

**Quality
Standards**

Low Back Pain

Care for Adults With Acute Low Back Pain

**Health Quality
Ontario**

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Summary

This quality standard addresses care for those 16 years of age and older with acute low back pain, with or without leg symptoms. It examines the assessment, diagnosis, and management of people with this condition by health care professionals across all health care settings, with a focus on primary care. This quality standard provides guidance on reducing unnecessary diagnostic imaging, encouraging physical activity, providing education, giving reassurance, assisting with self-management support, prescribing pharmacological therapies, and suggesting additional nonpharmacological therapies.

Table of Contents

About Quality Standards	1
How to Use Quality Standards	1
About This Quality Standard	2
Scope of This Quality Standard	2
Terminology Used in This Quality Standard	2
Why This Quality Standard Is Needed	3
Principles Underpinning This Quality Standard	5
How Success Can Be Measured	5
Quality Statements in Brief	7
Quality Statement 1: Clinical Assessment	8
Quality Statement 2: Diagnostic Imaging	13
Quality Statement 3: Patient Education and Self-Management	16
Quality Statement 4: Maintaining Usual Activity	20
Quality Statement 5: Psychosocial Information and Support	24
Quality Statement 6: Pharmacological Therapies	27
Quality Statement 7: Additional Nonpharmacological Therapies	31
Acknowledgements	34
References	36
About Health Quality Ontario	39

About Quality Standards

Health Quality Ontario, in collaboration with clinical experts, patients, residents, and caregivers across the province, is developing quality standards for Ontario.

Quality standards are concise sets of statements that will:

- Help patients, residents, families, and caregivers know what to ask for in their care
- Help health care professionals know what care they should be offering, based on evidence and expert consensus
- Help health care organizations measure, assess, and improve their performance in caring for patients

The statements in this quality standard do not override the responsibility of health care professionals to make decisions with patients, after considering each patient's unique circumstances.

How to Use Quality Standards

Quality standards inform clinicians and organizations about what high-quality health care looks like for aspects of care that have been deemed a priority for quality improvement in the province. They are based on the best available evidence.

Quality standards also include an inventory of indicator definitions to help clinicians and organizations assess the quality of care they are delivering, and to identify gaps in care and areas for improvement. These indicator definitions can be used to assess processes, structures, and outcomes. It is not mandatory to use or collect data when using a quality standard to improve care. The indicator definitions are provided to support quality improvement efforts; clinicians and organizations may choose indicators to measure based on local priorities and local data availability.

In addition, tools and resources to support clinicians and organizations in their quality improvement efforts accompany each quality standard.

For more information on how to use quality standards, contact qualitystandards@hqontario.ca.

About This Quality Standard

Scope of This Quality Standard

This quality standard addresses care for adults aged 16 years and older who have a first episode of acute low back pain, or who have recurrent episodes of acute low back pain that last less than 12 weeks. The standard addresses mechanical low back pain with or without associated leg symptoms,^{1,2} such as radiculopathy caused by compression of a spinal nerve root (a pinched nerve) and neurogenic claudication (painful cramping or weakness in the legs with walking or standing).

Although it applies to care in all settings, this quality standard focuses on primary care and community-based care that can be provided by an interprofessional team of health care providers. It includes the assessment and management (including pharmacological and additional nonpharmacological interventions) of acute low back pain with or without leg symptoms, as well as physical activity, education, self-management, and psychosocial

support for people with acute low back pain. This standard includes referral to nonsurgical and surgical speciality care providers for patients who require additional medical care for their low back pain, but it excludes information on specialty-based interventions.

This quality standard does not address the management of chronic low back pain (lasting more than 12 weeks). It also excludes low back pain in pregnancy; and the diagnosis and treatment of specific causes of low back pain, such as inflammatory conditions (e.g., ankylosing spondylitis), infections (e.g., discitis, osteomyelitis, epidural abscess), fracture, neoplasm, and metabolic bone disease (e.g., osteoporosis, osteomalacia, Paget's disease), nonspinal causes of back pain (e.g., from the abdomen, kidney, ovary, pelvis, bladder), chronic pain syndromes,³ and surgical interventions (e.g., fusion and disc replacement, discectomy, laminectomy).¹

Terminology Used in This Quality Standard

Red Flags

In this quality standard, the term “red flag” indicates a sign or symptom of a serious underlying pathological disease that may require tests or investigations.⁴ Red flag signs or symptoms can be identified as follows⁴:

- **Neurological disorders:** diffuse or substantial motor/sensory loss, progressive neurological deficits, cauda equina syndrome (Note: Acute cauda equina syndrome is a surgical emergency. Symptoms include new bowel or bladder disturbance, including unrecognized fecal incontinence, saddle numbness, lower motor neuron weakness, and distinct loss of saddle/perineal sensation⁵)

- **Infection:** fever, history of intravenous (IV) drug use, immunosuppression
 - **Fracture:** trauma, osteoporosis risk/fragility fracture
 - **Tumour:** history of cancer, unexplained weight loss, significant unexpected night pain, severe fatigue
 - **Inflammation:** chronic low back pain for more than 3 months, an age of onset less than 45 years, morning stiffness for more than 30 minutes, improvement with exercise, disproportionate night pain
- “Do you think your pain will improve or become worse?”
 - *What to listen for:* a belief that 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
 - “How are you coping emotionally with your back pain?”
 - *What to listen for:* a tendency to have a low mood 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

Yellow Flags

In this quality standard, the term “yellow flag” indicates a psychosocial risk factor for developing chronic low back pain.⁴ Yellow flags may be identified through the answers to the following questions⁴:

Why This Quality Standard Is Needed

Low back pain is defined as pain localized between the 12th rib and the inferior gluteal folds. Most cases of acute low back pain are “mechanical” or nonspecific, and are characterized by tension, soreness, or stiffness in the low back area.^{1,6} Although the source of pain and other symptoms might be attributed to several structures in the back, including discs, facet joints, muscles, and connective tissue,¹ the specific source is often not identifiable.

Worldwide, low back pain causes more disability, activity limitation, and work absenteeism than any other condition.^{1,7} An estimated 80% of adults experience an episode of acute low back pain at least once in their life.⁸ Most low back pain episodes improve with initial primary care management, and without further investigations or referral to specialists.¹

It is important to recognize that the decrease in function and mobility associated with acute low back pain has an impact on the social and economic contexts of people's health, well-being, and life in general. Evidence shows that people of low socioeconomic status are more likely to receive medication (opioids and/or nonsteroidal anti-inflammatory drugs) to manage their acute low back pain than are people of high socioeconomic status.⁹ People of low socioeconomic status also have a higher risk of recurrent, persistent low back pain and an overall poorer prognosis.^{9,10} People with acute low back pain who live in low socioeconomic areas do not have the same access to care as those living in high socioeconomic areas, and are disadvantaged by their restricted access to health care services.¹⁰ Despite evidence that opioids are not a useful treatment for acute low back pain, back pain is the most common reason physicians prescribe opioids in family medicine and the emergency department.¹¹

In Canada, about 30% of adults have low back pain that recurs within 6 months, and 40% within 1 year of their first episode.¹² Most people with low back pain can benefit from lifestyle modifications (such as physical activity) and additional interventions (such as pharmacological therapies, heat, manual therapy, and therapeutic exercise).¹³ Although the literature provides consistent recommendations for managing low back pain, there is poor uptake of these recommendations and a lack of consistency in the provision of educational materials and resources to patients with low back pain.¹³

Evidence shows that 90% of low back pain is not caused by serious underlying injury or disease that requires MRIs, CT scans, medication, surgical referrals, or opioid prescriptions. Less than 5% of low back x-ray examinations reveal a finding associated with red flags, which include neurological disorders, infection, fracture, tumour, or inflammation.¹² Medical imaging for low back pain is being used more often than necessary.¹³ Imaging of the lumbar spine accounts for about one-third of all MRI examinations, and the use of diagnostic imaging has grown more rapidly than almost any other type of Canadian health service. In Ontario, there is considerable regional variation in the use of diagnostic imaging for low back pain. The total cost for spinal imaging, including x-ray examination, CT scanning, and MRI was estimated to be \$40.4 million in 2001/2 and increased to \$62.6 million in 2010/11—a 55% increase over 10 years.^{11,12}

There are many opportunities for improving low back pain care in Ontario. These include decreasing the progression from acute low back pain to chronic low back pain; ensuring timely access to education to help patients manage their symptoms; ensuring access to an appropriate health care provider when it is required; decreasing the use of inappropriate imaging for low back pain; and decreasing the use of opioids. Several programs aim to address these issues, although there is limited access to acute low back pain resources and marked geographic variation in access across the province.

Principles Underpinning This Quality Standard

This quality standard is underpinned by the principles of respect, equity, and equality.

People with acute low back pain should receive services that are respectful of their rights and dignity and that promote shared decision-making. People with acute low back pain should be provided services that are respectful of their gender, sexual orientation, socioeconomic status, housing, age, background (including self-identified cultural, ethnic, and religious backgrounds), and disability. Language, a basic tool for communication, is an essential part of safe care and needs to be considered throughout a person's health care journey. For example, services should be actively offered in French and other languages.

People with acute low back pain should have access to care through an integrated approach that facilitates access to primary care providers, rehabilitation care providers, surgical and nonsurgical specialists, and programs in the community, according to a patient's

needs over time. Interprofessional collaboration, shared decision-making, coordination of care, and continuity of care (including follow-up care) are distinct aspects of a patient-centred approach. Collaborative practice in health care “occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers, and communities to deliver the highest quality of care across settings.”¹⁴

Care providers should be aware of the historical context of the lives of Canada's Indigenous peoples and be sensitive to the impacts of intergenerational trauma and the physical, mental, emotional, and social harms experienced by Indigenous people, families, and communities.

A high-quality health system is one that provides safe, effective, patient-centred, efficient, timely, and equitable care for everyone in Ontario, no matter where they live, what they have, or who they are.

How Success Can Be Measured

The Low Back Pain Quality Standard Advisory Committee identified a small number of overarching goals for this quality standard. These have been mapped to indicators that may be used to assess quality of care provincially and locally.

How Success Can Be Measured Provincially

In this section, we list indicators that can be used to monitor the overall success of the standard provincially, given currently available data. If additional data sources are developed, other indicators could be added.

Process indicators:

- Percentage of people who seek physician or emergency department care for acute low back pain who undergo diagnostic imaging (x-ray, CT, MRI, bone scan) of the spine
- Percentage of people who seek physician or emergency department care for acute low back pain who are prescribed an opioid medication

Outcome indicator:

- Percentage of people who seek physician or emergency department care for acute low back pain who subsequently present to the emergency department for low back pain

Note: We excluded red flags from the indicators to the best of our ability. However, owing to the limitations of using administrative data, some red flags could not be excluded. Please see the Measurement Guide that accompanies this quality standard for details of red flag exclusions.

How Success Can Be Measured Locally

Providers may want to monitor their own quality improvement efforts and assess the quality of care they provide to people with acute low back pain.

It might be possible to do this using their own clinical records, or they might need to collect additional data. We recommend the following list of indicators, in addition to those listed above, to measure the quality of care patients are receiving; these indicators cannot be measured provincially using currently available data sources:

- Percentage of people with acute low back pain who have surgeon or specialist consultations
- Percentage of people with acute low back pain who report an improvement in their quality of life
- Percentage of people with acute low back pain who rate their interaction with their health care professional as “definitely helping them feel better able to manage their low back pain” (response options: definitely, for the most part, somewhat, not at all)

In addition, each quality statement within the standard is accompanied by one or more indicators. These indicators are intended to guide the measurement of quality improvement efforts related to implementing the statement. To assess the equitable delivery of care, the quality standard indicators can be stratified by patient socioeconomic and demographic characteristics, such as income, education, language, age, sex, and gender.

Quality Statements in Brief

QUALITY STATEMENT 1:

Clinical Assessment

People with acute low back pain who seek primary care receive a prompt comprehensive assessment.

QUALITY STATEMENT 2:

Diagnostic Imaging

People with acute low back pain do not receive diagnostic imaging tests unless they present with red flags that suggest serious pathological disease.

QUALITY STATEMENT 3:

Patient Education and Self-Management

People with acute low back pain are offered education and ongoing support for self-management that is tailored to their needs.

QUALITY STATEMENT 4:

Maintaining Usual Activity

People with acute low back pain are encouraged to stay physically active by continuing to perform activities of daily living, with modification if required.

QUALITY STATEMENT 5:

Psychosocial Information and Support

People with acute low back pain who have psychosocial barriers to recovery (yellow flags) identified during their comprehensive assessment are offered further information and support to manage the identified barriers.

QUALITY STATEMENT 6:

Pharmacological Therapies

People with acute low back pain whose symptoms do not adequately improve with physical activity, education, reassurance, and self-management support are offered information on the risks and benefits of nonopioid analgesics to improve mobility and function.

QUALITY STATEMENT 7:

Additional Nonpharmacological Therapies

People with acute low back pain whose symptoms do not adequately improve with physical activity, education, reassurance, and self-management support are offered information on the risks and benefits of additional nonpharmacological therapies to improve mobility and function.

Clinical Assessment

People with acute low back pain who seek primary care receive a prompt comprehensive assessment.

Background

Many people with an episode of acute low back pain do not require treatment from a health care provider, as the pain usually resolves on its own. People who do seek advice from a primary health care provider should receive a comprehensive assessment using a standardized assessment tool (e.g., Brief Pain Inventory–Short Form, 3-minute Primary Care Low Back Exam, CORE Back Tool) to support clinical decision-making. The tools listed above are examples of commonly used standardized primary care assessments for acute low back pain and may or may not be applicable to all health care disciplines that assess low back pain. A precise anatomical diagnosis is not required to plan effective treatment for people experiencing nonspecific acute low back pain.³ The most important outcomes to be

assessed include pain severity, functional mobility, psychological distress, and health-related quality of life.¹ Assessment should be comprehensive and ongoing (repeated at subsequent visits) to check¹⁵:

- If symptoms are improving
- If the patient is using nonpharmacological therapies to manage their low back pain
- If factors may be inhibiting the person's recovery that are unrelated to the spine

If a patient's symptoms are not improving, they should follow up with their health care professional within 4 weeks of their initial visit.

1

Clinical Assessment

BACKGROUND CONTINUED

Imaging is not required and should be ordered only in cases where serious pathological disease is suspected (see Quality Statement 2). If the patient has unmanageable disabling back or leg pain (i.e., is unable to perform their usual daily activities), if their limitations from back pain are ongoing and substantial, or if their symptoms are worsened by physical activity and exercise, an appropriate referral should be made to a spine-focused provider.^{1,3,15} It is important that interactive, ongoing communication occurs between the primary care provider, specialist, and person experiencing acute low back pain.¹⁶

Sources: Institute for Clinical Systems Improvement, 2012¹⁵ | National Institute for Health and Care Excellence, 2016¹ | Toward Optimized Practice, 2015³

What This Quality Statement Means

For Patients

If you seek primary care for your acute low back pain, your health care professional should give you a full health assessment that includes screening for yellow and red flags. A full assessment of your health will help them develop the best management plan, because they will understand your needs, preferences, prognosis, and goals for your care.

For Clinicians

Perform and document a comprehensive assessment that includes screening for yellow and red flags for patients with acute low back pain. This assessment takes place early in their episode of acute low back pain and whenever they return to you to discuss their condition. The same approach should be followed for recurrent low back pain.

For Health Services

Ensure that health care professionals' clinics and electronic medical records have assessment tools in place that include screening for yellow and red flags in patients with acute low back pain so that a comprehensive assessment can be performed early in an episode of acute low back pain.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Prompt

Primary care providers should triage patients with acute low back pain who request appointments to ensure that urgent requests are assessed within 1 to 3 days. This appointment can be with the patient's own primary care provider or another appropriate interprofessional health care provider.

Comprehensive assessment

A complete and accurate history identifies pertinent elements of the patient's health (e.g., current and past treatment, impact on function at home and work, patient's ability to self-manage their low back pain), when pain occurs (e.g., in the morning, with directions of spinal movement or lifting), and if this is a new episode of acute low back pain or a recurrent episode.

A physical examination and functional assessment should be undertaken by a qualified health care provider. Potential psychosocial risk factors for developing chronic pain are identified as yellow flags, and possible serious underlying pathological disease are identified as red flags.^{4,17}

Yellow flags may be identified through the answers to the following questions⁴:

- "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

Quality Indicators

Process Indicators

Number of days from when people with low back pain seek primary care to when they receive a comprehensive assessment from their primary care provider

- Calculation: can be measured as mean, median, or distribution of the wait time (in days) from when people with low back pain seek primary care to when they receive a comprehensive assessment from their primary care provider
- Data source: local data collection

Percentage of people with acute low back pain who are referred to a spine-focused provider for any of the following:

- Unmanageable disabling back or leg pain
- Limitations from back pain that are ongoing and substantial
- Symptoms that worsen with physical activity and exercise
- Denominator: total number of people with acute low back pain who have any of the listed conditions
- Numerator: number of people in the denominator who are referred to a spine-focused provider
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Comprehensive assessment

- “Do you think you would benefit from activity, movement, or exercise?”
 - *What to listen for:* fear and avoidance of activity or movement
- “How are you coping emotionally with your back pain?”
 - *What to listen for:* a tendency to have a low mood 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

Patients who present with yellow flags will benefit from education and reassurance to reduce the risk of chronic illness. If yellow flags persist, additional resources should be considered, including the Keele STarT Back 9-item tool or the Patient Health Questionnaire for Depression and Anxiety.⁴

Red flags indicate the signs or symptoms of a serious underlying pathological disease that may require tests or investigations.⁴ Red flag signs or symptoms can be identified as follows⁴:

- **Neurological disorders:** diffuse or substantial motor/sensory loss, progressive neurological deficits, cauda equina syndrome (Note: Acute cauda equina syndrome is a surgical emergency.

QUALITY INDICATORS CONTINUED

Structural Indicator**Local availability of rapid access clinics for people with low back pain**

- Data source: regional or provincial data collection method needs to be developed

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT**Comprehensive assessment (continued)**

Symptoms include new bowel or bladder disturbance, including fecal incontinence, saddle numbness, lower motor neuron weakness, unrecognized fecal incontinence, and distinct loss of saddle/perineal sensation⁵⁾

- **Infection:** fever, history of IV drug use, immunosuppression
- **Fracture:** trauma, osteoporosis risk/ fragility fracture
- **Tumour:** history of cancer, unexplained weight loss, significant unexpected night pain, severe fatigue
- **Inflammation:** chronic low back pain for more than 3 months, an age of onset less than 45 years, morning stiffness for more than 30 minutes, improvement with exercise, disproportionate night pain

Primary care

In this quality standard, “primary care” refers to the regulated health care professional who is responsible for the person’s care (e.g., assessment and management) and who the person can access directly without a referral. In the context of acute low back pain management in primary care, this usually means a family physician, nurse practitioner, physician assistant, physiotherapist, and/or chiropractor.

Diagnostic Imaging

People with acute low back pain do not receive diagnostic imaging tests unless they present with red flags that suggest serious pathological disease.

Background

People with acute nonspecific low back pain and no red flags gain no clinical benefit from diagnostic imaging of the spine (x-ray, CT, MRI, bone scan).^{1,2} Diagnostic imaging of the low back may also identify age-related changes that may not be the reason for the patient's pain.^{12,18} It is common for imaging to identify natural changes that occur in the spine, but these changes occur just as frequently in people with no back pain; no treatment is required for degenerative or "age-related" spine changes.¹⁸ In the absence of red flags, the risks associated with routine diagnostic imaging (unnecessary exposure to radiation^{19,20} and lack of specificity of diagnostic imaging^{3,19})

generally outweigh the benefits. Diagnostic imaging for people with acute low back pain may lead to unnecessary worry and may generate unnecessary follow-up tests and procedures,²⁰ and yet imaging results on their own will rarely change the treatment plan.³

People with signs or symptoms of serious underlying pathological disease (red flags) benefit from early imaging and should be identified using comprehensive assessment, further clinical examination by a medical or surgical specialist in low back pain, and relevant clinical tests.

Sources: National Institute for Health and Care Excellence, 2016¹ | Toward Optimized Practice, 2015³

What This Quality Statement Means

For Patients

If you have acute low back pain, you do not need an MRI, x-ray, bone scan, or CT scan unless your primary care provider notices signs of a serious problem or disease. These tests will not explain your symptoms or help in making a diagnosis or a management plan. Decisions about your treatment should be based on your comprehensive assessment and how your symptoms affect your life.

For Clinicians

Do not send patients with acute low back pain for diagnostic imaging unless their symptoms suggest serious underlying pathological disease. If a patient presents with red flags that suggest serious disease, early imaging may confirm or rule out a suspected damaging diagnosis.

For Health Services

Ensure that all primary care providers have clear policies and processes in place for evaluating acute low back pain through comprehensive assessment without imaging, unless the patient has red flags (serious underlying pathological disease). Service providers should also monitor the use of imaging for assessing acute low back pain in adults to ensure that it is not being used inappropriately.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Diagnostic imaging

Diagnostic imaging frequently used for low back pain includes CT, MRI, x-ray examination, and bone scan.

Red flag

This indicates the signs or symptoms of a serious underlying pathological disease that may require tests or investigations.⁴ Red flag signs or symptoms can be identified as follows⁴:

- **Neurological disorders:** diffuse or substantial motor/sensory loss, progressive neurological deficits, cauda equina syndrome (Note: Acute cauda equina syndrome is a surgical emergency. Symptoms include new bowel or bladder disturbance, saddle numbness, lower motor neuron weakness, unrecognized fecal incontinence, and distinct loss of saddle/perineal sensation⁵)
- **Infection:** fever, history of IV drug use, immunosuppression
- **Fracture:** trauma, osteoporosis risk/ fragility fracture
- **Tumour:** history of cancer, unexplained weight loss, significant unexpected night pain, severe fatigue
- **Inflammation:** chronic low back pain for more than 3 months, an age of onset less than 45 years, morning stiffness for more than 30 minutes, improvement with exercise, disproportionate night pain

Quality Indicators

Process Indicator

Percentage of people who seek physician or emergency department care for acute low back pain who undergo diagnostic imaging (x-ray, CT scan, MRI, bone scan) of the spine

- Denominator: total number of people who seek physician or emergency department care for acute low back pain
- Numerator: number of people in the denominator who undergo diagnostic imaging of the spine:
 - X-ray
 - CT scan
 - MRI
 - Bone scan
- Data sources: local data collection (to identify the denominator); National Ambulatory Care Reporting System and OHIP (to identify the denominator and numerator)

Patient Education and Self-Management

People with acute low back pain are offered education and ongoing support for self-management that is tailored to their needs.

Background

It is important for people with acute low back pain to understand that their symptoms will usually improve and respond to initial care within a short amount of time (typically in weeks). Patient education provides people with information that encourages positive changes in knowledge, beliefs, and behaviour. People with acute low back pain who receive education from a health care professional feel less fearful and more in control of their health.^{1,3} People with acute low back pain should be offered information on the nature of their symptoms; reassurance about the low risk for serious

underlying disease; reminders about the importance of continuing their usual activities and remaining mobile; and guidance on self-managing their current and recurrent symptoms.⁵ Self-management involves goal setting to encourage people's self-confidence to manage their pain successfully and increase daily functioning.³ Empowering patients to take control of their condition by self-managing their symptoms is important to their recovery, and helps them overcome any misconceptions associated with back pain.

BACKGROUND CONTINUED

Educational materials should be provided in a format that meets the needs of the individual: for example, printed materials, videos, or multimedia formats.^{3,20} Health care professionals may choose to use standardized questionnaires and tools to assess how a person manages their low back pain. Recurrence of nonspecific acute low back pain is common; educational materials should describe what to expect in terms of recurrence and how to reduce recurrent low back pain by continuing physical activity and participating in regular exercise.^{3,21} Health care professionals should be aware that patients might avoid physical activity because they fear it will cause their back pain to recur. If people with acute low back pain seek health care professional support, additional education, reassurance, close follow-up, and referral to other health care professionals, as required, may promote a return to activity.^{3,18}

Sources: Institute for Clinical Systems Improvement, 2012¹⁵ | National Institute for Health and Care Excellence, 2016¹ | Toward Optimized Practice, 2015³

What This Quality Statement Means

For Patients

Your primary care provider should offer you information to help you understand your first and/or recurrent episode of acute low back pain and how to manage it. They should help you understand your pain and make informed decisions about your care. Self-management techniques include self-monitoring of symptoms, pacing activity, implementing relaxation techniques, and modifying negative self-talk.

For Clinicians

Provide education for people with acute low back pain that is responsive to their needs. Information should include all aspects of management and be reinforced and expanded upon at subsequent visits. Family and caregivers should be included, if appropriate.

For Health Services

Ensure that all health care settings have patient education materials (includes written and electronic tools) available for adults with acute low back pain. Materials should be available in French and other relevant languages and should aim to be culturally appropriate.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Ongoing support

A partnership or collaborative working relationship between the health care team, people with acute low back pain, and their support networks to assist with goal setting, overcome barriers to achieving goals, and provide general support and appropriate follow-up when necessary.

Self-management

Self-monitoring of symptoms to identify causes of pain exacerbation, activity pacing, relaxation techniques, communication techniques, and modification of negative self-talk (catastrophizing).³

Education

Focus on the following information:

- Back pain is common and usually improves in a short time (typically weeks), but it often recurs
- Low back pain, recurrent or not, usually does not indicate a risk of serious underlying pathological disease (reassure patients as part of the education strategy)
- It is important to remain active and resume normal activities as soon as possible

Quality Indicators

Process Indicator

Percentage of people with acute low back pain who receive education and ongoing support for self-management

- Denominator: total number of people with acute low back pain
- Numerator: number of people in the denominator who receive education and ongoing support for self-management
- Data source: local data collection

Outcome Indicator

Percentage of people with acute low back pain who report feeling confident about self-managing their low back pain

- Denominator: total number of people with acute low back pain
- Numerator: number of people in the denominator who report feeling confident about self-managing their low back pain
- Data source: local data collection

An example of a tool suitable for assessing confidence in self-management is the Self-Efficacy for Managing Chronic Disease 6-Item Scale.²² This is publicly available and can be used to assess more specific measures of confidence (i.e., one's ability to manage fatigue, pain, emotional distress, and other symptoms). The Pain Self-Efficacy Questionnaire²³ is another publicly available tool, and it can be used to assess the confidence people with ongoing pain have in performing activities while in pain.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Education (continued)

- Heat can provide greater pain relief when used in combination with exercise
- It is important to take part in physical activity and ensure a healthy lifestyle⁵
- The purpose of pharmacological therapy is for patients to maintain mobility and function, while continuing to be physically active
- Patients may consider additional nonpharmacological therapies if their acute low back pain symptoms are not improving with physical activity

Maintaining Usual Activity

People with acute low back pain are encouraged to stay physically active by continuing to perform activities of daily living, with modification if required.

Background

It is important for people with acute low back pain to remain as active as possible. To reduce the potential for further episodes or recurrence, it is important for patients to remain at least moderately active, especially during and after recovery from an episode of acute low back pain.³ Staying in bed, prolonged rest, and avoiding physical activity may increase pain and stiffness in the low back.¹⁵ Patients require reassurance that their back pain does not represent ongoing damage to their bones, muscles, or other connective tissues, and that it is safe to continue with normal activities.^{15,17}

People with acute low back pain should gradually increase their level of activity by using pacing, which involves modification of behaviour to improve function, manage symptoms, and reduce recurrence and disability for those experiencing pain.²⁴ Activity limitation might be required if physical activity causes symptoms to spread (pain or other symptoms radiating to the leg); temporary modifications are often necessary for people to continue to remain active.

4

Maintaining Usual Activity

BACKGROUND CONTINUED

People with acute low back pain should move in ways that work best for them to reduce pain and improve or maintain mobility. They should return to work or other life roles quickly, applying strategies that are appropriate to their work environment, using modifications as necessary,³ and minimizing the risk of prolonged disability.^{1,15} Most people with acute low back pain should be encouraged to return to work with modifications, even if they still feel some back discomfort, because working will not cause further damage to their back.³

Sources: Institute for Clinical Systems Improvement, 2012¹⁵ | National Institute for Health and Care Excellence, 2016¹ | Toward Optimized Practice, 2015³

What This Quality Statement Means

For Patients

Continue to stay physically active, moving around as much as you can, and try to do a little more each day. You may need accommodations and modifications to your daily activities, which may include returning to work. As soon as your back feels better, continue with your regular activities.

For Clinicians

Encourage your patients with acute low back pain to continue being physically active, moving around within their level of pain tolerance, doing more each day, and returning to work and other life roles as early in their treatment as possible. Convey the importance of not resting in bed, because bed rest will reduce their overall health and well-being. Once patients feel better, they should continue with their regular activities.

For Health Services

Ensure that all health care settings have systems, processes, and resources in place for adults with acute low back pain to encourage them to optimize their physical activity and return to work, while minimizing periods of prolonged rest. Ensure that all health care settings have systems and processes in place for people with acute low back pain to receive information on remaining active during an episode of acute low back pain, with appropriate modifications.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Physical activity

Any bodily movement produced by the musculoskeletal system that necessitates energy expenditure, including activities that are done while working, playing, carrying out household chores, caregiving, travelling, and engaging in recreational pursuits.²⁴ Patients who are recovering from an acute episode of low back pain should be advised that recurrent episodes are common and that remaining physically active and participating in regular exercise may lessen these recurrences.^{3,25}

Activities of daily living

Activities of daily living include personal care, continence, toileting, walking, feeding ourselves, work, and leisure.²⁶ Instrumental activities of daily living include doing housework, preparing meals, shopping, and managing medications.²⁷

Modifications

Modified duties should allow patients to ensure a safe work environment, given their current health status.²⁸

Quality Indicators

Process Indicators

Percentage of people with acute low back pain who have documented discussions in their medical record about staying physically active by continuing activities of daily living, with modifications if required

- Denominator: total number of people with acute low back pain
- Numerator: number of people in the denominator who have documented discussions in their medical record about staying physically active by continuing activities of daily living, with modifications if required
- Data source: local data collection

Percentage of people with acute low back pain who have documented discussions in their medical record about continuing work or returning to work, with appropriate modifications

- Denominator: total number of people with acute low back pain who are working or who take a leave of absence from work
- Numerator: number of people in the denominator who have documented discussions in their medical record about continuing work or returning to work, with appropriate modifications
- Data source: local data collection

Number of days from when people with acute low back pain take a leave of absence from work to when they return to work

- Calculation: can be measured as mean, median, or distribution of the wait time (in days) from when people with acute low back take a leave of absence from work to when they return to work
- Data source: local data collection

This indicator is similar to an indicator in the *Quality-Based Pathway Clinical Handbook for Non-Emergent Integrated Spine Care*.¹⁶

Psychosocial Information and Support

People with acute low back pain who have psychosocial barriers to recovery (yellow flags) identified during their comprehensive assessment are offered further information and support to manage the identified barriers.

Background

As part of a comprehensive assessment, health care professionals should assess patients with acute low back pain for psychosocial risk factors, referred to as yellow flags (see Quality Statement 1), especially if a patient is not improving.

People with psychosocial barriers to recovery may benefit from psychosocial support as a complement to nonpharmacological therapies.^{1,29} Programs that include psychosocial support, social and occupational components, and other nonpharmacological interventions are associated

with less pain and back-specific disability, as well as with an increased likelihood of returning to work and fewer sick days.²⁹ People with acute low back pain can access various types of culturally appropriate psychosocial supports, including communication and regular connection with their health care professional, education, community support groups, individual counselling, support through employer-sponsored programs, and evidence-based treatment for mood disorders.

Sources: Institute for Clinical Systems Improvement, 2012¹⁵ | National Institute for Health and Care Excellence, 2016¹ | Toward Optimized Practice, 2015³

What This Quality Statement Means

For Patients

If you are distressed and struggling to cope with your acute low back pain, tell your provider so that they can offer you information and support, as well as other nondrug therapies.

For Clinicians

When people with acute low back pain present with yellow flags, offer information and support to manage any psychosocial barriers that could affect their recovery.

For Health Services

Ensure that all health care settings have systems, processes, and resources in place so that adults with acute low back pain can receive information and referral to psychosocial support services if needed.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Psychosocial barriers to recovery (yellow flags)

A “yellow flag” indicates a psychosocial risk factor for developing chronic low back pain.⁴ Patients who present with yellow flags will benefit from education and reassurance to reduce the risk of chronic illness. Patients might also experience barriers to recovery, including fear, financial problems, anger, depression, job dissatisfaction, family issues, and stress.³ If yellow flags persist, consider additional resources, including the Keele STarT Back 9-item tool or the Patient Health Questionnaire for Depression and Anxiety.⁴

Yellow flags may be identified through the answers to the following questions⁴:

- “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
- “How are you coping emotionally with your back pain?”
 - *What to listen for:* a tendency to have a low mood or withdrawal from social interaction

Quality Indicators

Outcome Indicator

Percentage of people with acute low back pain with identified psychosocial barriers to recovery who report that their health care professional has given them information and support to manage their identified psychosocial barriers

- Denominator: total number of people with acute low back pain with identified psychosocial barriers to recovery
- Numerator: number of people in the denominator who report that their health care professional has given them information and support to manage their identified psychosocial barriers
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Psychosocial barriers to recovery (yellow flags) (continued)

- “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

Information

Information about psychosocial barriers should be offered to people with acute low back pain during in-person visits with their health care professional, in verbal, print, or multimedia formats.³ Patients’ needs and goals for improved function and mobility should be discussed.¹⁵

Support

Factual information that is provided by health care professionals to patients that meets the patients’ values and preferences. Health care professionals should also listen to patients and encourage them to do what is best for them to achieve their care goals.¹⁶

Pharmacological Therapies

People with acute low back pain whose symptoms do not adequately improve with physical activity, education, reassurance, and self-management support are offered information on the risks and benefits of nonopioid analgesics to improve mobility and function.

Background

If a patient's acute low back pain symptoms are not improving with physical activity (see Quality Statement 4), education, reassurance, and self-management support (see Quality Statement 3), they may consider pharmacological therapies to improve function and mobility. Given the nature of acute low back pain and the potential for it to recur, patients should be prescribed medication for only short periods at consistent dosing intervals. People with acute low back pain should continue to remain physically active and maintain nonpharmacological therapies (e.g., education, reassurance, and self-management support) after they start taking medication.

Pharmacological therapy is prescribed for patients with acute low back pain to maintain mobility and function, not primarily to relieve pain. When considering pain-relieving medications, clinicians should take into account risks, benefits, side effects, efficacy, costs, and patients' needs and preferences.^{1,25} Patients may be offered a short course of nonsteroidal anti-inflammatory drugs (NSAIDs) to improve function and regain mobility.^{25,30} Patients who have contraindications to these medications should not use them.^{1,5,15,25} Providers should consider other nonopioid analgesics when required (e.g., when people cannot take NSAIDs).

BACKGROUND CONTINUED

Although individual responses vary, many clinical trials have found that acetaminophen is no better than placebo for relieving acute low back pain, improving quality of life, or enhancing sleep quality.^{1,25,31}

Opioids should not be used routinely to treat acute low back pain. There is an increase in adverse events when opioids are used as a single intervention, and there are increased risks associated with opioid use, including dependency.³ In some circumstances, it is reasonable to prescribe opioids at the lowest effective dose for a limited time if patients with severe pain and disability are unresponsive to nonpharmacological therapies and medications.^{3,15} For detailed information about opioid prescribing, please refer to the quality standard *Opioid Prescribing for Acute Pain*.¹⁹

Sources: American College of Physicians, 2017²⁵ | Institute for Clinical Systems Improvement, 2012¹⁵ | National Institute for Health and Care Excellence, 2016¹ | Toward Optimized Practice, 2015³

What This Quality Statement Means

For Patients

If remaining active, receiving education, accepting reassurance, and getting self-management support are not working well enough to control your acute low back pain, your primary care provider should offer you information on the risks and benefits of pain medication. If you decide to use pain medication, it is important to continue using other nondrug therapies as well. One does not replace the other.

For Clinicians

Offer people with acute low back pain whose symptoms are not improving information on how nonopioid pain-relieving medications may be combined with nonpharmacological therapies to improve function and mobility. Discussions with patients about medications should include an overview of the risks and benefits associated with different options.

For Health Services

Ensure that all health care settings have systems, processes, and resources in place so that people with acute low back pain can receive information on the risks and benefits of nonopioid pain-relieving medications.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Information

Information addressing the benefits and harms associated with pharmacological therapy should be given to people with acute low back pain during in-person visits with their health care provider, in verbal, printed, or multimedia formats.³ Patients' needs and goals for improved function and mobility should be discussed.¹⁵

Nonopioid analgesics

- Nonsteroidal anti-inflammatory drugs (NSAIDs) are the first choice of therapy if nonpharmacological therapies do not reduce acute low back pain.¹ They have been shown to have short-term effectiveness in reducing pain severity and improving function
- Skeletal muscle relaxants are used to help manage acute low back pain that does not respond to first-choice therapies.^{5,25} These medications have limited benefit and should be prescribed at the lowest effective dose for a limited time (less than 2 weeks) to patients with severe pain and disability who do not respond to nonpharmacological therapies and first-choice analgesics (NSAIDs). The side effects must be considered for each person
- Opioids should not be used routinely to treat acute low back pain

Quality Indicators

Process Indicators

Percentage of people with acute low back pain whose symptoms are not improving with nonpharmacological therapies (physical activity, education, reassurance, and self-management support) who are given information by their health care provider on the risks and benefits of nonopioid analgesics for their acute low back pain

- Denominator: total number of people with acute low back pain whose symptoms are not improving with nonpharmacological therapies (physical activity, education, reassurance, and self-management support)
- Numerator: number of people in the denominator who are given information by their health care provider on the risks and benefits of nonopioid analgesics for their acute low back pain
- Data source: local data collection

Percentage of people who seek physician or emergency department care for acute low back pain who are prescribed an opioid medication

- Denominator: total number of people who seek physician or emergency department care for acute low back pain
- Numerator: number of people in the denominator who are prescribed an opioid medication
- Data sources: local data collection (to identify the denominator); Ontario Health Insurance Plan and National Ambulatory Care Reporting System (to identify the denominator); Narcotics Monitoring System (to identify the numerator)

Additional Nonpharmacological Therapies

People with acute low back pain whose symptoms do not adequately improve with physical activity, education, reassurance, and self-management support are offered information on the risks and benefits of additional nonpharmacological therapies to improve mobility and function.

Background

If a patient's acute low back pain symptoms are not improving with physical activity (see Quality Statement 4), education, reassurance, and self-management support (see Quality Statement 3), they may consider heat, manual therapy (with therapeutic exercise), or other additional nonpharmacological therapies to improve function

and mobility.²⁵ These additional therapies have been shown to be more effective when used in combination with physical activity than when used on their own. Manual therapy provides some improvement in patient quality of life and improved function.¹

Sources: American College of Physicians, 2017²⁵ | National Institute for Health and Care Excellence, 2016¹

What This Quality Statement Means

For Patients

Your care provider should offer you information on nondrug therapies that may work for you, while you continue to be physically active. Using these therapies may help to reduce your pain and discomfort and may improve your overall health and well-being.

For Clinicians

Offer patients information about additional nonpharmacological therapies if their acute low back pain does not adequately resolve with physical activity, education, reassurance, and self-management support.

For Health Services

Ensure that all health care settings have systems, processes, and resources in place to provide adults with information on additional nonpharmacological therapies.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Additional nonpharmacological therapies

Additional therapies that can be used in combination with interventions that should be tried first to maximize effectiveness (including encouraging physical activity, providing education, giving reassurance, and assisting with self-management support). Examples of additional nonpharmacological therapies that should be considered include superficial heat, massage therapy, acupuncture, and manual therapy.

Information

Information addressing the benefits and harms associated with additional nonpharmacological therapies should be given to people with acute low back pain during in-person visits with their health care provider, in verbal, printed, or multimedia formats.³ Patients' needs and goals for improved function and mobility should be discussed.¹⁵

Quality Indicators

Process Indicator

Percentage of people with acute low back pain whose symptoms do not adequately improve with physical activity, education, reassurance, and self-management support who receive one or more additional nonpharmacological therapies (see examples of additional nonpharmacological therapies in the definitions that should be considered)

- Denominator: total number of people with acute low back pain whose symptoms do not adequately improve with physical activity, education, reassurance, and self-management support
- Numerator: number of people in the denominator who receive one or more additional nonpharmacological therapies
- Data source: local data collection

Acknowledgements

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Health Quality Ontario thanks the following individuals for their generous, voluntary contributions of time and expertise to help create this quality standard:

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We would like to extend our thanks to Inge Schabort for her contributions during the initial phase of the Acute Low Back Pain Quality Standard development process.

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