fours, hands beneath the shoulders, knees beneath the hips. Tuck chin in and tail underneath, round back towards the ceiling. Then lower back down, arching back the other way. Repeat 10 times.



### Figure 4 Stretch—seated

Place left ankle onto right knee and keeping the back straight, lean forwards from the hips, feeling the stretch in the left buttock. Hold for 20-30 seconds then repeat with the other leg.



### Bird-dog

Kneel on all-fours, hands beneath the shoulders, knees beneath the hips. Keeping the back flat and stomach muscles engaged, stretch one leg straight out behind, lifting it horizontally off the floor. Repeat with the other leg. Then repeat with alternate arms instead of legs. Repeat 10 times.



### Supine Bridge

Lie on back, knees bent, feet flat on the floor, hip-width apart. Tighten the stomach muscles and gently squeeze the gluteal muscles. Lift the hips off the floor to make a straight line from the shoulders to the knees. Slowly lower back to the floor. Repeat 10 times.

Visit our website for more exercises and videos and patient resources

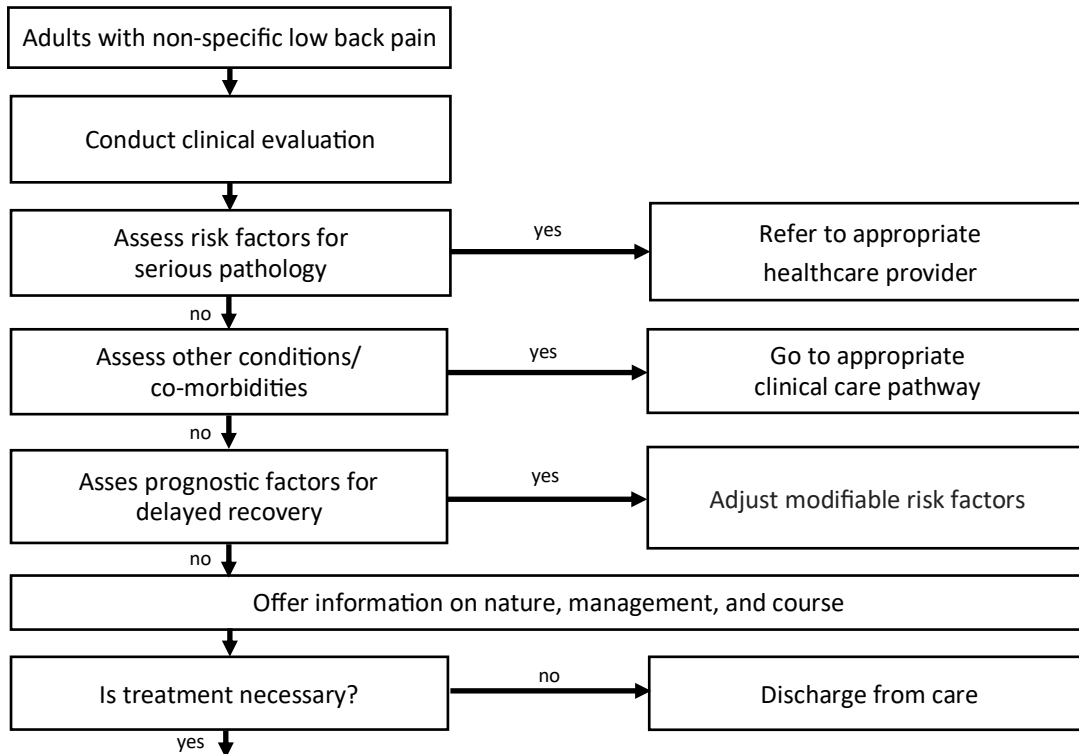
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[Bussi res A.E, et al. Spinal manipulative therapy and other conservative treatments for low back pain: a guideline from the Canadian Chiropractic Guideline Initiative. JMPT. 2018; 41\(4\): 265-293.](#)

[National Institute for Health and Care Excellence \(NICE\). Low back pain and sciatica in over 16s: assessment and management. 2016.](#)

[Qaseem A, et al. Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guidelines from the American College of Physicians. Ann Intern Med. 2017; 166: 514-530.](#)

## Care Pathway for the management of non-specific low back pain



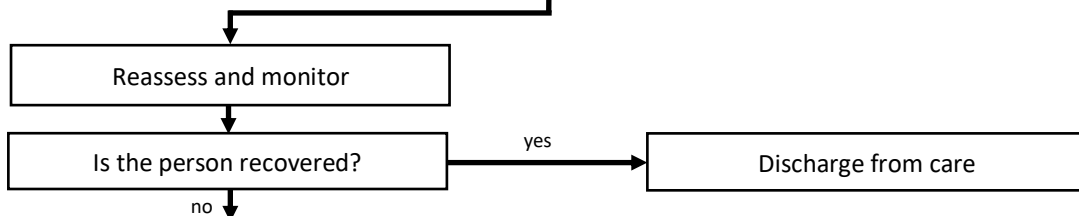
**Provide structured patient education (advice to stay active, reassurance, promote and facilitate return to work and normal activities, self-care advice) and any of the following therapeutic interventions\*:**

### Symptoms ≤ 3 months

- Exercise (strengthening/range of motion, aerobic, mind-body or a combination of approaches); group-based or individual, supervised or home-based
- Manipulation
- Muscle relaxants
- Multimodal care<sup>†</sup> including:
  - exercise and cognitive behavioural therapy (CBT) with or without manual therapy
  - exercise and manual therapy with or without psychological therapy
- Muscle relaxants or NSAIDS (short course for pain only, assess pain relief and discontinue if lack of clinical benefit)

### Symptoms > 3 months

- Exercise (strengthening/range of motion, aerobic, mind-body or a combination of approaches); group-based or individual, supervised or home-based
- Manipulation or mobilization
- Clinical or relaxation massage
- Needle acupuncture
- Multimodal care<sup>†</sup> including:
  - exercise and cognitive behavioural therapy (CBT) with or without manual therapy
  - exercise and manual therapy with or without psychological therapy
- NSAIDS (short course for pain only, assess pain relief and discontinue if lack of clinical benefit)

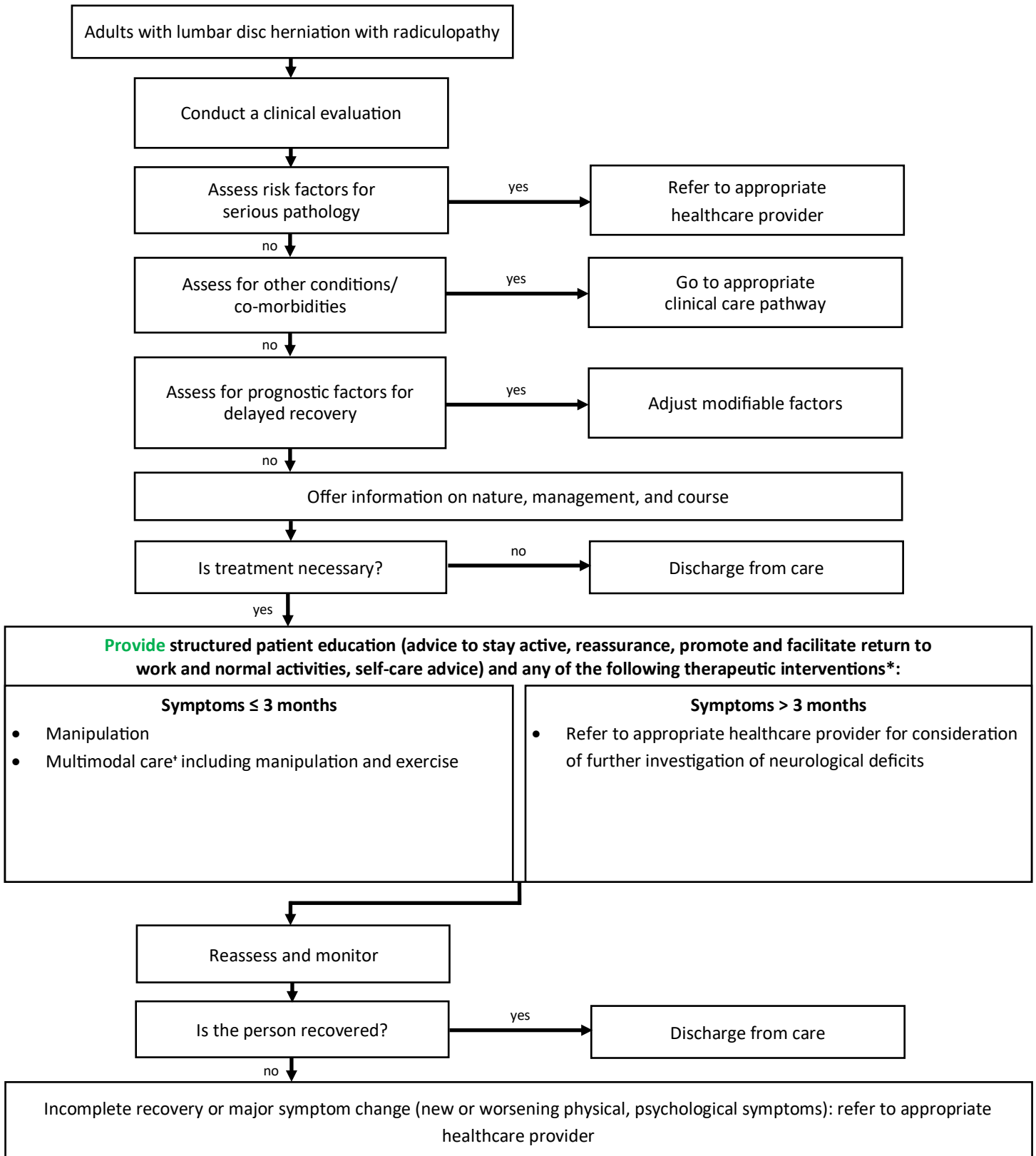


1. Incomplete recovery: for symptoms ≤ 3 months, initiate persistent protocol; for symptoms > 3 months, refer to appropriate healthcare provider
2. Signs of lumbar disc herniation with radiculopathy: refer to appropriate care pathway
3. Major symptom change (new or worsening physical, psychological symptoms): refer to appropriate healthcare provider

\*Interventions are recommended if guidelines used terms such as 'recommended for consideration' (e.g., 'offer', 'consider'), 'strongly recommended', 'recommended without any conditions required', or 'should be used'. Recommendations from low-quality evidence are not listed.

<sup>†</sup>Multimodal care: treatment involving at least two distinct therapeutic modalities, provided by one or more health care disciplines.

## Care pathway for the management of lumbar disc herniation with radiculopathy



\*Interventions are recommended if guidelines used terms such as 'recommended for consideration' (e.g., 'offer', 'consider'), 'strongly recommended', 'recommended without any conditions required', or 'should be used'. Recommendations from low-quality evidence are not listed.

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