

Low Back Pain

Clinical Care Standard

September 2022

The Australian Commission on Safety and Quality in Health Care acknowledges the traditional owners of Country throughout Australia, and their continuing connection to land, sea and community. We pay our respects to them and their cultures, and to elders both past and present.

Published by the Australian Commission on Safety and Quality in Health Care

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Website: www.safetyandquality.gov.au

ISBN: 978-1-922563-79-8

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Australian Commission on Safety and Quality in Health Care.
Low Back Pain Clinical Care Standard. Sydney: ACSQHC; 2022.

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Low Back Pain Clinical Care Standard

Quality statements

1

Initial clinical assessment

The assessment of a patient with a new presentation of low back pain symptoms, with or without leg pain or other neurological symptoms, focuses on screening for specific and/or serious pathology and consideration of psychosocial factors. It includes a targeted history and physical examination, with a focused neurological examination when appropriate. Arrangements are made for follow-up based on an evidence-based low back pain pathway.

2

Psychosocial assessment

Early in each new presentation, a patient with low back pain, with or without leg pain or other neurological symptoms, is screened and assessed for psychosocial factors that may affect their recovery. This includes assessing their understanding of, and concerns about, diagnosis and pain, and the impact of pain on their life. The assessment is repeated at subsequent visits to measure progress.

3

Reserve imaging for suspected serious pathology

Expectations of imaging and its limited role in diagnosing low back pain are discussed with a patient. Early and appropriate referral for imaging occurs when there are signs or symptoms of specific and/or serious pathology. The likelihood and significance of incidental findings are reported and discussed with the patient.

4

Patient education and advice

A patient with low back pain is provided with information about their condition and receives targeted advice to increase their understanding, and address their concerns and expectations. The potential benefits, risks and costs of medicines and other treatment options are discussed, and the patient is supported to ask questions and share in decisions about their care.

5

Encourage self-management and physical activity

A patient with low back pain is encouraged to stay active and continue, or return to, usual activity, including work, as soon as possible or feasible. Self-management strategies are discussed. The patient and clinician develop a plan together that includes practical advice to maximise function, and limit the impact of pain and other symptoms on daily life. The plan addresses individual needs and preferences.

6

Physical and/or psychological interventions

A patient with low back pain is offered physical and/or psychological interventions based on their clinical and psychosocial assessment findings. Therapy is targeted at overcoming identified barriers to recovery.

7

Judicious use of pain medicines

A patient is advised that the goal of pain medicines is to enable physical activity, not to eliminate pain. If a medicine is prescribed, it is in accordance with the current *Therapeutic Guidelines*, with ongoing review of benefit and clear stopping goals. Anticonvulsants, benzodiazepines and antidepressants are avoided, because their risks often outweigh potential benefits, and there is evidence of limited effectiveness. Opioid analgesics are considered only in carefully selected patients, at the lowest dose for the shortest duration possible.

8

Review and referral

A patient with persisting or worsening symptoms, signs or function is reassessed at an early stage to determine the barriers to improvement. Referral for a multidisciplinary approach is considered. Specialist medical or surgical review is indicated for severe or progressive back or leg pain that is unresponsive to other therapy, progressive neurological deficits, or other signs of specific and/or serious pathology.

Indicators for local monitoring

The following indicators will support healthcare services to monitor how well they are implementing the care recommended in this clinical care standard and are intended to support local quality improvement activities.

1 Initial clinical assessment

Indicator 1a: Evidence of a locally approved low back pain assessment protocol. The protocol should specify the:

- Assessment pathway to identify specific and/or serious underlying pathology
- Locally endorsed validated tool(s) to support the initial assessment
- Process to ensure that clinicians are trained in the assessment protocol and endorsed tools
- Pathway for follow-up care
- Process to assess adherence to the protocol.

Indicator 1b: Proportion of patients with acute low back pain with the findings of both their initial clinical assessment and screening for specific and/or serious underlying pathology documented in their medical record.

2 Psychosocial assessment

Indicator 2a: Evidence of a locally approved policy to ensure that patients are screened for psychosocial factors early in each new presentation. The policy should specify the:

- Process to ensure that clinicians are trained in biopsychosocial pain management and identification of psychosocial factors associated with delayed recovery
- Locally endorsed risk assessment tools available to support clinicians to complete early psychosocial assessment
- Referral pathways to appropriate clinicians with experience in pain management, and psychological and/or physical therapies
- Process to assess adherence to the policy.

3 Reserve imaging for suspected serious pathology

Indicator 3a: Evidence of a locally approved policy to ensure the appropriate use of imaging for low back pain. The policy should specify the:

- Appropriate indications for imaging a patient with low back pain
- Locally endorsed educational tools and resources that should be used to support discussions about appropriate imaging and interpretation of findings with patients
- Process to assess adherence to the policy.

Indicator 3b: Proportion of patients with a new episode of low back pain referred for imaging for whom an appropriate indication for imaging is documented in the medical record.

4

Patient education and advice

Indicator 4a: Evidence of local arrangements to ensure that patients are provided with information, advice and reassurance. The local arrangements should specify:

- The information a patient with low back pain should receive about their condition
- That a patient with low back pain is asked about their concerns related to their back pain and their expectations about management of their condition
- The process in place to assess whether a patient's concerns related to their low back pain have been addressed during the consultation.

5

Encourage self-management and physical activity

Indicator 5a: Proportion of patients with low back pain who have documented discussions in their medical record about both self-management strategies and staying active by continuing usual activities.

6

Physical and/or psychological interventions

Indicator 6a: Proportion of patients with low back pain at risk of poor outcomes who were referred to physical and/or psychological clinical services.

Indicator 6b: Evidence of a locally approved policy that specifies the referral pathways to clinicians who provide appropriate physical and/or psychological therapies.

7

Judicious use of pain medicines

Indicator 7a: Proportion of patients with low back pain who received an opioid analgesic.

Indicator 7b: Proportion of patients with low back pain who received an anticonvulsant.

8

Review and referral

Indicator 8a: Evidence of a locally approved policy that defines the process for review and referral of patients with low back pain. The policy should specify the:

- Indications and timelines for when a patient with low back pain should be reassessed to reconsider their diagnosis and treatment plan
- Referral pathways to appropriate healthcare providers and programs to support recovery
- Mechanisms to facilitate effective communication between healthcare providers and the patient
- Process to monitor the effectiveness of the recommended treatment(s).

The definitions required to collect and calculate indicator data are specified online: meteor.aihw.gov.au/content/755790. More information about indicators and other quality improvement measures is provided in [Appendix B](#).

Clinical care standards

Clinical care standards help support the delivery of evidence-based clinical care and promote shared decision making between patients, carers and clinicians. They aim to ensure that people receive best-practice care for a specific clinical condition or procedure, regardless of where they are treated in Australia.

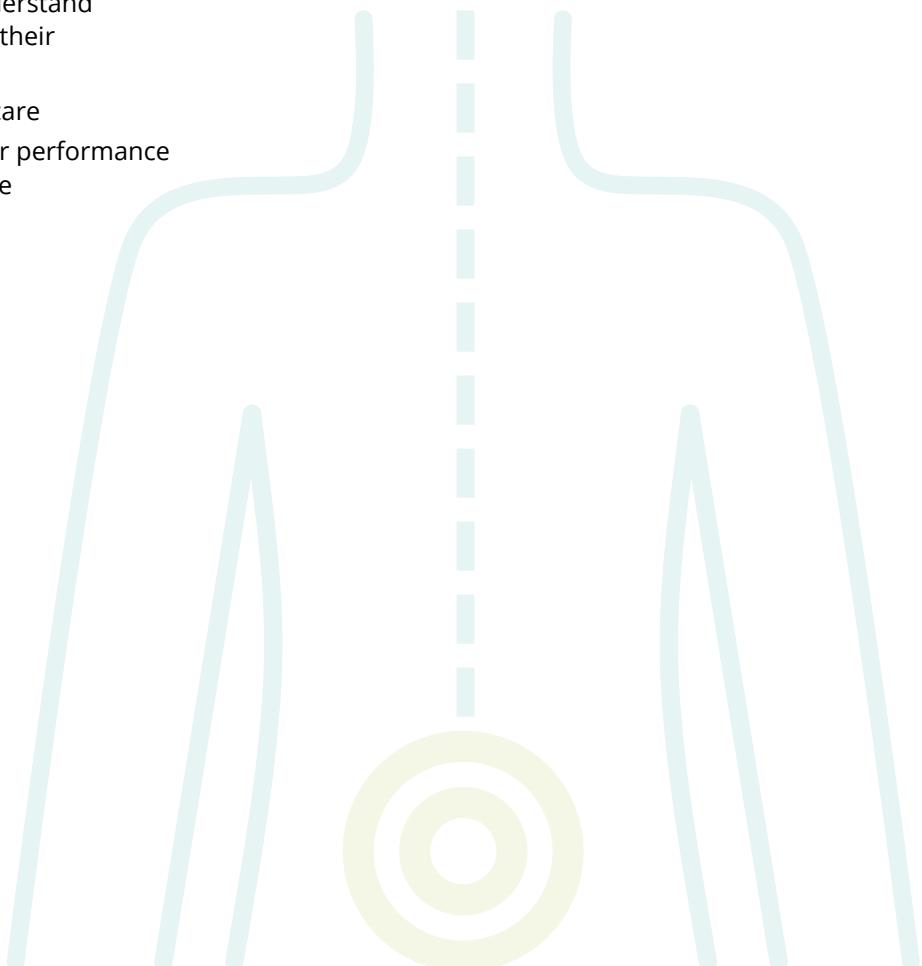
A clinical care standard contains a small number of quality statements that describe the level of clinical care expected for a specific clinical condition or procedure. Indicators are included for some quality statements to assist healthcare services to monitor how well they are implementing the care recommended in the clinical care standard.

A clinical care standard differs from a clinical practice guideline. Rather than describing all the components of care for a specific clinical condition or procedure, a clinical care standard focuses on key areas of care where the need for quality improvement is greatest.

Clinical care standards aim to improve healthcare outcomes by describing key components of appropriate care, enabling:

- Patients and the community to understand the care that is recommended and their healthcare choices
- Clinicians to provide best-practice care
- Healthcare services to monitor their performance and make improvements in the care they provide.

Clinical care standards are developed by the Australian Commission on Safety and Quality in Health Care (the Commission), an Australian Government agency that leads and coordinates national improvements in the safety and quality of health care, based on the best available evidence. By working in partnership with the Australian Government, states and territories, the private sector, clinical experts, and consumers and carers, the Commission aims to ensure that the health system is better informed, supported and organised to deliver safe and high-quality care.



About the Low Back Pain Clinical Care Standard

Context

Low back pain is a common form of back problem that affects most people at some point in their lives.¹ As well as pain, it often leads to psychological distress and poorer quality of life²⁻⁴, and is a leading cause of disability worldwide.⁵

In Australia, back problems are the number one cause of lost work productivity, early retirement and income poverty and a common reason for visiting emergency departments.⁶⁻¹² In 2018–19, more money was spent on managing musculoskeletal disorders, including back problems, than any other category of disease, condition or injury in Australia.¹³

The *Australian Atlas of Healthcare Variation* series has identified marked variation across Australia relevant to the care of low back pain, including in:

- Computed tomography (CT) of the lumbar spine¹⁴
- Opioid medicine use^{14,15}
- Lumbar spinal surgery.¹⁴⁻¹⁷

The *Second Australian Atlas of Healthcare Variation* (second Atlas) identified a need for comprehensive Australian guidance on the early management of low back pain, based on the National Institute for Health and Care Excellence guideline *Low Back Pain and Sciatica in Over 16s: Assessment and management*, and other relevant high-quality Australian and international evidence.¹⁶

The second Atlas recommended that the Australian guidance support appropriate early management, and ensure that patients are informed about and understand the range of treatment options available for low back pain, their risks and their likelihood of benefit.¹⁶

Improved uptake of guideline recommendations for management of low back pain has been shown to result in better patient outcomes, such as in the extent and rate of recovery and a reduced need for ongoing care.^{18,19} It could also lead to more judicious use of imaging; lead to more appropriate use of opioids, other medicines and invasive therapies; and ultimately mean that more patients receive high-value care.^{9,20-22}

This clinical care standard describes the key components of care that patients should receive when they have low back pain, with or without leg pain.

Goals

- To improve the early assessment, management, review and appropriate referral of patients with low back pain
- To reduce the use of investigations and treatments that may be ineffective or unnecessary in managing low back pain.

Scope

This clinical care standard relates to the care that should be received by patients aged 16 years and over who present with low back pain, with or without leg pain. It covers the early clinical assessment, management, and review and referral of people with low back pain symptoms who present with a new acute episode.

Although this standard does not cover the ongoing management of chronic low back pain, it does include the early management of patients with an acute episode, recurrence or exacerbation of chronic low back pain; such patients may progress more quickly to referral and further assessment.

See [Figure 1](#) for an overview of the scope of care described in this clinical care standard.

Healthcare settings

This clinical care standard applies to all healthcare settings where such care is provided, especially:

- Primary healthcare services
- Emergency departments.

The clinical care standard is of particular relevance to:

- General practitioners
- Allied health providers, including physiotherapists, pharmacists, psychologists, chiropractors, occupational therapists, osteopaths and paramedics
- Emergency physicians
- Nurses and nurse practitioners.

It may also be relevant in other specialist services that provide care within the scope of this standard.

Not all quality statements in this clinical care standard will be applicable to every healthcare service or clinical unit. Healthcare services should consider their individual circumstances in determining how to apply each statement.

Implementation should consider the context in which care is provided, local variation and the quality improvement priorities of the individual healthcare service.

What is not covered

This clinical care standard **does not cover**:

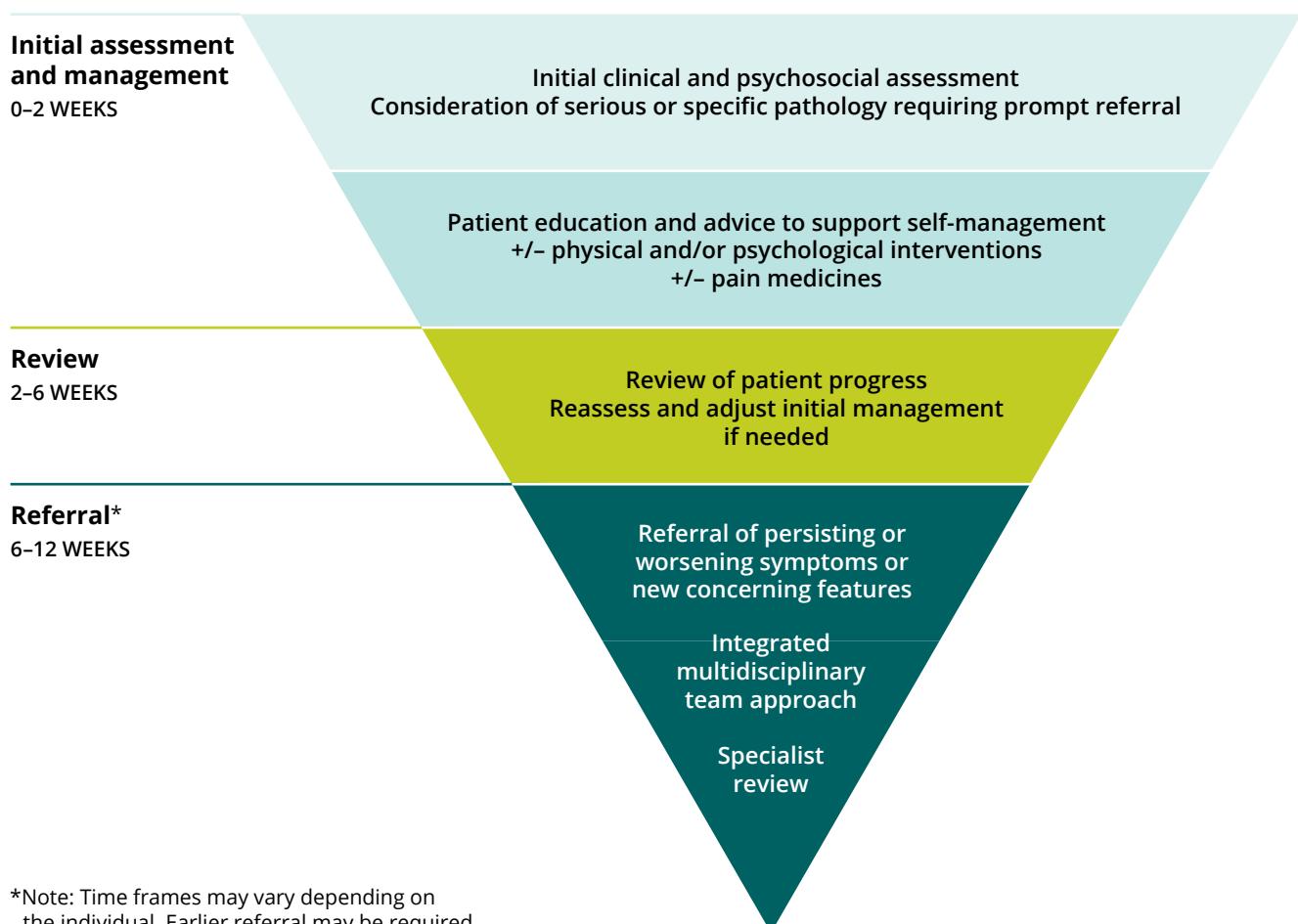
- Delivery of surgical interventions or their indications for use (for example, fusion and disc replacement, discectomy, laminectomy)
- Ongoing management of low back pain persisting longer than 12 weeks, beyond the initial management of an acute exacerbation (although many of the principles of care described may still be relevant)⁹
- Diagnosis or treatment of specific causes of low back pain, such as
 - inflammatory conditions (for example, axial spondyloarthritis)
 - infections (for example, discitis, osteomyelitis, epidural abscess)
 - fracture
 - neoplasm
 - metabolic bone disease (for example, osteoporotic fracture, Paget's disease)
 - non-spinal causes of back pain
 - degenerative spinal disorders.

Terminology

Term	How it is used in this document
Low back pain	<p>Symptoms of pain located between the lower rib margins and the buttock creases. These symptoms are commonly accompanied by pain in one or both legs, and some people have associated neurological symptoms in the lower limbs.²³</p> <p>'Low back pain' is used in this document to describe pain that does not have a diagnosed cause, but is not considered to be associated with specific or serious pathology, based on either clinical assessment or investigations. This has been described in the literature as 'non-specific', 'not specified', 'undiagnosed', 'mechanical' or 'musculoskeletal' low back pain.</p> <p>Low back pain may be acute or chronic, referring to the duration of symptoms.</p>
Leg pain	Pain that radiates into one or both legs; the terms 'radicular pain' and 'sciatica' are both used in international guidelines.
Clinician	Any healthcare provider, including registered and non-registered practitioners, who provide direct clinical care to patients, including doctors, nurses, paramedics, pharmacists, Aboriginal health practitioners and physiotherapists.
Healthcare services	Healthcare services are delivered in a wide range of settings, and vary in size and organisational structure from single healthcare providers to complex organisations. Where 'healthcare services' is used in this standard, it refers to those responsible for leading and governing the service.
Specific and/or serious pathology	<p>Recognised pathological causes of low back pain symptoms – for example, vertebral fracture, malignancy, infection or cauda equina syndrome.</p> <p>Note: The term 'specific and/or serious pathology' is used in preference to 'red flags'.</p> <p>The term 'red flags' is commonly used to refer to history or clinical findings that are believed to increase the likelihood of a serious diagnosis. However, nearly all commonly recommended individual red flags are uninformative and do not substantially change pre-test probabilities of a serious pathology, hence the term 'red flags' has not been used.²³</p>
Psychosocial factors that may affect recovery	Factors that are associated with an increased risk of developing disability in people presenting with low back pain. The term 'yellow flags' is commonly used in the literature, but is not used in this clinical care standard.

About the Low Back Pain Clinical Care Standard

Figure 1: General overview of care – *Low Back Pain Clinical Care Standard*



*Note: Time frames may vary depending on the individual. Earlier referral may be required.

Evidence that underpins this clinical care standard

Key evidence sources that underpin the *Low Back Pain Clinical Care Standard* are current international clinical guidelines from the:

- United Kingdom's National Institute for Health and Care Excellence²⁴
- Scottish Intercollegiate Guidelines Network²⁵
- American College of Physicians²⁶
- Belgian Health Care Knowledge Centre²²
- Danish Health Authority²⁷
- German Disease Management Guideline Group²⁸
- Canadian Institute of Health Economics²⁹
- American College of Occupational and Environmental Medicine³⁰
- United States Department of Veterans Affairs and Department of Defense³¹
- North American Spine Society.³²

Other guidelines to assist clinical decision-making and development of local policy include, but are not limited to:

- New South Wales Agency for Clinical Innovation *Management of People with Acute Low Back Pain: Model of care*⁹
- Queensland Health *Clinical Prioritisation Criteria: Spine (orthopaedics)*³³
- *Therapeutic Guidelines: Rheumatology*³⁴
- *Therapeutic Guidelines: Pain and Analgesia*.³⁵

A list of the evidence sources for this clinical care standard is available on the [Commission's website](#).

Supporting documents

Supporting documents for this clinical care standard are available on the [Commission's website](#).

How to use this clinical care standard

The quality statements describe the expected standard for key components of patient care. The standard explains what each quality statement means:

- **For patients**, so they know what care may be offered by their healthcare system
- **For clinicians**, to support decisions about appropriate care
- **For healthcare services**, to inform them of the policies, procedures and organisational factors that can enable the delivery of high-quality care.

General principles of care

This clinical care standard should be implemented as part of an overall approach to safety and quality, incorporating the following principles that are the foundation for achieving safe and high-quality care:

- Person-centred care and shared decision making
- Informed consent
- Cultural safety for Aboriginal and Torres Strait Islander people
- Equity of care for people from diverse backgrounds.

When applying the information contained in a clinical care standard, clinicians are advised to use their clinical judgement and to consider the individual patient's circumstances, in consultation with the patient or their support people.

For more information and additional Commission resources, see [Appendix A](#).

Measurement for quality improvement

Measurement is a key component of quality improvement processes. The Commission has developed a set of indicators to support clinicians and healthcare services to monitor how well they are implementing the care recommended in this clinical care standard. The indicators are intended to support local quality improvement activities. No benchmarks are set for these indicators.

The indicators are listed with the relevant quality statements. The definitions required to collect and calculate indicator data are available online: meteор.aihw.gov.au/content/755790. More information about indicators and other quality improvement measures is provided in [Appendix B](#).

Information on other quality measures, including patient-reported outcome measures and patient experience measures, is in [Appendix C](#).

Meeting the requirements of national standards and accreditation

Implementing this clinical care standard as part of a quality improvement activity can help:

- Acute healthcare services meet actions within the National Safety and Quality Health Service (NSQHS) Standards³⁶
- Primary care services meet actions within the National Safety and Quality Primary and Community Healthcare Standards (Primary and Community Healthcare Standards).³⁷

More information about clinical care standards, the NSQHS Standards, and the Primary and Community Healthcare Standards is in [Appendix D](#).

Background: Low back pain

About 1 in 6 Australians report having back problems, which include a range of musculoskeletal conditions related to the back.³ Low back pain is the most common form of back problem and contributes significantly to the burden of back problems and musculoskeletal pain in Australia and globally.^{3,5,38} This burden is increasing and is expected to continue to increase with the ageing population.^{1,3,5,38} Back problems are the second most common reason Australians seek care from their general practitioner⁷, and a leading cause of presentation to emergency departments in Australia and throughout the world.^{6,39}

Low back pain refers to pain felt in the lower part of the spine (lumbar spine) located between the 12th rib and the inferior buttock crease.⁴⁰ It is commonly accompanied by pain in one or both legs.²³

Most people will have low back pain at some point in their life^{35,38} and more commonly during middle or older age.^{1,3,6,7,9-11,41} Not all people who experience low back pain will seek care⁴²⁻⁴⁴ as new episodes are typically brief and resolve quickly on their own.⁴⁵ For people who do consult a healthcare provider, most improve rapidly with primary care management within the first six weeks of presentation, and without the need for further investigation, referral or presentation to the emergency department for care.^{8,9,24,40,46,47} After six weeks, recovery is slower, but most people can still achieve minimal pain and disability at one year – particularly if they present early in the acute episode for care.⁸

Nonetheless, recurrence is common and is responsible for much of the burden of low back pain.^{48,49} About one-quarter of people who initially recover from an acute episode have additional episodes within a year.⁴⁹ For a small proportion of patients, low back pain can become a persistent or chronic condition that recurs episodically or remains present but with exacerbations.⁴³ Once this occurs, management can be more challenging, with slower time to recovery.^{8,9,23,47-50}

There is broad international consensus on the best ways to manage low back pain. Early appropriate management may reduce the risk of recurrence and progression to persistent or chronic low back pain.^{4,8,47-49,51,52} Guideline recommendations include:

- Risk stratification to identify patients who may be at risk of a poor outcome, using a biopsychosocial model
- Initial management in primary care with non-invasive treatments that focus on improving function and addressing psychosocial factors⁴⁶ through self-management, including physical and psychological therapies
- Limiting the use of medicines, even commonly used analgesics such as non-steroidal anti-inflammatory drugs (NSAIDs) and paracetamol.

For several reasons, many people do not receive guideline-recommended care.^{46,53} A recent systematic review of 195,000 patients across seven countries, including Australia, found that overuse of imaging and opioid medicines, and underuse of advice and information, were common in patients presenting with low back pain to primary healthcare providers and emergency departments. Specifically:

- Imaging was received by one-quarter of patients with low back pain in primary care, and one-third of patients in emergency departments
- Less than half overall received appropriate medicines; one-third of patients in primary care and up to two-thirds of patients in emergency departments received opioids
- Only 1 in 5 patients in primary care received advice and information from their healthcare provider that aligned with guideline recommendations.⁵⁴

A Canadian study also found that many patients managed in primary care did not receive adequate treatment before referral to a surgeon. The authors suggested that patients without adequate initial treatment may be at risk of developing persistent or worsening back pain while awaiting surgical assessment.²¹

Biopsychosocial assessment and management

Screening for serious pathology is universally endorsed in guidelines (such as for malignancy, vertebral fracture, infection or inflammatory disorders).⁹ However, such pathology comprises less than 1% of cases in primary care.^{23,55} Use of a biopsychosocial model to inform assessment and management of low back pain without a specific nociceptive source is consistently recommended.^{24,26,27,46} Improved education and training in this model for assessing and managing low back pain are crucial to reducing unnecessary investigations and treatment, and improving patient outcomes.⁵⁶

Imaging

Although methods such as magnetic resonance imaging (MRI), CT and X-ray can be used to image the spine, few indications for imaging of low back pain are supported by guidelines. The routine use of imaging is discouraged unless alerting features are present and serious pathology is suspected, or it is likely to change management, because findings are often poorly correlated with symptoms.³⁴ Incidental findings can also lead to unnecessary worry for patients, and trigger additional tests and treatment that are of little clinical value.^{40,46,56}

To support the appropriate use of imaging in people with low back pain, as part of Australia's Choosing Wisely initiative, five peak professional societies and clinical colleges recommend that imaging should not be performed if there are no indicators of a serious underlying cause for low back pain.⁵⁷

For patients with low back pain who require imaging, the choice of method is guided by the suspected pathology.³⁴ MRI – delivered in a specialist setting – is generally preferred because it has a better sensitivity and superior safety profile.^{24,34,58} Although CT and X-ray have a limited role, they may be used in the presence of alerting features and after considering the risks and benefits, if MRI is contraindicated or unavailable, or if early referral to a specialist is not possible.^{34,41,44,59}

Concerns about the possible overuse of imaging of the lumbar spine have been expressed for some time. The first *Australian Atlas of Healthcare Variation* reported that, in 2013–14, the rate of Medicare Benefits Schedule-subsidised services for CT imaging of the lumbar spine was 11.8 times higher in the area with the highest rate than in the area with the lowest rate.¹⁴ Although the Atlas data do not allow assessment of the appropriateness of imaging requests, there is a clear anomaly between the rate of CT imaging and the prevalence of serious causes for low back pain. As the likelihood of diagnosing serious disease is low, the variation suggests that some people are receiving imaging that is inappropriate and of little or no diagnostic benefit, exposing people to unnecessary radiation.⁵⁵

Education and self-management

Guidelines recommend education that supports self-management, and resumption of normal activities and exercise.⁴⁶ Active strategies that address psychosocial factors are recommended instead of passive approaches such as bed rest and pain medicines, which are linked with worsening disability.^{46,56}

Educating patients about addressing lifestyle factors that may exacerbate symptoms is an important part of treatment. Smoking, physical inactivity and obesity are each associated with low back pain.³⁴ Lifestyle changes can reduce low back pain symptoms; for example, a 5% reduction in body weight has been shown to reduce the symptoms of low back pain.⁶⁰

Barriers to evidence-based management include misconceptions among both the general public and clinicians about the causes and prognosis for low back pain, and the effectiveness of different treatments.⁵⁶ Consistent messaging and reassurance from all clinicians involved in a patient's care are important to dispel myths and support shared decision making. Checking the patient's understanding of the advice and whether they feel reassured is essential.

Low health literacy is a risk factor for poor health outcomes.⁶¹ Chronic, disabling low back pain disproportionately affects people with low income and limited education.²³ Awareness of how patients' health literacy levels influence their ability to seek, understand and apply health information can assist clinicians to tailor patient education and communication to support self-management.

Pharmacological interventions

Guidelines recommend pharmacological therapy as second-line therapy for low back pain after self-management and physical or psychological strategies to improve function.⁴⁶ Yet a variety of medicines are commonly used for low back pain, some of which have little evidence of effectiveness.

If medicines are needed, NSAIDS are recommended as first-line treatment for people at low risk of harm from NSAID use.^{3,47,62} Although opioid analgesics relieve severe acute pain, they are high-risk medicines that can cause significant harm, including death, and are not significantly more effective than other commonly used medicines, such as NSAIDs, for managing low back pain.⁶³ When an opioid analgesic is considered appropriate after careful assessment of risks and benefits, immediate-release formulations for short-term use are recommended, at the lowest effective dose and for the shortest duration possible.^{3,15,24,47,62,64}

The *Third Australian Atlas of Healthcare Variation* identified that the rate of opioid analgesics dispensed per 100,000 people nationally increased by 5% between 2013 and 2017.¹⁵ Concerns about inappropriate prescribing and misuse of opioid medicines have prompted a number of national responses in Australia to support harm minimisation¹⁵, including Australia's response to the World Health Organization Global Patient Safety Challenge: Medication without Harm⁶⁵ and development of the *Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard*, supported by Australia's Therapeutic Goods Administration.⁶⁶

Surgery

The first, second and fourth editions of the *Australian Atlas of Healthcare Variation* identified marked differences in hospitalisation rates for lumbar spine surgery in people aged 18 years and over.^{14,16,17} Further analysis of the reasons for this variation is required; however, potential contributing factors suggested in the atlases included uncertainty about adherence to guideline recommendations for the early management of low back pain in primary care, and a lack of access to models of care encouraging self-management and a multidisciplinary approach. Better use of guidelines, including the assessment and management of psychosocial factors and optimal use of non-surgical treatment options, may prevent deterioration in pain and function for patients with low back pain, while improving access to care for patients most likely to benefit from surgery.^{21,67} For example, this may include spinal decompression for people with low back pain and leg pain for whom non-surgical treatment has not improved pain or function.²⁴

Implementation

There are several challenges to implementing evidence-based recommendations for low back pain in clinical practice.^{68,69} Reported barriers include:

- Current models of healthcare reimbursement
- Short consultation times in primary care
- Low awareness or uptake of clinical guidelines
- Physician misconceptions about best care⁶⁹
- Fear of litigation if serious pathology is missed
- Patient expectations⁴⁶
- Long wait times²³
- Lack of access to, and availability of, support services for self-management²³
- Lack of access to, and availability of, specialised effective interventions.²³

Implementing this clinical care standard and integration with other efforts to improve the management of low back pain across the health sector will be vital to addressing some of these issues and achieving better outcomes.

1

Quality statement 1 – Initial clinical assessment

The assessment of a patient with a new presentation of low back pain symptoms, with or without leg pain or other neurological symptoms, focuses on screening for specific and/or serious pathology and consideration of psychosocial factors. It includes a targeted history and physical examination, with a focused neurological examination when appropriate. Arrangements are made for follow-up based on an evidence-based low back pain pathway.

Purpose

To ensure that a patient's management is informed by an appropriate history and physical examination to screen for serious pathology, and assess pain, physical abilities and function.^{24,40}

What the quality statement means

For patients

If you see a clinician about your low back pain, they will ask:

- About your pain
- How it is affecting your daily activities
- How it is making you feel
- About your previous health issues and background.

This will help them to understand your needs and goals for your care.⁴⁰ Your clinician will examine you and check for signs of serious health issues, and may refer you for further tests or investigations if necessary. However, even though back pain can feel bad and interfere with your life, serious causes are very rare (less than 5% of cases).²³

If a serious underlying problem is unlikely, low back pain can be treated with simple measures because the pain will get better on its own over time. It is often not possible or necessary to identify an exact cause for low back pain, and it can still be treated even if the cause is not known.³⁴ If you have leg pain, this can be nerve-related pain – commonly called 'radicular pain', 'sciatica' or 'referred' pain – which starts somewhere in your back but is felt in your legs.¹¹ For most people, this is managed the same way as low back pain.

You and your clinician should discuss what follow-up you may need. You may need further visits to check on your symptoms and wellbeing, and to adjust your treatment if necessary. See your clinician urgently if new symptoms appear, such as problems with controlling urine or bowel movements, or numbness or weakness in your legs, back or genitals.

For clinicians

Early assessment should include a targeted history of symptoms, including attention to the pain, past history, functional capacity and alerting features for specific and/or serious pathology (see [Table 1](#)).⁹ Consider differential diagnoses – for example, nephritis, colitis, hip osteoarthritis and aortic dissection.

Physical examination should include a postural assessment, bony and soft tissue palpation for tenderness and tone, and movement assessment for range and associated pain.

A physical examination supports diagnosis and can help to build the patient's confidence in the therapeutic relationship.^{9,22,28,29,31}

Consider using an evidence-based low back pain pathway that guides the appropriate assessment of patients who present with low back pain symptoms. The pathway should incorporate screening for specific and/or serious pathology. It should allow the use of validated tools, such as the [Brief Pain Inventory \(short form\)](#)⁷⁰ or the [Clinically Organized Relevant Exam \(CORE\) Back Tool](#)⁷¹, to aid assessment and monitoring of the patient's progress.⁴⁰ It should also allow referral to specialist clinicians, when needed, for management.

For acute leg pain without severe or progressive motor weakness, initial management should be the same as for acute low back pain.^{9,34}

For patients with low back pain symptoms and/or leg symptoms where there is clinical suspicion of neurological impairment, include a focused neurological examination with straight leg raise, deep tendon reflexes, and strength and sensation testing.⁷²

Arrange appropriate investigation or intervention if alerting features of specific and/or serious underlying pathology are identified. The presence of multiple alerting features is associated with a greater likelihood of serious pathology compared with the presence of a single alerting feature.³⁴ Emergency assessment or referral is indicated for clinical signs of spinal nerve root compression or spinal cord compression with rapidly progressive neurological signs or symptoms³³, suspected spinal infection or cauda equina syndrome, spinal tumour, trauma or fracture.*⁹

Determine the most likely diagnosis†,^{11,72}, document the assessment findings and communicate them to the patient. Arrange follow-up for monitoring or further assessment. Reassess at subsequent visits to check for symptom progression or any new concerning features that need urgent investigation or specialist assessment (refer to [Quality statement 8 – Review and referral](#)).^{35,40}

* See Queensland Health [Spine \(Orthopaedics\)](#) for a list of common traumatic spine injuries that require urgent referral to emergency and should not be referred for elective/fracture clinic categorisation.³³

† Likely diagnoses include^{11,72}:

- Serious spinal disease (less than 1% of cases in primary care)
- Radicular pain or neurogenic claudication (5–10% of cases in primary care)
- Non-specific low back pain (90–95% of cases in primary care).

Table 1: Alerting features of serious pathologies in patients with low back pain

Serious pathology	Alerting features
Spinal infection (for example, osteomyelitis, epidural abscess)	<ul style="list-style-type: none"> ▪ Symptoms and signs of infection (fever) ▪ Raised inflammatory markers (C-reactive protein, erythrocyte sedimentation rate) ▪ Risk factors for infection (underlying disease, immunosuppression, penetrating wound, history of intravenous drug use)
Vertebral fracture	<ul style="list-style-type: none"> ▪ History of considerable trauma ▪ History of minor trauma if patient <ul style="list-style-type: none"> – is older than 50 years – has a history of osteoporosis or taking corticosteroids
Malignancy	<ul style="list-style-type: none"> ▪ History of malignancy ▪ Age older than 50 years ▪ Failure to improve with treatment ▪ Unexplained weight loss ▪ Pain at multiple sites ▪ Pain while resting ▪ Symptoms in other body systems (e.g. cough, dysphagia)
Visceral disease (e.g. pancreatitis, aortic aneurysm)	<ul style="list-style-type: none"> ▪ Sudden onset of pain ▪ Abdominal pain radiating to the back ▪ Associated collapse or hypotension ▪ Absence of aggravating features (such as pain not aggravated by spinal movement)
Suspected or threatened cauda equina compression	<p>Early symptoms⁷³:</p> <ul style="list-style-type: none"> ▪ Bilateral/alternating radiculopathy ▪ Subjective sphincteric problems ▪ Subjective perineal sensory changes <p>Established symptoms:</p> <ul style="list-style-type: none"> ▪ Altered bladder and/or bowel function (urinary retention, faecal incontinence) ▪ Reduced sensation in the 'saddle' area ▪ Progressive bilateral foot or leg weakness

continued over

Serious pathology	Alerting features
Spinal cord pathology (myelopathy)	<ul style="list-style-type: none"> ■ Sensory-level weakness ■ Hyperreflexia or hyporeflexia ■ Upgoing plantar responses ■ Sensory loss ■ Gait disturbance ■ Reduced balance ■ Reduced fine motor control ■ Clonus
Axial spondyloarthritis	<ul style="list-style-type: none"> ■ Age younger than 40 years ■ Symptom duration of more than three months ■ Prolonged morning stiffness and night pain ■ Alternating buttock pain ■ Altered/wide-based gait ■ Improvement of symptoms with physical activity or exercise, and failure to improve with rest ■ Response to non-steroidal anti-inflammatory drugs

Source: Based on *Therapeutic Guidelines: Rheumatology*.³⁴

For healthcare services

Ensure the use of an evidence-based low back pain pathway that guides appropriate assessment, investigation, referral, management and counselling of patients who present with low back pain symptoms, based on their history and physical examination. The pathway should incorporate screening for specific and/or serious pathology, allow the use of validated tools to aid assessment early in an episode of low back pain and monitoring at subsequent visits⁴⁰, and allow referral to specialists if needed – for example:

- Brief Pain Inventory (short form)⁷⁰
- Clinically Organized Relevant Exam (CORE) Back Tool.⁷¹

Ensure that clinicians have current training in the clinical assessment of back pain and, when relevant, in the use of validated tools.

Related resources

Evidence-based pathways to guide assessment:

- New South Wales Agency for Clinical Innovation *Management of People with Low Back Pain: Model of care*⁹ – provides guidance on the care to be provided to patients who present to their general practitioner or the emergency department with low back pain
- Emergency Care Institute New South Wales *Acute Low Back Pain*⁷⁴ – provides guidance on the care to be provided to patients who present to the emergency department with acute low back pain
- Queensland Health clinical prioritisation criteria *Spine (Orthopaedics)*³³ – provides guidance to assist with the clinical assessment and referral of people with low back pain to specialist services according to clinical urgency.

Indicators for local monitoring

Indicator 1a: Evidence of a locally approved low back pain assessment protocol. The protocol should specify the:

- Assessment pathway to identify specific and/or serious underlying pathology
- Locally endorsed validated tool(s) to support the initial assessment
- Process to ensure that clinicians are trained in the assessment protocol and endorsed tools
- Pathway for follow-up care
- Process to assess adherence to the protocol.

METEOR link: meteor.aihw.gov.au/content/759554

Indicator 1b: Proportion of patients with acute low back pain with the findings of both their initial clinical assessment and screening for specific and/or serious underlying pathology documented in their medical record.

METEOR link: meteor.aihw.gov.au/content/759579

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR links.



Clinician practice points

Initial assessment and follow-up may differ for patients with severe low back pain or an exacerbation of chronic or persistent low back pain:

- For patients presenting with **severe low back pain**, it may be necessary to prioritise rapid assessment of pain and treatment of acute medical problems (for example, trauma); comprehensive assessment may need to be postponed until distressing symptoms are controlled³⁵
- For patients presenting with an exacerbation of **chronic or persistent low back pain**, a comprehensive pain assessment and neurological examination are needed before initiating management; use the assessment to identify whether the patient is experiencing an exacerbation of chronic pain or acute pain resulting from new pathology.³⁵



Clinician communication tips

For a patient with low back pain

Explain to the patient that low back pain can be effectively managed even when the cause is not known – for example:

'We've done a good assessment here today and there is no indication that your back pain is associated with a serious underlying condition. While the pain can be severe the good news is that most acute episodes of low back pain settle within a couple of weeks. In the meantime, there are a lot of things you can do to help reduce and manage your low back pain.'

For a patient with low back pain with leg pain

Explain how low back pain and leg pain may be related and what can be done – for example:

'The pain going down your leg suggests the pain may be coming from a nerve in your spine. This is called radicular pain or sciatica. Radicular pain is thought to involve irritation or compression of one or more nerves in your spine. This can get better over time.'

Sources: Adapted from [MyBackPain⁷⁵](#) and Traeger et al.¹¹

2

Quality statement 2 – Psychosocial assessment

Early in each new presentation, a patient with low back pain, with or without leg pain or other neurological symptoms, is screened and assessed for psychosocial factors that may affect their recovery. This includes assessing their understanding of, and concerns about, diagnosis and pain, and the impact of pain on their life. The assessment is repeated at subsequent visits to measure progress.

Purpose

To identify a patient's risk of impaired functional outcome related to psychosocial factors, and determine the complexity of support they may need to self-manage⁷⁶ their condition and prevent progression to chronic pain.^{9,22}

What the quality statement means

For patients

It can be harder to recover from back pain if there are other issues that are influencing your experience of pain. These might include:

- Your general mood
- Your understanding about what is causing your pain and what you can do about it
- Other factors in your life such as financial, family or work issues that may be causing you distress⁴⁰
- The impact the pain is having on your life (such as sleep).

Your clinician may ask you about such issues to understand how they relate to your pain.⁴⁰ They may use questionnaires to help understand how your pain is affecting your life, and to help identify the best treatment and support for you. For example, you might not be able to change factors causing distress, but you can learn ways to reduce their impact on you, which can also help with your pain. This is why it is important to identify and understand what is influencing your pain and what can be done to help with your recovery.

■ For clinicians

Certain psychosocial factors and emotional responses to pain are associated with delayed recovery^{9,22,24,28,29}, and their presence indicates the need for further assessment and appropriate intervention (see **Box 1**).³⁴ Use a biopsychosocial approach that considers the relationship between the patient's beliefs and pain behaviours to manage the patient.⁹

Consider using risk assessment tools early in each new episode (first or second visit) of low back pain (see the clinician practice points). These tools can help to identify a patient's risk of poor functional outcome or long-term pain and disability, and reduce the time involved in assessment and investigation.^{9,24,28,77} Examples include:

- STarT Back Screening Tool⁷⁸
- Örebro Musculoskeletal Pain Screening Questionnaire (10-item version).⁷⁹⁻⁸¹

Repeat risk assessment at subsequent visits to measure progress.

Listen to the patient, and validate that their thoughts and feelings are understandable, and the pain they are experiencing is real.⁷⁷ Explore the patient's reasons for presenting and perception of their pain, and identify harmful misconceptions, including fear-avoidance behaviour.^{34,35} Motivational interviewing techniques can help to explore and dispel misconceptions in a non-threatening way.⁷⁶

Box 1: Psychosocial factors associated with delayed recovery

Factors associated with delayed recovery from low back pain include:

- Belief that pain and activity are harmful
- 'Sickness behaviours' (such as extended rest)
- Low or negative moods, or social withdrawal
- Mental health comorbidities or trauma history
- Treatment that does not fit with best practice, but remains the focus of the patient's requests
- Problems with the compensation system
- Previous history of back pain, time off work or other claims
- Problems at work or poor job satisfaction
- Financial hardship
- Overprotective family or lack of social support.

Source: Adapted from New South Wales Agency for Clinical Innovation.⁹

For healthcare services

Provide clinicians with training and skills to support them in managing patients with low back pain, including biopsychosocial pain management.

Provide access to assessment tools that include screening for psychosocial barriers to recovery in patients with low back pain, such as the STarT Back Screening Tool, or the short form Örebro Musculoskeletal Pain Screening Questionnaire. Ensure that systems and processes are in place to distribute and score risk assessment tools, and that clinicians are trained in their use.

Related resources

Risk assessment tools to identify patients at risk of poor functional outcomes:

- See the [STarT Back website](#) for further guidance on using the risk assessment tool, including an [Online STarT Back Calculator](#) and [downloadable screening tool](#)
- The Örebro Musculoskeletal Pain Screening Questionnaire (10-item version) is available on the Western Australian Department of Health [PainHealth website](#) or on the [OrthoToolKit website](#), and a downloadable version with scoring instructions is available on the [Central and Eastern Sydney Primary Health Network website](#).

Indicator for local monitoring

Indicator 2a: Evidence of a locally approved policy to ensure that patients are screened for psychosocial factors early in each new presentation. The policy should specify the:

- Process to ensure that clinicians are trained in biopsychosocial pain management and identification of psychosocial factors associated with delayed recovery
- Locally endorsed risk assessment tools available to support clinicians to complete early psychosocial assessment
- Referral pathways to appropriate clinicians with experience in pain management, and psychological and/or physical therapies
- Process to assess adherence to the policy.

METEOR link: meteor.aihw.gov.au/content/759556

More information about the indicator and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.



Clinician practice points

Assessment tools such as the STarT Back and Örebro questionnaires help to identify psychosocial risks for poor clinical outcomes. If there is insufficient time during the consultation to do this:

- Advise the patient that pain affects both the body and the mind, and that some simple questionnaires can help identify their concerns and aid their treatment provider in developing the best treatment and support for them.
- Provide them with an assessment tool and ask them to complete it and bring it for further discussion at the next consultation
- Direct them to websites such as [MyBackPain⁷⁵](#) or [PainHealth⁸¹](#) to complete the risk assessment online and receive tailored information to support self-management, and to inform discussion at a subsequent consultation.

The same information may be gained by direct questioning when taking a patient history. Some simple questions you can use to identify psychosocial issues include the following⁴⁰:

- **Do you think your pain will improve or become worse?**
 - *What to listen for:* A belief that the back pain is damaging or potentially severely disabling
- **Do you think you would benefit from activity, movement or exercise?**
 - *What to listen for:* Fear and avoidance of activity or movement-related pain
- **How are you coping emotionally with your back pain?**
 - *What to listen for:* Signs of low mood, distress or withdrawal from social interaction
- **What treatments or activities do you think will help you recover?**
 - *What to listen for:* Expectations of passive treatment, rather than expectations that active participation will help
- **Are you worried that something has been missed?**
 - *What to listen for:* Concerns that there is serious pathology that has been missed.

Source: Adapted from Health Quality Ontario.⁴⁰



Clinician communication tips

Inform the patient of the effect that pain can have on the body and the mind – for example:

'The experience of pain affects both body and mind, so treatments targeted at both factors can reduce pain and disability more than medical care alone.⁵⁶ Back pain does not usually mean your back is badly damaged. It means it is sensitised. The brain acts as an amplifier: the more you worry and think about your pain, the worse it can get.'

3

Quality statement 3 – Reserve imaging for suspected serious pathology

Expectations of imaging and its limited role in diagnosing low back pain are discussed with a patient. Early and appropriate referral for imaging occurs when there are signs or symptoms of specific and/or serious pathology. The likelihood and significance of incidental findings are reported and discussed with the patient.

Purpose

To manage patient expectations and avoid unnecessary investigations, exposure to radiation and unnecessary distress.⁸² To confirm or rule out a suspected diagnosis for patients with alerting features for serious underlying pathology.⁴⁰

What the quality statement means

For patients

In most cases of low back pain, an imaging test such as an X-ray, a CT (computed tomography) scan or MRI (magnetic resonance imaging) is not necessary. These tests are usually only needed when your clinician needs to rule out a serious cause for your back pain. It is important to remember that more than 95% of low back pain cases do not have serious underlying causes.

Your clinician will talk to you about the role of imaging in your situation. Unless there is a good reason, it is best to avoid scans because they are unlikely to find the reason for your pain or change how it is treated. Scans can often show changes that are normal for your age and may not be causing your pain, such as:

- Disc degeneration
- Facet joint changes
- Disc bulges
- Disc protrusions.

Changes such as these are also found on the scans of people who do not have low back pain. Knowing about these changes may worry you and can lead to further tests, consultations or treatments that do not help your back pain. Scans can also be expensive and inconvenient, and some can expose you to radiation.

For clinicians

A patient without alerting features for serious underlying pathology may not receive any clinical benefit from diagnostic imaging (see [Table 1](#) in Quality statement 1).^{*,28,40} Explain that investigations are rarely helpful or indicated for low back pain. Explain that imaging

* Through the [Choosing Wisely](#) initiative, five of Australia's peak health professional colleges, societies and associations recommend that clinicians should not request imaging if there are no indicators of a serious cause for low back pain.

outside recommendations can create unnecessary concerns and that incidental findings with no clinical significance can lead to unnecessary tests (see [Table 2](#)).

Early imaging is appropriate for a patient with alerting features for specific and/or serious underlying pathology (see [Table 1](#)); consider specialist involvement to obtain guidance and appropriate imaging studies.^{9,28,40,82} MRI is generally preferred because it offers better sensitivity and a superior safety profile. However, it is not covered by the Medicare Benefits Schedule if requested by a general practitioner, a physiotherapist or a chiropractor.⁸³ CT has a limited role but in the presence of alerting features may be considered in some cases, such as when MRI is unavailable or contraindicated, or early consultation with a specialist is not available.⁵⁹ [Figure 2](#) outlines appropriate imaging decisions.

Ensure that sufficient detail is included on the radiological referral, such as the provisional diagnosis and the clinical question being asked, to ensure appropriate imaging and reporting (see [Box 2](#)), and discuss any risks of radiation exposure with the patient.

Ensure that the patient understands the radiological findings. When no serious pathology is found, discuss the report in the context of history, examination and other investigations. Patient interpretations of imaging findings can lead to unnecessary distress and fear-avoidance behaviour.^{34,35} Advise the patient that findings such as disc degeneration; facet joint arthritis; and disc bulges, fissures and protrusions are very common in people without pain and are usually a normal feature of ageing (see [Table 2](#)).⁷⁶ Epidemiological reporting of imaging findings may help patients understand the probability and significance of incidental findings.

The need for imaging should be reassessed for patients with changing or worsening symptoms.²⁸ Patients with unchanged symptoms should not undergo repeated imaging unless a diagnosis that was not considered on previous imaging is being contemplated.^{15,28}

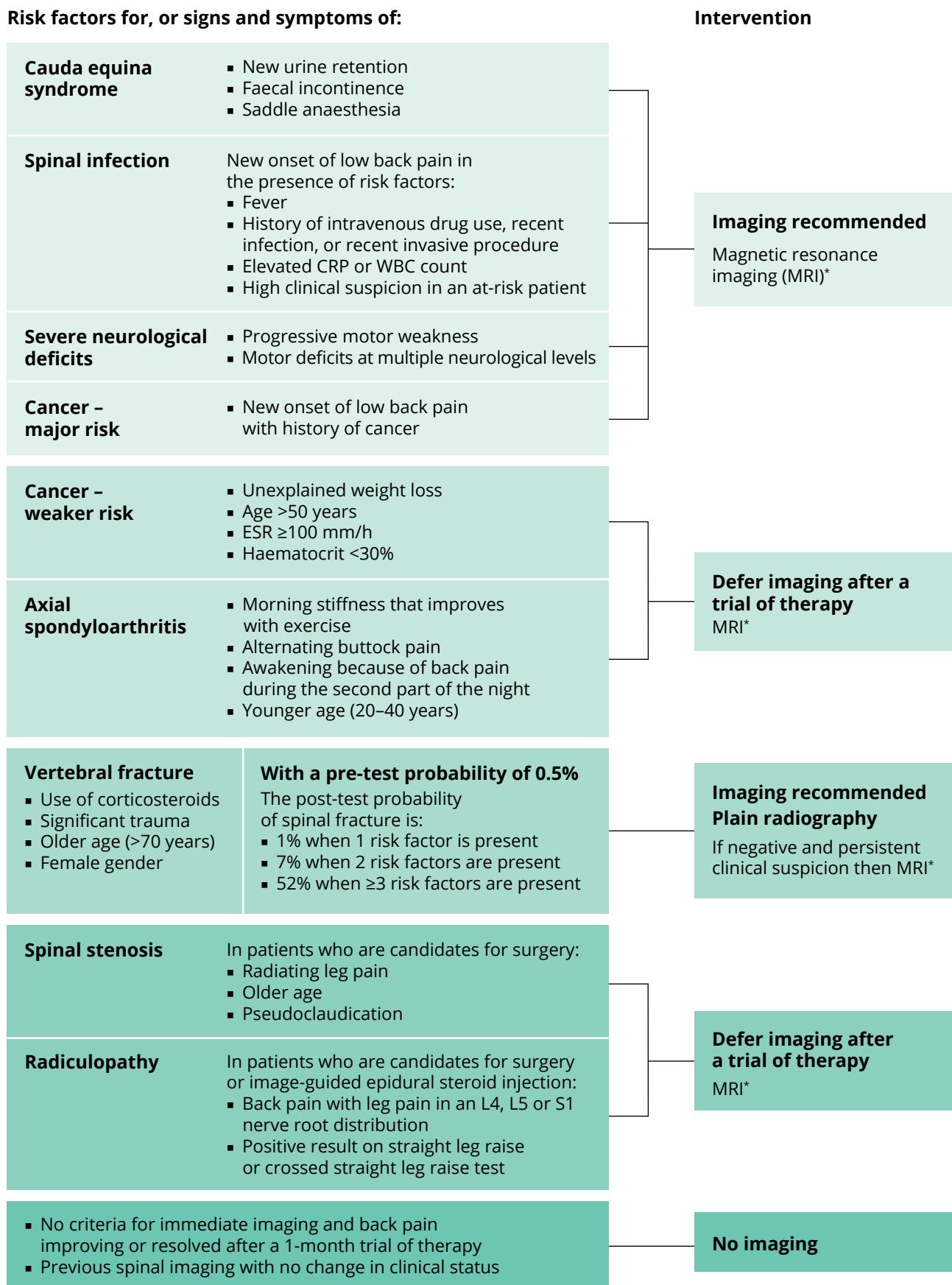
Table 2: Age-specific prevalence estimates of degenerative spine imaging findings in patients asymptomatic for low back pain

Imaging finding	Prevalence of finding (%) for each age group (years)						
	20	30	40	50	60	70	80
Disc degeneration	37	52	68	80	88	93	96
Disc signal loss	17	33	54	73	86	94	97
Disc height loss	24	34	45	56	67	76	84
Disc bulge	30	40	50	60	69	77	84
Disc protrusion	29	31	33	36	38	40	43
Annular fissure	19	20	22	23	25	27	29
Facet degeneration	4	9	18	32	50	69	83
Spondylolisthesis	3	5	8	14	23	35	50

Note: Prevalence rates estimated with a generalised linear mixed-effects model for the age-specific prevalence estimate (binomial outcome) clustering on study and adjusting for the midpoint of each reported age interval of the study.

Source: Brinjikji et al.⁸⁴

Figure 2: Imaging decision flow chart for acute presentations of low back pain



*In some cases, computed tomography (CT) might be used. For example, if MRI is not available or is contraindicated, or early specialist referral is not available.

Source: Adapted with permission from Royal Australian and New Zealand College of Radiologists.⁵⁹

Box 2: Essentials to include in a medical imaging referral

- Clinical question being addressed – A clear diagnostic question will help focus the radiologist's interpretation of results.⁸⁵
- Provisional diagnosis – A provisional diagnosis on the request can help guide the protocol for imaging investigation. This will help to determine what conditions are being ruled in and ruled out.⁸⁶
- Relevant clinical details and family history – Can give clues as to the most likely diagnosis and area to focus on.⁸⁶
- Alerting features of serious pathology, symptoms or warning signs – Note any alerting features that can indicate a specific clinical suspicion.
- Signature and date from requesting doctor.

Source: NPS MedicineWise.⁸⁷

■ For healthcare services

Ensure that policies, processes and pathways are in place for appropriate assessment of low back pain, with or without leg pain, that describe indications for imaging patients with alerting features for serious underlying pathology and when imaging is not needed.⁴⁰

Support clinicians to provide advice about the limited role of imaging and make information resources – such as those produced by [the Commission](#) and [NPS MedicineWise](#)⁸⁸ – available to provide to patients.

Ensure that systems are in place to monitor the appropriateness of imaging requests for low back pain as part of quality improvement processes. Consider use of a template for reporting of imaging results that includes epidemiological reporting of common imaging findings to help clinicians and patients understand the probability and significance of incidental findings.

Indicators for local monitoring

Indicator 3a: Evidence of a locally approved policy to ensure the appropriate use of imaging for low back pain. The policy should specify the:

- Appropriate indications for imaging a patient with low back pain
- Locally endorsed educational tools and resources that should be used to support discussions about appropriate imaging and interpretation of findings with patients
- Process to assess adherence to the policy.

METEOR link: meteor.aihw.gov.au/content/759558

Indicator 3b: Proportion of patients with a new episode of low back pain referred for imaging for whom an appropriate indication for imaging is documented in the medical record.

METEOR link: meteor.aihw.gov.au/content/759583

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR links.



Clinician practice points

- NPS MedicineWise has produced a [consumer fact sheet](#) outlining the reasons why scans are not necessary or advised for patients with low back pain. Providing the resource and discussing it may help to reassure the patient and reinforce the decision not to refer for imaging. It is important to check whether the patient feels reassured.
- The presence of radicular leg pain alone is not considered a serious pathology in the absence of severe or progressive neurological deficits.³⁴ Although imaging can sometimes identify the cause of neuropathic pain, it should only be done if it will change management.³⁵
- Indications for imaging should be reassessed for patients with changing or worsening symptoms.²⁸ Do not repeat imaging for a patient with no change in symptoms, unless it is to assess a diagnosis not previously considered.²⁸



Clinician communication tips

For a patient with acute low back pain

Explain to the patient why imaging is not recommended – for example:

'Imaging is used mainly to rule out anything serious, but otherwise it is not very good for identifying the cause of your pain. From what I can see, I'm not concerned that you have any of the serious causes of low back pain, so there is no need for any scans at this stage. In fact, imaging shows up changes that occur normally with age, even in people without back pain, so the findings are often not very helpful.'

For a patient with new-onset low back pain with radicular pain

Explain to the patient why imaging is not recommended – for example:

'Because a lot of people with radicular pain improve rapidly, there is no need for us to do a scan right now. If we need to, we can reconsider this at our next review. We would only use imaging if your pain continues or gets worse, or if there are signs of pressure on the nerves in your back that might indicate the need for further investigation and referral.'

Source: Adapted from Traeger et al.¹¹

4

Quality statement 4 – Patient education and advice

A patient with low back pain is provided with information about their condition and receives targeted advice to increase their understanding, and address their concerns and expectations. The potential benefits, risks and costs of medicines and other treatment options are discussed, and the patient is supported to ask questions and share in decisions about their care.

Purpose

To educate patients about the nature of low back pain, provide reassurance that they do not have a serious disease and reinforce helpful beliefs about pain to achieve meaningful goals.¹¹

To ensure that patients have the opportunity to participate in shared decision making, based on an informed understanding of each treatment option, and its potential benefits, risks and costs.

What the quality statement means

■ For patients

One of the best ways to manage low back pain is to learn about the condition, what to expect and how to manage it.^{40,75} Ask questions to make sure you receive the care that is right for you (see [Box 3](#) for examples of the types of questions you could ask). Your clinician will offer you information and help you understand more about back pain.⁴⁰ They may provide you with fact sheets and direct you to useful resources. Information will be provided in a format and language you can understand.

There are many different treatments for low back pain. In most cases, simple, cost-effective measures will give you the most benefit. Your clinician will help you to consider the best treatment for your back pain, considering the evidence, and the potential benefits, risks and costs, so that you can share in decisions about your care.^{9,22,24,28}

Box 3: Five questions to ask your doctor or other healthcare provider before you get any test, treatment or procedure

1. Do I really need this test, treatment or procedure?

Tests may help you and your doctor or other healthcare provider determine the cause of the problem. Treatments, such as medicines, and procedures may help to treat it.

2. What are the risks?

Will there be side effects of the test or treatment? What are the chances of getting results that aren't accurate? Could that lead to more testing, additional treatments or another procedure?

3. Are there simpler, safer options?

Are there alternative options to treatment that could work? Lifestyle changes, such as eating healthier foods or exercising more, can be safe and effective options.

4. What happens if I don't do anything?

Ask if your condition might get worse – or better – if you don't have the test, treatment or procedure right away.

5. What are the costs?

Costs can be financial, emotional or a cost of your time. Where there is a cost to the community, is the cost reasonable or is there a cheaper alternative?

Source: Choosing Wisely Australia.⁸⁹

For clinicians

Recognise and validate the patient's experience of pain. Reassure patients about the benign nature of low back pain, the low risk of serious underlying disease and the likelihood of recurrence.^{24,26,40} Provide educational materials that are consistent with your verbal advice to reinforce key messages^{29,34,35}, taking into consideration the patient's culture and health literacy. Address any unhelpful beliefs and thoughts identified in the psychosocial assessment that may affect how the patient manages their symptoms, including anxiety or fear about their condition.^{28,34,35,40} Use motivational interviewing techniques to help explore and dispel misconceptions in a non-threatening way.⁷⁶ Check for understanding and whether the patient feels reassured. Repeat education at subsequent visits.⁴⁰

Discuss the patient's expectations about management of their condition, and address any misconceptions about tests and interventions. Explain the evidence for treatment options, so the patient can understand why some strategies are, or are not, being recommended.³⁵ Inform patients about the potential benefits, risks and costs of any treatment being considered.²²

For healthcare services

Ensure that clinicians have the knowledge, information and relevant training to provide information about the nature of low back pain and to support shared decision making. Ensure that patient educational materials are available – including on the potential benefits, risks and costs of treatment options – to support the patient to be engaged in their care and to participate in decision-making.

Indicator for local monitoring

Indicator 4a: Evidence of local arrangements to ensure that patients are provided with information, advice and reassurance. The local arrangements should specify:

- The information a patient with low back pain should receive about their condition
- That a patient with low back pain is asked about their concerns related to their back pain and their expectations about management of their condition
- The process in place to assess whether a patient's concerns related to their low back pain have been addressed during the consultation.

METEOR link: meteor.aihw.gov.au/content/759560

More information about the indicator and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.



Clinician practice points

Providing education, reassurance and information about back pain is critical to ensuring appropriate care and patient self-management. This is particularly so for patients with psychosocial factors that may delay recovery.

In addition to verbal discussion, direct the patient to websites such as [MyBackPain⁷⁵](#) or [PainHealth⁸¹](#) and reinforce that the first step to feeling better is to understand back pain, what the patient can do, and when and where to seek more help.

Nurses and allied health providers in any setting can educate patients, and assist with developing and monitoring individual management plans and management goals.³⁵



Clinician communication tips

Reassure the patient about the nature of low back pain – for example:

'Most acute low back pain does not indicate serious disease or long-term disability.'⁹

'Most people with acute low back pain will feel much better or will have recovered within two weeks.'

'Because it recovers so well on its own, a lot of the treatments out there don't help.'¹¹

'It's important to understand what you can do to help manage your pain.'

'It is common for back pain to return. Let's talk about what you can do to help prevent that.'

'If you do get another episode of back pain, it is likely that it will follow a similar course and settle quickly.'²⁵

Although the aim of providing this advice is to reassure the patient, it is important to check whether the patient accepts the advice and feels reassured, particularly for patients from low socioeconomic backgrounds, who speak English as a second language, who have low health literacy or who are in distress.

5

Quality statement 5 – Encourage self-management and physical activity

A patient with low back pain is encouraged to stay active and continue, or return to, usual activity, including work, as soon as possible or feasible. Self-management strategies are discussed. The patient and clinician develop a plan together that includes practical advice to maximise function, and limit the impact of pain and other symptoms on daily life. The plan addresses individual needs and preferences.

Purpose

To involve patients in the management of their pain, and encourage self-confidence to stay active, avoid bed rest and continue or quickly return to usual activities, including work.^{46,82}

What the quality statement means

For patients

Do not wait for all the pain to be gone before you start moving.⁹⁰ Staying active and continuing daily activities as normally as possible (including work) leads to the most rapid and complete recovery.¹¹ Your clinician will encourage you to stay active and continue or quickly get back to normal activities, including exercise and work, wherever possible.⁹¹ If your pain is worse after activity and persists, you may be advised to take things a little easier at first and gradually build up over a few days or weeks.⁹⁰ Avoid long periods of bed rest, which can slow down recovery.^{34,91} Try to remain at work, or get back to work as soon as possible.

Your clinician will suggest ways for you to manage your pain and can develop a self-management plan with you, so you know what to do. Things that you **do yourself** to control your pain (like pacing yourself when carrying out physical activity) are more likely to help than treatments that are done to you (like medicines, massage or surgery). Refer to the patient information sheet **How to manage your back pain** for things that you can do.

You will be encouraged to set treatment goals.⁹¹ Your clinician can also discuss monitoring your symptoms; pacing (or spreading out) activity into small, regular periods⁴⁰; relaxation techniques; and exercise routines and activities.⁸² If activities or treatments in your self-management plan make your pain worse, talk to your clinician about other strategies you can try.

Continue with physical activity even after your back pain has improved, because this is important for preventing future episodes.⁴⁰

For clinicians

Explain the importance of maintaining or quickly returning to normal activities, including physical activity and a graded return to work* and/or other meaningful activity (see [Box 4](#)).^{9,24-26,29,34} Listen to the patient, and validate that their thoughts and feelings are understandable, and the pain they are experiencing is real (see [Quality statement 2 – Psychosocial assessment](#)).⁷⁷ Discuss strategies to support the patient to continue to engage or quickly re-engage socially. Prolonged bed rest is harmful and should be discouraged.³⁴

Consider the impact of lifestyle factors that are associated with occurrence of low back pain episodes, such as smoking and obesity.³⁴

Encourage patients to take control of their condition by following advice about ways to self-manage their back pain symptoms.¹⁴ Assess the patient's confidence and ability to engage in self-management, particularly for patients with a history of recurrent back pain and identified psychosocial risk factors. Where potential barriers appear to exist for the patient to undertake self-management and active strategies, discuss strategies to overcome them.

Self-management will differ for each patient depending on their history, pain severity and confidence to undertake self-management. A self-management plan may vary from brief advice to a more detailed management plan, according to the needs of the patient, and may include:

- Prioritising active management strategies (such as physical activity, social connection, healthy sleep habits and use of heat) over passive strategies (such as pain medicines, activity avoidance and massage)^{28,35}
- Gradually increasing activity levels by using pacing to prevent overexertion followed by inactivity^{†,35}
- Supporting the patient to set SMART (specific, measurable, achievable, realistic and time-bound) goals that are important to them.³⁵

If physical activity causes the patient's symptoms to spread (pain or other symptoms radiating to the leg), activity limitation but not cessation may be required.^{29,40}

* See [Therapeutic Guidelines: Rheumatology](#) for further information on preventing work-related disability.

† See figure in [Therapeutic Guidelines: Rheumatology](#) for further information on staying active and for practice points on a pragmatic approach to exercise for non-specific low back pain.

Box 4: Advice to stay active for people with acute low back pain

Indication

Staying active, instead of resting in bed, is recommended for a low back pain episode. It can improve pain relief and the ability to perform everyday activities (functional state), reduce sick leave and enable people to continue or return to work.

Precautions

Patients can be advised to reduce, alter or modify certain painful activities (for example, lifting) for a few days, as certain activities may exacerbate back pain. Patients need to be reassured that an exacerbation of pain is not an indication of damage, and fluctuations in pain can be expected during recovery from acute low back pain. Patients should feel confident to continue or get back to their normal everyday activities in days to weeks.

Description

Staying active means continuing with normal daily activities as much as possible, including going to work. It also means trying to reduce long periods of inactivity. No specific exercise(s) is needed at this stage.

People with low back pain who remain active, even when in pain, do better in the long term. In fact, it appears that the longer a person stays in bed because of low back pain, the worse their ability to work or return to work becomes.

Tips and challenges

Patients should be advised that it is important not to wait for all pain to be gone before they start moving. Having a strategy whereby they either reduce or alter certain painful activities (for example, lifting) for a few days, and then gradually build up these activities again can be recommended.

Patients often fear that pain is a sign of deterioration and/or further damage. They are often anxious about returning to physical work or activities that are high impact or involve bending, twisting or lifting. Patients may need to be reassured that the back is strong and, although they may need to reduce, alter or modify how they do these activities, they can still do them. They may also need reassurance that the pain is likely to subside and that ongoing pain is not an indication of further damage.

Source: RACGP.⁹⁰

Related patient resource: [*Staying Active for Acute Low Back Pain*](#).

For healthcare services

Ensure that clinicians have the knowledge, information and relevant training to support people with low back pain to self-manage their condition in line with current guidelines.⁸²

Ensure that pathways are in place so that patients with low back pain receive advice and encouragement to remain as active as possible.

Ensure that appropriate services and referral pathways are available to support physical activity programs and interventions.

Indicator for local monitoring

Indicator 5a: Proportion of patients with low back pain who have documented discussions in their medical record about both self-management strategies and staying active by continuing usual activities.

METEOR link: meteor.aihw.gov.au/content/759562

More information about the indicator and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.



Clinician practice points

For those who find it difficult to resume activity, programs are available to help in health centres and workplaces.⁵⁶ Local councils and primary healthcare centres are also helpful sources of information about community groups and activities.³⁵

Encourage the patient to return within an agreed time frame if the initial self-management strategies are not helping, and explain that there are other treatments that can be discussed.²⁵ Provide information on how to reduce recurrent low back pain by continuing physical activity and participating in regular exercise.^{29,40}



Clinician communication tips

There is often confusion about what 'staying active' means. It means different things to different patients. Staying active does not mean undertaking any particular activity, and does not mean resting.⁹⁰

Explain to the patient why staying active is important – for example:

'The pain does not mean you are undergoing serious damage. Remember that your back is strong. Movements may be painful at first, like an ankle sprain, but they will get better as you gradually get active again. It is likely that you will experience some pain with activity, but that does not mean that your back is getting worse or that your spine is damaged.'³⁴

Advise the patient on the importance of continuing or returning to work – for example:

'Staying at or getting back to work as you are able, even part-time at first, will also help you recover. By working together with your employer and healthcare team, you are more likely to recover and avoid the problems associated with taking a lot of time off work.'

6

Quality statement 6 – Physical and/or psychological interventions

A patient with low back pain is offered physical and/or psychological interventions based on their clinical and psychosocial assessment findings. Therapy is targeted at overcoming identified barriers to recovery.

Purpose

To help reduce pain; prevent chronic pain; restore and maintain physical activity and function; minimise disability, stress or anxiety; address psychosocial factors that contribute to pain; and reduce the need for medicines or surgery.^{34,35,40}

What the quality statement means

For patients

Your clinician will offer information and support based on your individual needs, values and preferences, and discuss your goals for improved function and mobility.⁴⁰ For many people with new back pain, additional therapies are not necessary because the pain will improve naturally as you follow the advice of your clinician about physical activity and self-management. To avoid ongoing issues, treatments that target both the mind and the body will be considered because they are more likely to help with reducing your pain and improving your function long term.⁵⁶

You may be referred to other clinicians for physical therapy, psychological pain management support or a combined treatment approach. Although hands-on therapies may be offered, the overall goal should be to support you to manage your symptoms independently in the longer term. There are many types of clinicians who can help you to set achievable movement and exercise goals, and show you how to pace your activities. For some people with repeated episodes, a psychologist or counsellor can also help you to understand your pain and how it affects your body, thoughts and behaviours, and help you to develop effective coping strategies. Your general practitioner may be able to advise about options for receiving Medicare rebates for these services, if you meet the criteria. You should always receive strategies that support you to manage your symptoms independently in the longer term.

For clinicians

Use the findings from the psychosocial assessment (see [Quality statement 2 – Psychosocial assessment](#)) to determine the complexity and intensity of support the patient may need.²⁴

For patients with few psychosocial risk factors, who are likely to improve quickly, consider simpler and less intensive support such as reassurance, guidance on self-management and advice to keep active (see [Box 4](#) in Quality statement 5).²⁴ Offer a review at one to two weeks to assess recovery and the need for further physical or psychological interventions.⁴⁷

For patients at higher risk of a poor outcome, consider early referral for physical and/or psychological therapies.^{9,24,35} A patient with moderate to high levels of distress who has difficulty overcoming fear of movement or changing their beliefs or behaviours may require more specific psychological interventions, such as cognitive behavioural therapy, progressive relaxation or mindfulness-based stress reduction.^{11,24,26,27,35,46} A cognitive behavioural approach can help the patient to develop adaptive coping strategies to self-manage their pain.⁹ Where possible, refer patients to a clinician who has experience in pain management and understands the biopsychosocial factors that influence it.³⁵ Assess and resolve any concerns the patient may have about such a referral.²⁵

For patients with an acute exacerbation of persistent or chronic low back pain, advise that physical activity and exercise therapy can help to relieve pain and improve function (see **Box 5**), and check adherence to, and effectiveness of, any previous physical and psychological treatments.^{9,23,25,26,29,34,35,90}

Since the evidence does not show that one form of exercise is superior, exercise should be individualised to the patient's activity preferences, beliefs and functional impairment.*³⁴ The effects of treatment should be documented, with attention to objective and functional improvements.⁹² Advise the patient they may be eligible for Medicare rebates as part of a GP Management Plan and Team Care Arrangements.⁹³

Physical therapies (such as heat wraps and massage)²⁶ may also help to improve function and mobility^{26,28,30}, but only as part of a treatment package including physical activity, with or without psychological therapy, and only for a short period of time.^{23,24,40}

Box 5: Practice points for recommending exercise for patients

- Exercise programs should be individualised, taking into account the patient's physical activity preferences, beliefs and specific functional impairments
- Exercise programs should include stretching, strengthening and aerobic exercises that are functionally oriented
- Starting with gentle movements is the first step. These might include water-based walking, land-based walking, gentle swimming and floor stretches that encourage the spine to move in its normal planes. Activity should be graded by the duration of time spent exercising, rather than the pain experienced
- As the patient's tolerance to activity over longer periods increases, the mode, frequency and/or intensity of activity can be progressed
- Functional exercises can be introduced to encourage activation of large muscle groups (for example, squats, lunges, step-ups)
- Exercise that patients enjoy (for example, yoga, Pilates, walking, cycling) can be gradually introduced (for example, start at 15–20 minutes duration and then increase)
- In the later stages of rehabilitation, more dynamic and higher-load exercises can be performed.

Source: Adapted from *Therapeutic Guidelines: Rheumatology*.³⁴

* See RACGP HANDI interventions on [Advice to Stay Active: Acute low-back pain](#) and [Exercise for Chronic Low Back Pain](#).

■ For healthcare services

Ensure that systems, processes and appropriate resources are in place so that adults with low back pain can access the physical and psychosocial clinical services they need.⁴⁰ Identify where access issues are likely barriers to appropriate treatment and develop strategies to address them (such as telehealth).

Indicators for local monitoring

Indicator 6a: Proportion of patients with low back pain at risk of poor outcomes who were referred to physical and/or psychological clinical services.

METEOR link: meteor.aihw.gov.au/content/759564

Indicator 6b: Evidence of a locally approved policy that specifies the referral pathways to clinicians who provide appropriate physical and/or psychological therapies.

METEOR link: meteor.aihw.gov.au/content/759566

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR links.



Clinician practice points

Psychological techniques are an important component of acute and chronic pain management. For patients with acute low back pain, brief assessment may be adequate. Psychological intervention can assist with treatment adherence and reduced analgesic use.³⁵ For patients with chronic low back pain, a comprehensive assessment of psychosocial impact and contributors is required. Psychological intervention is a first-line management strategy that may improve function, quality of life, treatment adherence and mood.³⁵

There are a range of physical and psychological therapies, but not all are effective or relevant for low back pain. For example, electrotherapies such as ultrasound and laser are often not effective. If your patient has not responded to a therapy, clarify what treatment they received and what it entailed.

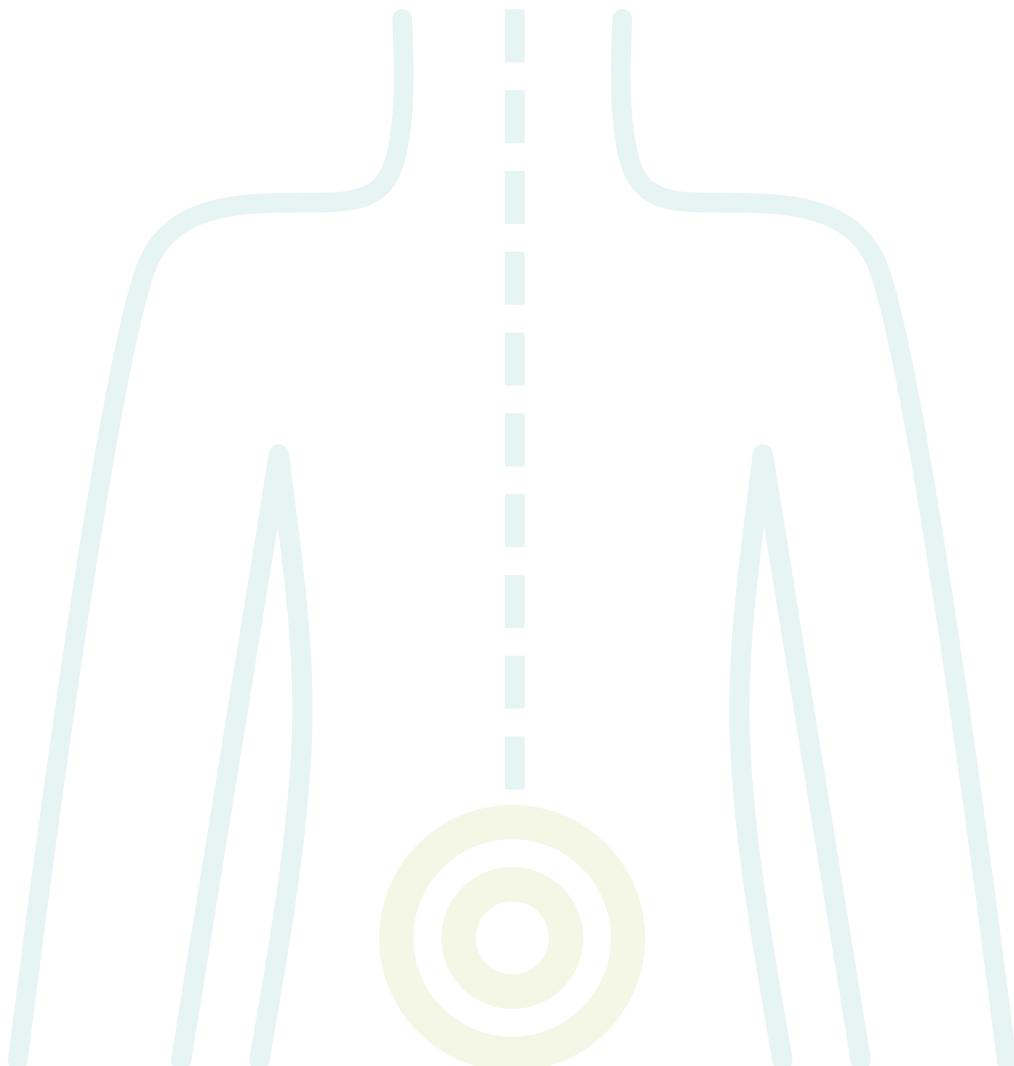


Clinician communication tips

Sensitive and motivational communication builds health literacy about low back pain and empowers patients to take an active role in their care, rather than relying on passive treatments.

Explain that experience of pain affects both body and mind, and so treatments targeted at both factors can reduce pain and disability more than medical care alone.⁵⁶

When referring a patient for psychological intervention, emphasise that the use of psychological techniques does not mean that they have a suspected psychological illness, or that their pain is not real or not being taken seriously. Instead, describe pain as a complex problem that requires a multidimensional approach. This is particularly important for patients with chronic pain.³⁵



7

Quality statement 7 – Judicious use of pain medicines

A patient is advised that the goal of pain medicines is to enable physical activity, not to eliminate pain. If a medicine is prescribed, it is in accordance with the current *Therapeutic Guidelines*, with ongoing review of benefit and clear stopping goals. Anticonvulsants, benzodiazepines and antidepressants are avoided, because their risks often outweigh potential benefits, and there is evidence of limited effectiveness. Opioid analgesics are considered only in carefully selected patients, at the lowest dose for the shortest duration possible.

Purpose

To ensure that medicines are used effectively and safely for patients with low back pain to avoid unnecessary side effects and the risk of dependence.^{24,82}

What the quality statement means

For patients

The aim of taking medicines is to reduce pain enough to help you stay active, rather than to completely stop the pain. Medicines are only one part of pain management. They are most effective in the short term to help get you moving and support you while you learn active self-management strategies. It is important to remain physically active and continue with physical activity and self-management strategies after you start any medicine.⁴⁰

When suggesting a medicine, your clinician will consider your symptoms, any other conditions you may have, other medicines you take and your treatment preferences. They will explain:

- What the medicine is for
- How much to take
- How long to take it for
- The expected benefits and risks, including possible side effects.

Ask questions to decide if the medicines being suggested are right for you, and to make sure you understand how to use them.

Medicines that are generally not recommended for low back pain include benzodiazepines (sometimes prescribed as muscle relaxants), anticonvulsants (also used to treat epilepsy) and antidepressants. This is because these medicines are not very effective for low back pain and can have significant side effects.⁸²

Opioid analgesics should only be used short term at the lowest dose that helps your symptoms and as recommended by your clinician. Do not use these for long periods because they can cause significant side effects and can be addictive.³⁵

For clinicians

Explain that the goal of pain medicines is to reduce pain to support continuation of usual activities, including physical activity and work, rather than to eliminate pain.³⁴ Offer information on how pain medicines may be combined with physical activity and self-management strategies to help the patient improve their function and mobility.⁴⁰

If a pain medicine is being considered:

- Discuss the patient's individual expectations, preferences, comorbidities, needs and treatment goals^{40,53}
- Review the patient's current medicines, including use of over-the-counter medicines, and previously prescribed medicines used to manage pain
- Provide information about the risks and benefits associated with specific pain medicines⁴⁰, including the potential for dependency and how to manage side effects^{35,53}
- Prescribe the lowest effective dose for the shortest possible time in line with current *Therapeutic Guidelines**.^{34,35}
- Establish and document clear stopping goals^{34,35}
- Encourage the patient to continue other self-management strategies after they start the medicine⁴⁰
- Review early and frequently to assess and monitor the effectiveness of the treatment, adverse effects, misuse and functional gains.

Evidence has shown that anticonvulsants (pregabalin and gabapentin), tricyclic antidepressants, selective serotonin reuptake inhibitors and benzodiazepines have no or limited effectiveness in reducing low back pain or disability, and have significant risks.^{94,95}

Opioid analgesics have limited evidence of short-term effectiveness. In addition to side effects such as constipation and somnolence, they carry the risk of overdose and dependency, and can prolong the time to recovery.^{82,94,96} If opioid analgesics are used for severe acute pain – for example, in patients who present to the emergency department – prescribe immediate-release formulations on a limited trial basis for a defined duration, as part of an overall pain management strategy that takes into account the patient's opioid status.^{t,34} Before prescribing an opioid analgesic, it is essential that the patient and anyone involved in their care understand how to use these medicines safely³⁵, including their correct storage and disposal (see *Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard*).⁶⁶

* See *Therapeutic Guidelines: Rheumatology* for information on specific pain medicines, effectiveness and dosing, and *Therapeutic Guidelines: Pain and Analgesia* for information on tapering and stopping analgesics and reviewing analgesia efficacy.

^t See *Therapeutic Guidelines: Pain and Analgesia* for information on using opioids in the community and in hospital, with examples of oral and subcutaneous opioid dose titration in hospital for moderate and severe acute pain.

■ For healthcare services

Ensure that systems, processes and resources are in place to support clinicians to provide information to patients about their treatment. Ensure that patients have access to medicines advice, including information on the risks and benefits of pain medicines.⁴⁰ Provide clinicians with access to current *Therapeutic Guidelines* and monitor appropriate adherence.

Policies should limit prescribing of opioid analgesics for low back pain to immediate-release formulations for a limited duration. Ensure that information is provided to manage patient expectations about ongoing opioid analgesic treatment. In the emergency department setting, durations of therapy should be explained to the patient. This information should also be included in the discharge summary, along with a description of the advice and the limited dose and quantity given to the patient, with the goal of avoiding prolonged use, in accordance with the *Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard*, (see Quality statement 9 – Transfer of care).

Indicators for local monitoring

Indicator 7a: Proportion of patients with low back pain who received an opioid analgesic.

METEOR link: meteor.aihw.gov.au/content/759568

Indicator 7b: Proportion of patients with low back pain who received an anticonvulsant.

METEOR link: meteor.aihw.gov.au/content/759570

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR links.



Clinician practice points

Ensure that first-line management strategies such as patient education and supported self-management have been implemented before considering pain medicines.³⁴

Take a medication history that includes over-the-counter medicines. Ask the patient if any medicines being used are helping their pain. If the medicines are helping, check if the patient is taking them appropriately or experiencing any side effects (such as stomach pain associated with non-steroidal anti-inflammatory drugs), and for contraindications.

If the patient has used a prescription pain medicine previously, ask about their response to the medicine and whether they experienced breakthrough pain. This information can be used to determine a starting dose, or prevent the use of previously unhelpful therapy.^{34,35}

NPS MedicineWise has several resources that may help, including a list of **questions to ask about using opioids for back pain**.⁹⁷



Clinician communication tips

For patients with acute low back pain

Advise the patient on immediate and follow-up actions – for example:

'For now, I suggest you stay as active as you can and try things like heat wraps to help with the pain. We can reassess whether you need medicines to help manage your pain at our next review. How do you feel about that approach?'

For a patient with new-onset low back pain with leg pain (without neurological signs)

Advise the patient on your recommendations and approach – for example:

'I recommend you try some gentle exercise to keep you from stiffening up, and we will monitor your progress closely.'

'If we need to, we could try a short course of anti-inflammatory medicines (like ibuprofen) afterwards. This may help a little bit with low back pain, but has not been tested for leg pain. These medicines also have potential side effects and may not be suitable for everyone.'

'Most of the medicines used for managing low back pain (including drugs for nerve pain and opioid analgesics) do not have strong evidence that they are effective. All of these medicines have potential significant side effects, so it would be best not to use them routinely. If we need to use them, we need to do so very carefully and on a short-term trial basis only.'

'If the pain becomes unbearable, we can discuss other options. How would you feel about that approach?'

For patients with an acute exacerbation of persistent low back pain

Inform the patient of the latest research on non-drug options for low back pain – for example:

'Nowadays, non-drug options are preferred over pain medicines to manage persistent low back pain. Non-drug options like exercise programs and psychological approaches are effective for managing pain, and have fewer risks and side effects. How would you feel if we started on one of those approaches? How would you feel if we tried to replace some of the medicines you are taking with one of those approaches? We can review how it is going and discuss your medicine options within the next 2–4 weeks.'

Sources: Adapted from Traeger et al.¹¹ *Therapeutic Guidelines: Pain and Analgesia*³⁵, and NSW Agency for Clinical Innovation.⁹

8

Quality statement 8 – Review and referral

A patient with persisting or worsening symptoms, signs or function is reassessed at an early stage to determine the barriers to improvement. Referral for a multidisciplinary approach is considered. Specialist medical or surgical review is indicated for severe or progressive back or leg pain that is unresponsive to other therapy, progressive neurological deficits, or other signs of specific and/or serious pathology.

Purpose

To ensure that review and referral for a patient with persisting or worsening low back pain are tailored to the patient's clinical needs, with the goal of identifying specific and serious diagnoses or progression, while preventing chronic pain and related long-term problems.^{9,34}

What the quality statement means

For patients

Let your clinician know if your pain continues to be a problem, if your symptoms get worse or if new symptoms appear. Your clinician can monitor your symptoms and wellbeing, and adjust your treatment if needed. You may be referred to another clinician or team of clinicians who can help you with your goals for achieving physical activity and mobility, and help you to understand your pain and how to reduce its impact on your body, mental state and behaviours.

In some instances, your clinician may refer you to a specialist spine service, a pain service or a physician (such as a rheumatologist, a spine surgeon, or a pain or rehabilitation physician). These specialists can assess your condition, provide advice and discuss other specialised treatment options.

Your clinician will also refer you to a spine surgeon if they suspect a serious condition for which surgery is appropriate, or if you have any nerve compression that is getting worse.

For clinicians

If the patient's pain is persisting or worsening on review, assess if the lack of improvement relates to progression of their condition, or physical, functional or psychosocial factors.³⁴ Review the initial assessment and current management program, including psychosocial factors that may delay recovery, medicines and adherence to self-management strategies, and adjust the treatment plan accordingly. Any treatments trialled should be assessed for efficacy, and ineffective treatments should be discontinued rather than accumulated.²⁶

Discuss ongoing compensation or legal actions that may affect a patient's response to treatment, because there is an association between compensation-related factors and poorer physical and psychological function.⁹⁸

For a patient with disabling low back or leg pain, or significantly limited function on review at 2–6 weeks²⁹, consider referral to a healthcare provider with expertise in using evidence-based approaches to support functional improvement^{9,29,34,72} (see [Quality statement 6 – Physical and/or psychological interventions](#)).

A multidisciplinary team approach should be used to address both physical and psychosocial barriers to recovery when required. This should include a mechanism for regular shared communication between healthcare providers and ensuring that consistent information is provided to a patient receiving care from multiple clinicians.^{9,29,34}

Referral to a multidisciplinary chronic pain management program or clinician with appropriate expertise should be considered for patients with recurrent or persistent low back pain, or any patient who has not recovered from the acute episode by 12 weeks.⁹ These services can provide more intensive treatment to support resumption of pre-back pain activities. They have improved function and self-management as the main objectives, and allow ongoing regular review of the patient so that care can be modified according to the patient's condition.^{9,28,34,62,99}

Earlier referral or review may be warranted for patients with an acute exacerbation of chronic back pain, or when it is clear that pain is persisting or worsening despite appropriate early intervention.^{9,72}

Any new concerning features (for example, serious pathologies, neurological deficits) require urgent investigation or specialist assessment (see **Table 1** in Quality statement 1).^{*} Patients with severe or progressively deteriorating neurological signs and symptoms should be immediately referred for urgent imaging and surgical review (see **Box 6** for essential history to be included in the referral).^{34,46}

Box 6: Essential history to include in a referral for urgent imaging and surgical review

- Presence and duration of neurological signs and symptoms
- Presence or absence of concerning features
- Age (at onset) under 16 years and over 50 years with new-onset pain
- Motor deficit (such as foot weakness)
- Recent significant trauma
- Unexplained weight loss
- Previous history of malignancy (however long ago)
- History of intravenous drug use
- Previous longstanding steroid use
- Recent serious illness
- Recent significant infection
- Mechanism of injury
- Functional status
- Management to date (including previous spinal surgery and non-operative management)
- General medical history
- Relevant imaging results (such as X-ray, CT, MRI).

Source: Queensland Health clinical prioritisation criteria.³³

* See Queensland Health *Spine (Orthopaedics)* for a list of common traumatic spine injuries that require urgent referral to the emergency department and should not be referred for elective/fracture clinic categorisation, and other useful information for referring practitioners.

■ For healthcare services

Ensure that systems, processes and resources are in place to support clinicians to monitor the symptoms, function and psychosocial wellbeing of patients with low back pain. Protocols should describe appropriate referral pathways and support timely access, including for patients with persisting and worsening pain with signs of serious pathology.

For services providing one component of multidisciplinary care, ensure that systems are in place to facilitate effective shared care across multiple healthcare providers, including mechanisms for regular communication among providers to facilitate the delivery of consistent information to the patient.

At a healthcare service level, assess whether multidisciplinary pain clinics and specialised spinal surgical services are meeting the needs of their populations. Consider quality improvement activities to assess effectiveness and improve access to care.

Indicator for local monitoring

Indicator 8a: Evidence of a locally approved policy that defines the process for review and referral of patients with low back pain. The policy should specify the:

- Indications and timelines for when a patient with low back pain should be reassessed to reconsider their diagnosis and treatment plan
- Referral pathways to appropriate healthcare providers and programs to support recovery
- Mechanisms to facilitate effective communication between healthcare providers and the patient
- Process to monitor the effectiveness of the recommended treatment(s).

METEOR link: meteor.aihw.gov.au/content/759572

More information about the indicator and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.



Clinician communication tips

Advise the patient on the referral options suitable to their circumstances. In the absence of signs of specific and/or serious pathology, discuss the rationale for further specialist review, whether for further diagnosis or multidisciplinary care to improve function. Support patients to ask questions, such as the *5 Questions to Ask Your Doctor or Health Care Provider before You Get Any Test, Treatment or Procedure*.⁸⁹

Appendix A:

General principles of care

This clinical care standard aligns with key principles that are the foundation for achieving safe, high-quality care. When implementing this clinical care standard, healthcare services should ensure that quality improvement activities support these principles.

Person-centred care

Person-centred care is health care that is respectful of, and responsive to, the preferences, needs and values of patients and consumers.³⁶

Clinical care standards support the key principles of person-centred care, namely:

- Treating patients with dignity and respect
- Encouraging patient participation in decision-making (see **Shared decision making**)
- Communicating with patients about their clinical condition and treatment options
- Providing patients with information in a format that they understand and encouraging them to participate in decision-making.

Shared decision making

Shared decision making involves discussion and collaboration between a consumer and their clinician. It is about bringing together the consumer's values, goals and preferences with the best available evidence about benefits, risks and uncertainties of treatment, to reach the most appropriate healthcare decisions for that person.

Involving support people

The *Australian Charter of Healthcare Rights* (second edition)¹⁰⁰ describes the rights that consumers, or someone they care for, can expect when receiving health care.

Patients have the right to involve the people they want in planning and making decisions about their health care and treatment. This could be a family member, carer, friend or consumer advocate such as a social worker. Many healthcare services employ different types of liaison officers, such as Aboriginal and Torres Strait Islander liaison officers, who can provide patients with advocacy, information and support.

This clinical care standard does not specifically refer to carers and family members, but statements that refer to clinicians' discussions with patients about their care should be understood to include support people if this is what the patient wishes, or a substitute decision-maker if the person is unable to provide their consent.

Informed consent

Informed consent is a person's voluntary and informed decision about a healthcare treatment, procedure or intervention that is made with adequate knowledge and understanding of the benefits and risks, and the alternative options available. A **fact sheet for clinicians on informed consent**¹⁰¹ is available.

Action 2.04 in the National Safety and Quality Health Service (NSQHS) Standards requires health service organisations to ensure that informed consent processes comply with legislation and best practice.³⁶

Cultural safety and patient safety

Cultural safety is about overcoming the cultural power imbalances of places, people and policies to contribute to improvements in Aboriginal and Torres Strait Islander health.¹⁰²

The *Cultural Respect Framework 2016–2026* commits the Australian Government and all states and territories to embed cultural respect principles in their health systems.¹⁰³ The framework should be used to develop, implement and evaluate cultural awareness and cultural competency strategies.

Health consumers are safest when clinicians have considered power relations, cultural differences and patients' rights. Part of this process requires clinicians to review their own beliefs and attitudes.¹⁰⁴

The *NSQHS Standards User Guide for Aboriginal and Torres Strait Islander Health* describes six specific actions that aim to help healthcare services improve the quality of care and health outcomes for Aboriginal and Torres Strait Islander people.^{36,104}

Action 1.09 of the National Safety and Quality Primary and Community Healthcare Standards outlines that the healthcare service identifies patient populations using its service who are at greater risk of avoidable differences in health outcomes, including:

- Aboriginal and Torres Strait Islander people
- People with disability
- People from diverse backgrounds.

Appendix B:

Indicators to support local monitoring

The Commission has developed a set of indicators to support clinicians and healthcare services in monitoring how well they implement the care described in this clinical care standard. The indicators are a tool to support local quality improvement activities. No benchmarks are set for any indicator.

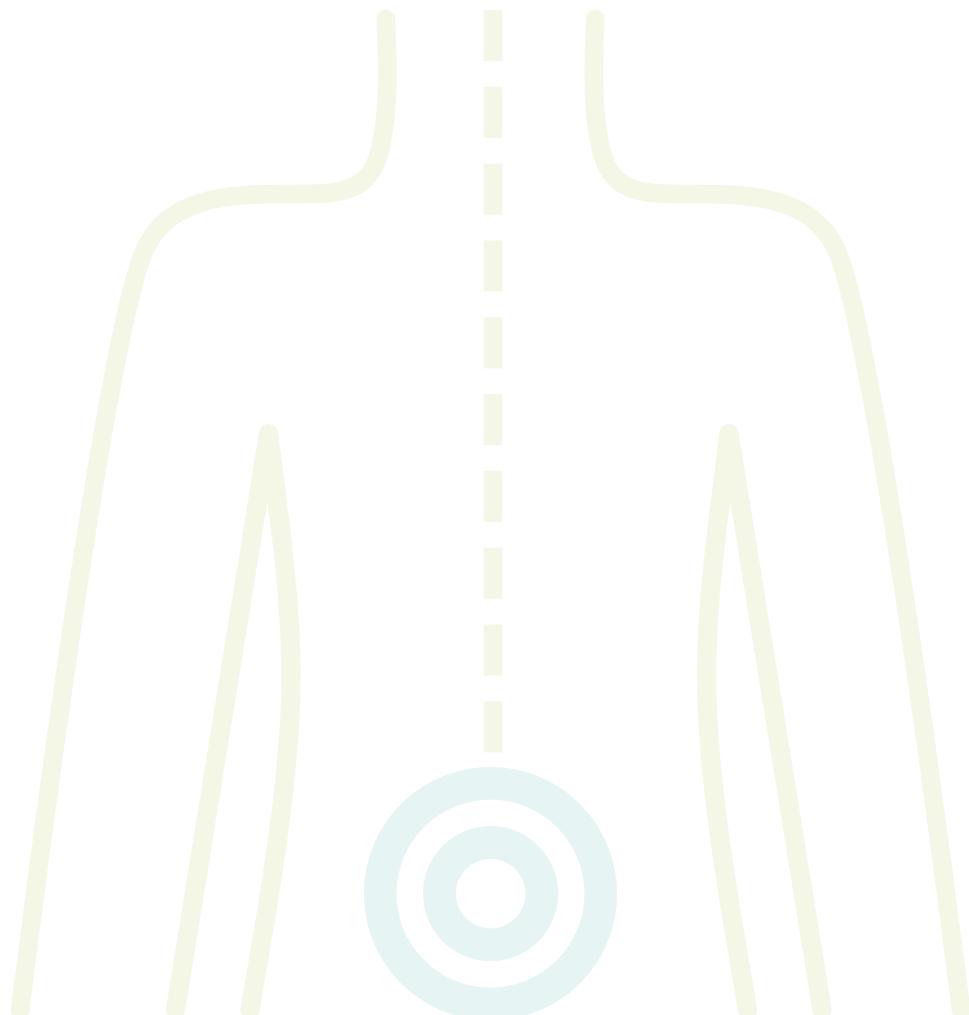
The process to develop the indicators specified in this document comprised:

- A review of existing Australian and international indicators
- Prioritisation, review and refinement of the indicators with the topic working group.

Most data underlying these indicators are collected from local sources, through prospective data collection or retrospective chart audits, or review of policies and protocols.

In this document, the indicator titles and hyperlinks to the specifications are included with the relevant quality statement under the heading 'Indicator(s) for local monitoring'. Full specifications for the *Low Back Pain Clinical Care Standard* indicators can be found in the Metadata Online Registry (METEOR): [meteor.aihw.gov.au/content/755790](http://aihw.gov.au/content/755790).

METEOR is Australia's web-based repository for national metadata standards for the health, community services and housing assistance sectors. Hosted by the Australian Institute of Health and Welfare, METEOR provides users with online access to a wide range of nationally endorsed data and indicator definitions.



Appendix C:

Measuring and monitoring patient experiences

Systematic, routine monitoring of patients' experiences of, and outcomes from, health care is an important way to ensure that the patient's perspective drives service improvements and person-centred care. This is the case in all healthcare services.

Patient experience measures

While this clinical care standard does not include indicators specific to measuring patient experiences, the Commission strongly encourages healthcare services to use the Australian Hospital Patient Experience Question Set (AHPEQS). AHPEQS is a 12-question generic patient experience survey that has been validated in both day-only and admitted hospital patients across many clinical settings. The [instrument is available for download¹⁰⁵](#) to both private and public sector healthcare services.

Patient-reported outcome measures

In Australia, patient-reported outcome measures (PROMs) are an emerging method of assessing the quality of health care. The Commission is leading a national work program to support the consistent and routine use of PROMs to drive quality improvement.

PROMs are standardised, validated questionnaires that patients complete, without any input from healthcare providers. They are often administered at least twice to an individual patient – at baseline and again after an intervention, or at regular intervals during a chronic illness. The information contributed by patients filling out PROMs questionnaires can be used to support and monitor the movement of health systems towards person-centred, value-based health care.

PROMs are being used to evaluate healthcare effectiveness at different levels of the health system, from the individual level to service and system levels. There is growing interest across Australia and internationally in the routine interrogation of patient-reported outcome information for evaluation and decision-making activities at levels of the health system beyond the clinical consultation.

Appendix D: Integration with national safety and quality standards

Implementation of this clinical care standard will help healthcare services to meet requirements of the National Safety and Quality Health Service (NSQHS) Standards³⁶, or the National Safety and Quality Primary and Community Healthcare (Primary and Community Healthcare) Standards, whichever is relevant to the service.³⁷

Both the NSQHS Standards and the Primary and Community Healthcare Standards aim to protect the public from harm and improve the quality of health service provision. They provide a quality assurance mechanism that tests whether relevant systems are in place to ensure that expected standards of safety and quality are met.

Within both the NSQHS Standards and the Primary and Community Healthcare Standards, the Clinical Governance Standard and the Partnering with Consumers Standard set the overarching requirements, or clinical governance framework, for the effective implementation of other standards.

National Safety and Quality Health Service Standards

Relevant actions

Under the Clinical Governance Standard, healthcare services are expected to:

- Support clinicians to use the best available evidence, including clinical care standards (Action 1.27b)
- Monitor and respond to unwarranted clinical variation (Action 1.28).

Implementation of the NSQHS Standards is mandated in all hospitals, day procedure services and public dental services across Australia. Healthcare services are expected to implement the NSQHS Standards in a way that is appropriate to the clinical services provided and their associated risks. Similar implementation strategies apply to multiple actions across the NSQHS Standards; identifying the links between actions will help healthcare services to ensure that their safety and quality systems are integrated, and reduce duplication of effort

in implementing the eight NSQHS standards and clinical care standards.

For more information about:

- Assessment to the NSQHS Standards and applicability of clinical care standards, visit the [NSQHS Standards webpage](#) outlining requirements
- Monitoring and responding to unwarranted clinical variation, see the [NSQHS Standards User Guide for the Review of Clinical Variation in Health Care](#)
- Other relevant actions in the NSQHS Standards, see the [NSQHS Standards](#).

National Safety and Quality Primary and Community Healthcare Standards

Relevant actions

Under the Clinical Governance Standard, healthcare services are expected to:

- Support healthcare providers to use best-practice guidelines and available evidence, including clinical care standards such as the *Low Back Pain Clinical Care Standard*, where relevant (Action 1.20b)
- Monitor and respond to unwarranted clinical variation (Action 1.21).

Application of the Primary and Community Healthcare Standards is voluntary. They should only be applied where services are involved in the direct care of patients. The way in which an individual primary and/or community healthcare service implements the Primary and Community Healthcare Standards will depend on the size of the healthcare service, as well as the risks and complexity associated with the services it delivers. Further information about the Primary and Community Healthcare Standards is available on the [Primary and Community Health Service Standards webpage](#).³⁷

Glossary

Term	Definition
acute low back pain	<p>Lasts less than three months.</p>
	<p>The term 'acute' indicates the duration of symptoms, and is not a diagnosis.^{9,24,35}</p>
biopsychosocial (also known as sociopsychobiomedical) framework	<p>A framework that helps clinicians understand the complexity of their patient's pain experience, and lays a foundation for assessment and more effective pain management. The way a person processes nociceptive signals in their brain, and their resulting pain experience, depends on their developmental stage (for example, infancy, adolescence, adulthood), the social and cultural context (socio-), their emotional state (psycho-) and their biological health (-biomedical). A biopsychosocial approach considers the bidirectional relationship between these factors and the person's pain experience to determine strengths, and areas that may need support during management.³⁵</p>
chronic low back pain (also referred to as persistent pain)	<p>Low back pain that is present for more than three months.</p> <p>The term 'chronic' indicates the duration of symptoms, and is not a diagnosis. Chronic low back pain may have a specific cause, or may be non-specific – that is, no cause has been identified.^{9,35}</p>
clinician	<p>A trained health professional, including registered and non-registered practitioners, who provides direct clinical care to patients. Clinicians may provide care within a healthcare service as an employee, a contractor or a credentialed healthcare provider, or under other working arrangements. They include nurses, midwives, medical practitioners, allied health professionals, paramedics and other professions who provide health care, and students who provide health care under supervision.³⁶</p>
exercise therapy	<p>Various forms of physical exercise that are used to prevent or treat low back pain. The term 'exercise therapy' includes a wide range of different exercise types, environments and theoretical models. All types of exercise therapy engage the patient with a program of physical exercise that they are encouraged to perform regularly. Exercise therapy may be delivered by a range of healthcare professionals on a one-to-one basis or in a group environment. The focus may vary from exercise using specialist gym equipment to exercises conducted at home or in the outdoor environment.²⁶</p>
mechanical back pain	<p>A term sometimes used to describe non-specific low back pain to highlight the exclusion of an underlying systemic inflammatory disease (for example, axial spondyloarthritis) or other serious pathology (for example, spinal infection, malignancy, fracture). It should not be used to infer a reliable relationship between symptoms and anatomical structures.⁹</p>
multidisciplinary approach	<p>An approach to chronic pain management that simultaneously addresses all biopsychosocial factors affecting the patient's pain, and helps patients achieve their goals sooner compared with approaches that address only some contributors to the patient's pain.³⁵</p>

Term	Definition
neuropathic pain	A type of pain that occurs following damage to the nervous system itself. The sensations associated with this type of pain are described as burning or shooting pains. The skin can be numb, tingling or extremely sensitive. ¹⁰⁶ Neuropathic pain may be peripheral (peripheral nerve) or central (spinal cord or brain), depending on the location of the damage in the nervous system. ³⁵
nociceptive pain	Pain caused by damage to body tissue and usually described as a sharp, aching or throbbing pain. It can be caused by a range of conditions or factors, including injury, surgery, arthritis, osteoporosis or musculoskeletal conditions. ¹⁰⁶
opioids	Medicines used to achieve analgesia by reducing transmission of nociceptive impulses (through effects at central nervous system mu-opioid receptors) and modulating the descending inhibitory pathways from the brain. Some opioids (for example, tramadol, tapentadol) also produce analgesia via non-opioid receptors. ³⁵
pacing	Modification of behaviour to prevent overexertion, improve function, manage symptoms, and reduce recurrence of pain, inactivity and disability. ³⁵
pain	An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage. ³⁵
patient education	Education about health literacy, competencies and adaptation of behaviour. Patient education should consist of reassurance facilitated by elements of cognitive behavioural therapy. Reassurance takes place during the interaction between the clinician and the patient, during which information, instruction or persuasions are exchanged to reduce patients' worries and fears of illness, and recommendations are translated into action in daily life. Patient education is part of informed consent to treatment. It enhances expectations of management and improves adherence to treatment strategies. ³⁵
physical activity	Movement of the body. It can be structured (for example, walking groups, exercise classes, gym or pool-based exercise) or unstructured, involving activities of daily living (for example, playing, working, mobilising, house chores, recreational activities). Physical activity can be aerobic (endurance), or focused on strengthening, flexibility, coordination or balance. ³⁵
	See staying active
recurrent pain (also referred to as episodic pain)	Pain that occurs episodically over three months or more. Each episode is similar in presentation – it may be recurrent acute nociceptive pain or episodes of a chronic pain condition. ³⁵
	See acute low back pain, chronic low back pain and nociceptive pain
risk assessment (also referred to as risk stratification)	A process that aims to improve the outcome by selecting treatments that may be more likely to work in certain groups of people. There are several methods of stratification, which are similar in outcome. The STarT Back risk assessment tool is an example of a validated tool for stratification by risk of ongoing functional impairment. ³²
self-management	Methods a patient uses to limit the impact of pain on their daily lives, their mood and functions (for example, sleep), whether at home or at work. ¹⁰⁷

Term	Definition
serious underlying pathology	Existing conditions that may be influencing pain, such as cancer, infection, trauma or inflammatory disease such as spondyloarthritis. ⁸²
social connection	Feeling close to, or belonging with, an individual or community. Social connection occurs when a person feels safe, seen, heard and valued. Its absence triggers threat pathways and worsens pain experience, negatively affects health and wellbeing, and is associated with increased mortality. ³⁵
staying active	Continuing with normal daily activities as much as possible, including going to work. It also means avoiding sitting still for long periods. Staying active does not mean participating in any specific exercises. ^{34,90}
	See physical activity

References

1. Hoy D, Bain C, Williams G, March L, Brooks P, Blyth F, et al. A systematic review of the global prevalence of low back pain. *Arthritis Rheum* 2012;64(6):2028–37.
2. Apos E, Cunningham J, Ahern S, Truong T, Hansen J, Johnson MA. The Australian Spine Registry annual report, 2019. Melbourne: Spine Society of Australia and Public Health and Preventive Medicine, Monash University; 2020.
3. Australian Institute of Health and Welfare. Back problems. Canberra: AIHW; 2020.
4. Froud R, Patterson S, Eldridge S, Seale C, Pincus T, Rajendran D, et al. A systematic review and meta-synthesis of the impact of low back pain on people's lives. *BMC Musculoskelet Disord* 2014;15(1):50.
5. Vos T, Abajobir AA, Abate KH, Abbafati C, Abbas KM, Abd-Allah F, et al. Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2017;390(10100):1211–59.
6. Australian Institute of Health and Welfare. Australian hospital statistics: emergency department care 2020–21. Table 4.9: The 20 most common principal diagnoses (3 character level) for emergency department presentations, states and territories, 2020–21 [spreadsheet] [Internet]. Canberra: AIHW; 2022 [updated 2022; cited 2022 Aug 10]. Available from: www.aihw.gov.au/reports-data/myhospitals/sectors/emergency-department-care
7. Britt H, Miller GC, Henderson J, Bayram C, Harrison C, Valenti L, et al. General practice activity in Australia 2015–16. Sydney: Sydney University Press; 2016.
8. da C Menezes Costa L, Maher CG, Hancock MJ, McAuley JH, Herbert RD, Costa LO. The prognosis of acute and persistent low-back pain: a meta-analysis. *CMAJ* 2012 Aug 7;184(11):E613–24.
9. NSW Agency for Clinical Innovation. Management of people with acute low back pain: model of care. Chatswood: NSW Health; 2016.
10. Schofield DJ, Shrestha RN, Passey ME, Earnest A, Fletcher SL. Chronic disease and labour force participation among older Australians. *Med J Aust* 2008 Oct 20;189(8):447–50.
11. Traeger A, Buchbinder R, Harris I, Maher C. Diagnosis and management of low-back pain in primary care. *CMAJ* 2017 Nov 13;189(45): E1386–95.
12. Schofield DJ, Shrestha RN, Cunich M, Tanton R, Kelly S, Passey ME, et al. Lost productive life years caused by chronic conditions in Australians aged 45–64 years, 2010–2030. *Med J Aust* 2015 Sep 21;203(6):260.e261–6.
13. Australian Institute of Health and Welfare. Disease expenditure in Australia 2018–19. Canberra: AIHW; 2021.
14. Australian Commission on Safety and Quality in Health Care, National Health Performance Authority. Australian atlas of healthcare variation. Sydney: ACSQHC; 2015.
15. Australian Commission on Safety and Quality in Health Care. The third Australian atlas of healthcare variation. Sydney: ACSQHC; 2018.
16. Australian Commission on Safety and Quality in Health Care. The second Australian Atlas of healthcare variation. Sydney: ACSQHC; 2017
17. Australian Commission on Safety and Quality in Health Care. The fourth Australian atlas of healthcare variation. Sydney: ACSQHC; 2021.
18. Bogduk N. Management of chronic low back pain. *Med J Aust* 2004 Jan 19;180(2):79–83.
19. McGuirk B, King W, Govind J, Lowry J, Bogduk N. Safety, efficacy, and cost effectiveness of evidence-based guidelines for the management of acute low back pain in primary care. *Spine (Phila Pa 1976)* 2001 Dec 1;26(23):2615–22.
20. Ferreira GE, Machado GC, Abdel Shaheed C, Lin CC, Needs C, Edwards J, et al. Management of low back pain in Australian emergency departments. *BMJ Qual Saf* 2019 Oct;28(10): 826–34.

21. Layne EI, Roffey DM, Coyle MJ, Phan P, Kingwell SP, Wai EK. Activities performed and treatments conducted before consultation with a spine surgeon: are patients and clinicians following evidence-based clinical practice guidelines? *Spine J* 2018 Apr;18(4):614–9.
22. van Wambeke P, Desomer A, Ailliet L, Berquin A, Demoulin C, Depreitere B, et al. Low back pain and radicular pain: assessment and management. Brussels: Belgian Health Care Knowledge Centre; 2017. KCE Report 287.
23. Hartvigsen J, Hancock MJ, Kongsted A, Louw Q, Ferreira ML, Genevay S, et al. What low back pain is and why we need to pay attention. *Lancet* 2018 Jun 9;391(10137):2356–67.
24. National Institute for Health and Care Excellence. Low back pain and sciatica in over 16s: assessment and management [Internet]. London: NICE; 2016 [updated 2020 Dec 11; cited 2021 Oct]. (NICE guideline NG59.) Available from: www.nice.org.uk/guidance/ng59
25. Scottish Intercollegiate Guidelines Network (SIGN). Management of chronic pain. Edinburgh: SIGN; 2019.
26. Qaseem A, Wilt TJ, McLean RM, Forciea MA, Clinical Guidelines Committee of the American College of Physicians. Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians. *Ann Intern Med* 2017 Apr 4;166(7):514–30.
27. Stochkendahl MJ, Kjaer P, Hartvigsen J, Kongsted A, Aaboe J, Andersen M, et al. National clinical guidelines for non-surgical treatment of patients with recent onset low back pain or lumbar radiculopathy. *Eur Spine J* 2018 Jan;27(1):60–75.
28. Chenot JF, Greitemann B, Kladny B, Petzke F, Pfingsten M, Schorr SG. Non-specific low back pain. *Dtsch Arztebl Int* 2017 Dec 25;114 (51–52):883–90.
29. Institute of Health Economics. Toward optimized practice: guideline for the evidence-informed primary care management of low back pain. Edmonton (AB): IHE; 2019.
30. Hegmann KT, Travis R, Belcourt RM, Donelson R, Eskay-Auerbach M, Galper J, et al. Diagnostic tests for low back disorders. *J Occup Environ Med* 2019 Apr;61(4):e155–68.
31. Pangarkar SS, Kang DG, Sandbrink F, Bevevino A, Tillisch K, Konitzer L, et al. VA/DoD clinical practice guideline: diagnosis and treatment of low back pain. *J Gen Intern Med* 2019;34(11):2620–9.
32. North American Spine Society. Evidence-based clinical guidelines for multidisciplinary spine care: diagnosis and treatment of low back pain. Illinois: NASS; 2020. www.spine.org/Research-Clinical-Care/Quality-Improvement/Clinical-Guidelines (accessed Sep 2021).
33. Queensland Health. Clinical prioritisation criteria: spine (orthopaedics) [Internet]. Brisbane: Queensland Health; 2018 [updated 2019 May 14 v8.0; cited 2021 Sep]. Available from: cpc.health.qld.gov.au/Condition/273/spine-neck-back-pain
34. Rheumatology Expert Group. Therapeutic guidelines: rheumatology, version 3. Melbourne: Therapeutic Guidelines Limited; 2017.
35. Pain and Analgesia Expert Group. Therapeutic guidelines: pain and analgesia, version 7. Melbourne: Therapeutic Guidelines Limited; 2020.
36. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards. 2nd ed. Sydney: ACSQHC; 2021.
37. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Primary and Community Healthcare Standards. Sydney: ACSQHC; 2021.
38. Hoy D, March L, Brooks P, Blyth F, Woolf A, Bain C, et al. The global burden of low back pain: estimates from the Global Burden of Disease 2010 study. *Ann Rheum Dis* 2014 Jun;73(6):968–74.
39. Edwards J, Hayden J, Asbridge M, Gregoire B, Magee K. Prevalence of low back pain in emergency settings: a systematic review and meta-analysis. *BMC Musculoskelet Disord* 2017 Apr 4;18(1):143.
40. Health Quality Ontario. Care for adults with acute low back pain quality standard Ontario, Canada: Health Quality Ontario; 2019.

References

41. Wheeler SG, Wipf JE, Staiger TO, Deyo RA, Jarvik JG. Evaluation of low back pain in adults [Internet]. Alphen aan den Rijn: Wolters Kluwer N.V.; 2021 [updated 2021 Jun 21; cited 2021 Sep]. Available from: www.uptodate.com/contents/evaluation-of-low-back-pain-in-adults
42. Ferreira ML, Machado G, Latimer J, Maher C, Ferreira PH, Smeets RJ. Factors defining care-seeking in low back pain: a meta-analysis of population based surveys. *Eur J Pain* 2010 Aug;14(7):747.e741-7.
43. Lemeunier N, Leboeuf-Yde C, Gagey O. The natural course of low back pain: a systematic critical literature review. *Chiropr Man Therap* 2012;20(1):33.
44. Walker BF, Muller R, Grant WD. Low back pain in Australian adults: health provider utilization and care seeking. *J Manipulative Physiol Ther* 2004 Jun;27(5):327-35.
45. Maher C, Underwood M, Buchbinder R. Non-specific low back pain. *Lancet* 2017 Feb 18;389(10070):736-47.
46. Foster NE, Anema JR, Cherkin D, Chou R, Cohen SP, Gross DP, et al. Prevention and treatment of low back pain: evidence, challenges, and promising directions. *Lancet* 2018 Jun 9;391(10137):2368-83.
47. Almeida M, Saragiotti B, Maher CG. Primary care management of non-specific low back pain: key messages from recent clinical guidelines. *Med J Aust* 2018 Sep;209(5):235-235.e1.
48. da Silva T, Mills K, Brown BT, Herbert RD, Maher CG, Hancock MJ. Risk of recurrence of low back pain: a systematic review. *J Orthop Sports Phys Ther* 2017 May;47(5):305-13.
49. Stanton TR, Henschke N, Maher CG, Refshauge KM, Latimer J, McAuley JH. After an episode of acute low back pain, recurrence is unpredictable and not as common as previously thought. *Spine (Phila Pa 1976)* 2008 Dec 15;33(26):2923-8.
50. Pengel LHM, Herbert RD, Maher CG, Refshauge KM. Acute low back pain: systematic review of its prognosis. *BMJ* 2003;327(7410):323.
51. Hancock MJ, Maher CG, Latimer J, Herbert RD, McAuley JH. Can rate of recovery be predicted in patients with acute low back pain? Development of a clinical prediction rule. *Eur J Pain* 2009 Jan;13(1):51-5.
52. Itz CJ, Geurts JW, van Kleef M, Nelemans P. Clinical course of non-specific low back pain: a systematic review of prospective cohort studies set in primary care. *Eur J Pain* 2013 Jan;17(1):5-15.
53. Ramanathan SA, Hibbert PD, Maher CG, Day RO, Hindmarsh DM, Hooper TD, et al. CareTrack: toward appropriate care for low back pain. *Spine* 2017 Jul 1;42(13):E802-9.
54. Kamper SJ, Logan G, Copsey B, Thompson J, Machado GC, Abdel-Shaheed C, et al. What is usual care for low back pain? A systematic review of health care provided to patients with low back pain in family practice and emergency departments. *Pain* 2020 Apr;161(4):694-702.
55. Henschke N, Maher CG, Refshauge KM, Herbert RD, Cumming RG, Bleasel J, et al. Prevalence of and screening for serious spinal pathology in patients presenting to primary care settings with acute low back pain. *Arthritis Rheum* 2009 Oct;60(10):3072-80.
56. Buchbinder R, van Tulder M, Öberg B, Costa LM, Woolf A, Schoene M, et al. Low back pain: a call for action. *Lancet* 2018 Jun 9;391(10137): 2384-8.
57. Choosing Wisely Australia. Recommendations: tests, treatments and procedures clinicians and consumers should question [filtered by condition - low back pain] [Internet]. Sydney: NPS MedicineWise; 2018 [cited 2021 Dec] Available from: www.choosingwisely.org.au/recommendations?q=&organisation=&medicineBranch=&medicalTest=&medicineTreatment=&conditionSymptom=2941
58. Lee J, Gupta S, Price C, Baranowski AP. Low back and radicular pain: a pathway for care developed by the British Pain Society. *Br J Anaesth* 2013 Jul;111(1):112-20.
59. Royal Australian and New Zealand College of Radiologists. Education modules for appropriate imaging referrals [Internet]. Sydney: ANZCR; 2015 [cited 2021 Feb 23]. Available from: www.ranzcr.com/our-work/quality-standards/education-modules
60. Dunlevy C, MacLellan GA, O'Malley E, Blake C, Breen C, Gaynor K, et al. Does changing weight change pain? Retrospective data analysis from a national multidisciplinary weight management service. *Eur J Pain* 2019 Sep;23(8):1403-15.

61. Australian Commission on Safety and Quality in Health Care. Health literacy: taking action to improve safety and quality. Sydney: ACSQHC; 2014.
62. Oliveira CB, Maher CG, Pinto RZ, Traeger AC, Lin CC, Chenot JF, et al. Clinical practice guidelines for the management of non-specific low back pain in primary care: an updated overview. *Eur Spine J* 2018 Nov;27(11): 2791–803.
63. Knight CL, Deyo RA, Staiger TO, Wipf JE. Treatment of acute low back pain [Internet]. Alphen aan den Rijn: Wolters Kluwer N.V.; 2021 [updated 2021 Aug 4; cited 2021 Sep]. Available from: www.uptodate.com/contents/treatment-of-acute-low-back-pain
64. Chou R, Qaseem A, Snow V, Casey D, Cross Jr JT, Shekelle P, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Ann Intern Med* 2007 Oct 2;147(7):478–91.
65. Australian Commission on Safety and Quality in Health Care. Medication without harm: WHO Global Patient Safety Challenge – Australia's response. Sydney: ACSQHC; 2020. www.safetyandquality.gov.au/our-work/medication-safety/who-global-patient-safety-challenge-medication-without-harm (accessed Sep 2021).
66. Australian Commission on Safety and Quality in Health Care. Opioid analgesic stewardship in acute pain clinical care standard. Sydney: ACSQHC; 2021. www.safetyandquality.gov.au/standards/clinical-care-standards/opioid-analgesic-stewardship-acute-pain-clinical-care-standard (accessed Nov 2021).
67. van Wambeke P, Desomer A, Jonckheer P, Depreitere B. The Belgian national guideline on low back pain and radicular pain: key roles for rehabilitation, assessment of rehabilitation potential and the PRM specialist. *Eur J Phys Rehabil Med* 2020 Apr;56(2):220–7.
68. Hall AM, Scurrey SR, Pike AE, Albury C, Richmond HL, Matthews J, et al. Physician-reported barriers to using evidence-based recommendations for low back pain in clinical practice: a systematic review and synthesis of qualitative studies using the Theoretical Domains Framework. *Implement Sci* 2019;14(1):49.
69. Slade SC, Kent P, Patel S, Bucknall T, Buchbinder R. Barriers to primary care clinician adherence to clinical guidelines for the management of low back pain: a systematic review and metasynthesis of qualitative studies. *Clin J Pain* 2016 Sep;32(9):800–16.
70. NSW Agency for Clinical Innovation. ACI Pain Management Network: assessment [internet]. Sydney: NSW Health; n.d. [cited 2024 Jan]. Available from: aci.health.nsw.gov.au/chronic-pain/health-professionals/assessment
71. Centre for Effective Practice. Low Back Pain [internet]. Toronto, Canada; 2016 [cited 2024 Jan]. Available from: cep.health/clinical-products/low-back-pain/
72. Bardin LD, King P, Maher CG. Diagnostic triage for low back pain: a practical approach for primary care. *Med J Aust* 2017 Apr 3;206(6): 268–73.
73. Todd NV. Guidelines for cauda equina syndrome: red flags and white flags – systematic review and implications for triage. *Br J Neurosurg* 2017 May 4;31(3):336–9.
74. NSW Agency for Clinical Innovation Emergency Care Institute. Acute low back pain [internet]. Sydney: NSW Health; n.d. [cited 2021 Dec]. Available from: aci.health.nsw.gov.au/networks/eci/clinical/clinical-tools/orthopaedic-and-musculoskeletal/acute-low-back-pain
75. Arthritis Australia, University of Queensland, Cochrane Back and Neck Group. MyBackPain [internet]. Brisbane: Arthritis Australia; 2016 [cited 2021 Sep]. Available from: mybackpain.org.au
76. O'Sullivan P, Ng L, Edwards P. Communicating with people seeking help for lower back pain [internet] Perth: Curtin University; 2021 [cited 2021 Feb]. Available from: www.lowbackpaincommunication.com
77. Edmond SN, Keefe FJ. Validating pain communication: current state of the science. *Pain* 2015 Feb;156(2):215–19.
78. Keele University. STarT Back: evidence based implementation of stratified care [internet]. United Kingdom [cited 2021 Dec]. Available from: startback.hfac.keele.ac.uk

References

79. Central and Eastern Sydney Primary Health Network. Örebro musculoskeletal pain screening questionnaire [Internet]. Sydney: Central and Eastern Sydney PHN; n.d. [cited 2021 Dec]. Available from: www.cesphn.org.au/search?q=Musculoskeletal+Pain+Screening+Questionnaire+
80. OrthoToolKit. Örebro Musculoskeletal Pain Screening Questionnaire – short form [Internet]. OrthoToolKit; [cited Dec 2021] Available from: orthotoolkit.com/ompsq-sf
81. Western Australian Department of Health. Pain health: Örebro musculoskeletal pain [Internet]. Perth: Department of Health; n.d. [cited Dec 2021]. Available from: painhealth.csse.uwa.edu.au/pain-self-checks/orebro-musculoskeletal-pain-screening-questionnaire
82. National Institute for Health and Care Excellence. Low back pain and sciatica in over 16s [Internet]. United Kingdom: NICE; 2017 [cited 2021 Oct]. (Quality Standard QS155.) Available from: www.nice.org.uk/guidance/qs155
83. Medicare Benefits Schedule Review Taskforce. First report from the Diagnostic Imaging Clinical Committee: low back pain. Canberra: Australian Government Department of Health; 2016.
84. Brinjikji W, Luetmer PH, Comstock B, Bresnahan BW, Chen LE, Deyo RA, et al. Systematic literature review of imaging features of spinal degeneration in asymptomatic populations. *AJNR Am J Neuroradiol* 2015 Apr;36(4):811–16.
85. Pitman GA. Quality of referral: what information should be included in a request for diagnostic imaging when a patient is referred to a clinical radiologist? *J Med Imaging Radiat Oncol* 2017 Jun;61(3):299–303.
86. Western Australian Department of Health. Diagnostic imaging pathways. About imaging: general principles in requesting and providing imaging investigations [Internet]. Perth: Department of Health; 2015 [updated 2019 Jul; cited 2021 Jun]. Available from: www.imagingpathways.health.wa.gov.au/index.php/about-imaging/general-principles-in-requesting
87. NPS MedicineWise. Essentials in an imaging referral [Internet]. Sydney: NPS MedicineWise; 2020 [cited 2021 Feb 16] Available from: www.nps.org.au/news/essentials-in-an-imaging-referral
88. NPS MedicineWise. 10 things you need to know about low back pain [Internet]. Sydney: NPS MedicineWise; 2021 [cited 2021 Dec]. Available from: www.nps.org.au/consumers/10-things-you-need-to-know-about-low-back-pain#questioning-the-need-for-scans
89. Choosing Wisely Australia. 5 questions to ask your doctor or other healthcare provider before you get any test, treatment, or procedure [Internet]. Sydney: NPS MedicineWise; n.d. [cited 2021 Jun] Available from: www.choosingwisely.org.au/resources/consumers-and-carers/5questions
90. Royal Australian College of General Practitioners. Handbook of non-drug interventions (HANDI) [Internet]. Melbourne: RACGP; 2021 [cited 2021 Feb 16] Available from: www.racgp.org.au/clinical-resources/clinical-guidelines/handi
91. French SD, Nielsen M, Hall L, Nicolson PJA, van Tulder M, Bennell KL, et al. Essential key messages about diagnosis, imaging, and self-care for people with low back pain: a modified Delphi study of consumer and expert opinions. *Pain* 2019 Dec;160(12):2787–97.
92. Hegmann KT, Travis R, Andersson GB, Belcourt RM, Carragee EJ, Donelson R, et al. Non-invasive and minimally invasive management of low back disorders. *J Occup Environ Med* 2020 Mar;62(3):e111–38.
93. Services Australia. Chronic disease GP management plans and team care arrangements [Internet]. Canberra: Department of Health; 2021 [updated 2021 Dec 10; cited 2021 Dec]. Available from: www.servicesaustralia.gov.au/chronic-disease-gp-management-plans-and-team-care-arrangements
94. Chou R, Deyo R, Friedly J, Skelly A, Weimer M, Fu R, et al. Systemic pharmacologic therapies for low back pain: a systematic review for an American College of Physicians clinical practice guideline. *Ann Intern Med* 2017 Apr 4;166(7):480–92.
95. Enke O, New HA, New CH, Mathieson S, McLachlan AJ, Latimer J, et al. Anticonvulsants in the treatment of low back pain and lumbar radicular pain: a systematic review and meta-analysis. *CMAJ* 2018 Jul 3;190(26):E786–93.

96. Petzke F, Klose P, Welsch P, Sommer C, Häuser W. Opioids for chronic low back pain: an updated systematic review and meta-analysis of efficacy, tolerability and safety in randomized placebo-controlled studies of at least 4 weeks of double-blind duration. *Eur J Pain* 2020 Mar;24(3):497–517.
97. Choosing Wisely Australia. 5 questions to ask about using opioids for back pain or osteoarthritis [Internet]. Sydney: NPS MedicineWise; 2020 [cited 2021 Dec] Available from: www.choosingwisely.org.au/resources/consumers-and-carers/5-questions-to-ask-about-using-opioids-for-back-pain-or-osteoarthritis
98. Murgatroyd DF, Casey PP, Cameron ID, Harris IA. The effect of financial compensation on health outcomes following musculoskeletal injury: systematic review. *PLoS One* 2015;10(2):e0117597.
99. Chou R. Subacute and chronic low back pain: nonpharmacologic and pharmacologic treatment. Alphen aan den Rijn: Wolters Kluwer N.V.; 2021 [updated 2021 Nov; cited 2021 Nov]. Available from: www.uptodate.com/contents/subacute-and-chronic-low-back-pain-nonpharmacologic-and-pharmacologic-treatment
100. Australian Commission on Safety and Quality in Health Care. Australian Charter of Healthcare Rights. 2nd ed. Sydney: ACSQHC; 2019. www.safetyandquality.gov.au/consumers/working-your-healthcare-provider/australian-charter-healthcare-rights (accessed Sep 2021).
101. Australian Commission on Safety and Quality in Health Care. Informed consent: fact sheet for clinicians. Sydney: ACSQHC; 2020. www.safetyandquality.gov.au/publications-and-resources/resource-library/informed-consent-fact-sheet-clinicians (accessed Dec 2021).
102. Australian Indigenous Doctors' Association. Cultural safety [position statement for Aboriginal and Torres Strait Islander doctors, medical students and patients]. Canberra: AIDA; 2021. aida.org.au/app/uploads/2021/09/AIDA-Position-Paper-Cultural-Safety-Final-28-September-Word.pdf
103. National Aboriginal Torres Strait Islander Standing Committee. Cultural respect framework 2016–2026 for Aboriginal and Torres Strait Islander health: a national approach to building a culturally respectful health system. Canberra: Australian Health Minister's Advisory Council; 2016.
104. Australian Commission on Safety and Quality in Health Care. NSQHS Standards user guide for Aboriginal and Torres Strait Islander health. Sydney: ACSQHC; 2017.
105. Australian Commission on Safety and Quality in Health Care. Australian Hospital Patient Experience Question Set [Internet]. Sydney: ACSQHC; 2019 [cited 2021 Dec] Available from: www.safetyandquality.gov.au/our-work/indicators-measurement-and-reporting/australian-hospital-patient-experience-question-set
106. Australian Government Department of Health. National Strategic Action Plan for Pain Management. Canberra: Department of Health; 2021. www.health.gov.au/resources/publications/the-national-strategic-action-plan-for-pain-management (accessed Sep 2021).
107. Nicholas MK, Blyth FM. Are self-management strategies effective in chronic pain treatment? *Pain Manag* 2016;6(1):75–88.

Acknowledgements

Many individuals and organisations have freely given their time and expertise in the development of this document. In particular, the Commission wishes to thank the *Low Back Pain Clinical Care Standard* Topic Working Group, and other key experts who have given their time and advice. The involvement and willingness of all concerned to share their experience and expertise are greatly appreciated.

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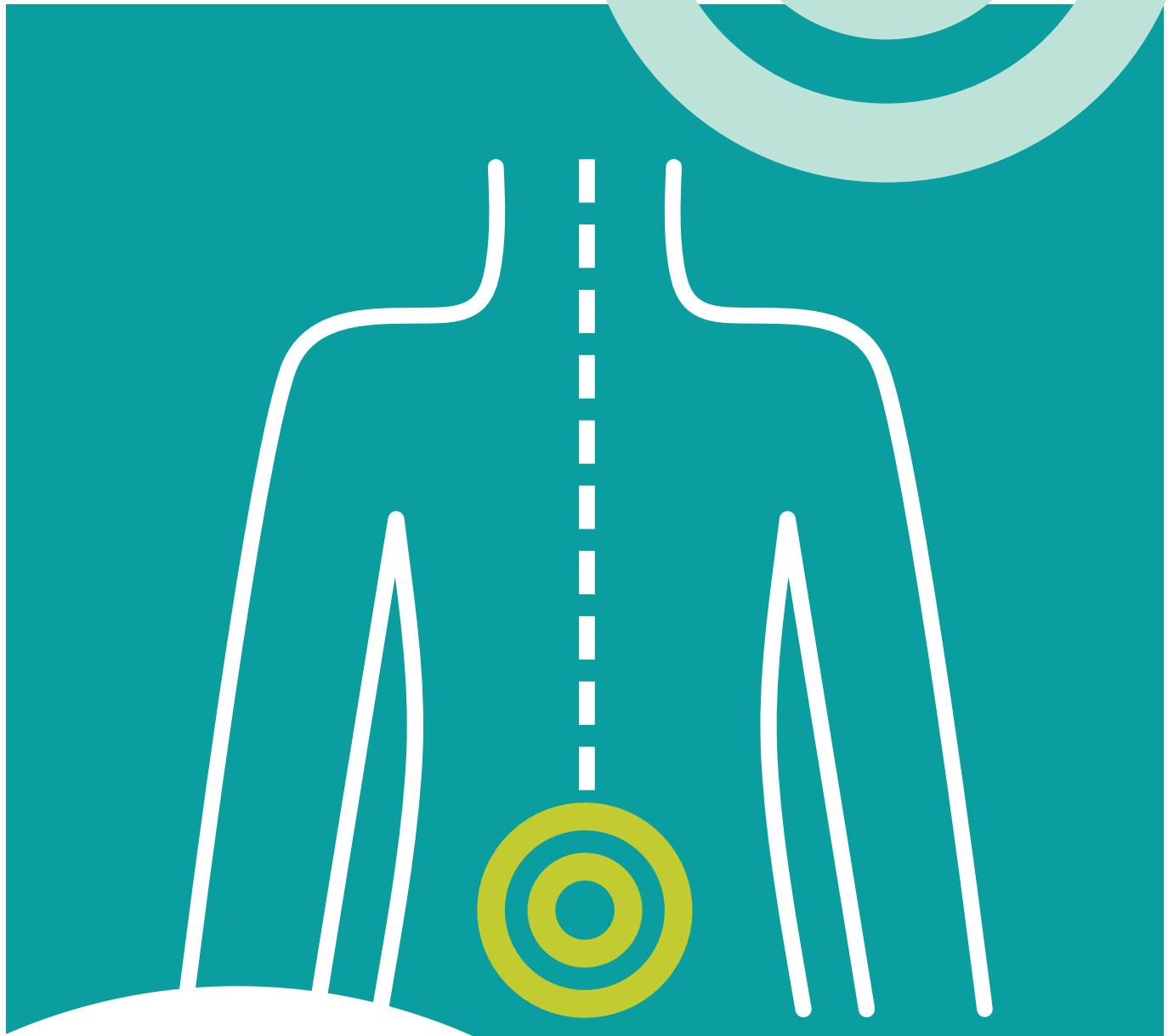
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A number of Commission staff were also involved in the writing and review of this publication, and the Commission wishes to acknowledge:

- Dr Alice Bhasale
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- Debbie Carter
- Suzanna Henderson
- Christina Lane
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