

CHOOSING WISELY ALBERTA LOW BACK PAIN

TOOLKIT

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National Recommendations for Low Back Pain

- **Don't do imaging for lower back pain unless red flags* are present.**
 Family Medicine, Choosing Wisely Canada recommendation #1
 Radiology, Choosing Wisely Canada recommendation #1
 (In Alberta 30% of patients with lower back pain without red flags had at least one unnecessary X-ray, CT or MRI. Reference: Unnecessary Care in Canada April 2017 Canadian Institute for Health Information IHI/CWC Report page 20)
- **Don't order lumbosacral (low back) spinal imaging in patients with non-traumatic low back pain who have no red flags/pathologic indicators.**
 Emergency Medicine, Choosing Wisely Canada recommendation #3
- **Don't order x-rays for acute low back pain in the absence of red flags.**
 Occupational Medicine, Choosing Wisely Canada recommendation #3
- **Do not order CT scans for low back pain unless red flags are present.**
 Physical Medicine and Rehabilitation, Choosing Wisely recommendation #4
- **Don't routinely image patients with low back pain regardless of the duration of symptoms unless:**
 - there are clinical reasons to suspect serious underlying pathology (i.e. red flags)
 - imaging is necessary for the planning and/or execution of a particular evidence-based therapeutic intervention on a specific spinal condition Spine, Choosing Wisely Recommendation #2
- **Don't use epidural steroid injections (ESI) for patients with axial low back pain who do not have leg dominant symptoms originating in the nerve roots.**
 Spine, Choosing Wisely Recommendation #3

*Red Flags – Clinical Path Guidelines that identify rare serious conditions
1. Features of Cauda Equina Syndrome including sudden or progressive onset of loss of bladder/bowel control, saddle anesthesia (emergency - Referral within hours)
2. Severe worsening pain, especially at night or when lying down (urgent – referral within 24 – 48 hours)
3. Significant trauma (urgent – referral within 24 – 48 hours)
4. Weight loss, history of cancer, fever (urgent – referral within 24 – 48 hours)
5. Use of steroids or intravenous drugs (urgent – referral within 24 – 48 hours)
6. Patient with first episode of severe back pain over 50 years old, especially over 65 (soon – referral within weeks)
7. Widespread neurological signs (soon – referral within weeks)

Introduction

This Low Back Pain toolkit was created to support the implementation of primary care interventions to improve care for low back pain. It can be used by physicians and their health care teams to improve care delivery and patient safety by reducing exposure to harm from low value imaging. This toolkit captures the results of an Alberta demonstration project which reviewed evidence, engaged in qualitative and quantitative research with patients and providers, and tested implementation (See Appendix B: Themes from physician interviews and patient focus groups).

Make sure this tool is right for you. This toolkit is intended to be used by providers and groups that have recognized that their patients would benefit from a consistent evidence-based approach to the common issue of low back pain **in the absence of red flags**.

The Low Back Pain Toolkit has embedded links for easy access to resources. The website addresses are provided with the references.

Key Ingredients of this Low Back Pain Toolkit

This toolkit may help you improve care for patients with low back pain in your practice by introducing you to the following changes:

- A. Identification of specific factors driving low value imaging in your practice
- B. Shared understanding of the risks of unnecessary imaging
- C. Use of data for learning, planning and tracking improvements
- D. Review of the evidence and skills for low back pain care
- E. Enhanced communication of key messages to patients
- F. Reinforce care plan with patients
- G. Pulling it all together

Low Back Pain Approach for Improved Care

A. Specific Factors Driving Low Value Imaging in Your Practice

Physician leaders and Primary Care Network (PCN) provider groups worked with Choosing Wisely Alberta about low back pain care issues and recommended practices. Providers have identified challenges which can be addressed by building a common approach within the practice, or across the PCN.

Table 1 (Low Back Pain Care Improvements and Supports) provides an overview of recommended changes, the supports available to practices, and the comparative effort required. These supports build on the strengths of the Clinical Practice Guidelines from Toward Optimized Practice and the Institute of Health Economics, and broaden to include CWA newly developed tools and national resources.

Opportunities for improvement have been listed in three categories; patient-provider interactions at the point of care, developing a standard provider approach, and referral/coordination processes.

Table 1: Low Back Pain Care Improvements and Supports

Changes for Care Improvement	Where can you get support and resources?	Effort Required
Patient - Provider Interactions at Point of Care		
Patient pamphlets	<ul style="list-style-type: none"> • Imaging tests for LBP: When you need them—and when you don't • Treating-lower-back-pain: How much bedrest is too much? 	Low
Scripting for Healthy Communication	<ul style="list-style-type: none"> • Enhanced Communication example; uncomplicated headaches • CWA sample scripts (see Section D. Enhanced Communication) 	Low
Patient Education Videos	<ul style="list-style-type: none"> • CWA - Low Back Pain Patient Video Quiz • Dr. Mike Evans Low Back Pain 	Low
Prescription for Exercise	<ul style="list-style-type: none"> • Prescription to Get Active • Low Back Pain Prescription for Exercise (in development; contact CWA.) 	Medium
Developing a Standard Provider Approach		
Physical Assessment	<ul style="list-style-type: none"> • 3-Minute Low Back Exam 	Medium
Community Provider Workshop	<ul style="list-style-type: none"> • Managing Back Pain Evidence • Low Back Pain Resources TOP IHE 	Medium
Integrated Tool	<ul style="list-style-type: none"> • CORE Back Tool 	Medium
Referral/Coordination Processes		
Referral to trusted allied provider (warm hand-off)	<ul style="list-style-type: none"> • Primary Care Network supported by Choosing Wisely Alberta 	Medium
Referral Plan with Specialty	<ul style="list-style-type: none"> • Primary Care Network supported by Choosing Wisely Alberta 	High

Consult with your practice team about the challenges they face when providing care for patients with low back pain. You may identify several issues, and together choose one or two to address based on the list above, or some other specific need. This toolkit provides additional information to help your team make improvements for low back pain care.

B. Shared Understanding of the Risks of Unnecessary Imaging

In health care, more is not always better. Despite the benefits of imaging under appropriate circumstances, providers also consider the risks of exposure to harm and avoid low value imaging. Within your practice team and community partners, discuss the impact of imaging on your patients with low back pain. For example:

- Imaging using x-ray and CT scans expose patients to unnecessary radiation. Imaging in the absence of red flags has been shown to increase the chance that 1 in 14 patients will not experience improvement (2015, Euro J Internal Med).
- Imaging may uncover incidental findings, leading to further unnecessary investigations. For example, 80% of asymptomatic 50 year old patients will have degenerative spine findings (AJNR Am J Neuroradiol 2015).

These, and further examples, are outlined in the CWA Low Back Pain narrated PowerPoint presentation; Managing Back Pain.

Since the introduction of the AHS L-spine screening form (Appendix A), there has been a significant reduction in L-spine MRIs. However, there are still pressures to order low value imaging, and the rest of this toolkit is dedicated to the changes that allow patients and providers to have the conversations that reduce expectations for low value imaging.

C. Use of Data for Learning, Planning and Tracking Improvement

Practice data offers valuable learning for providers and can help prioritize areas for improvement. There are three key sources of Low Back Pain data available to Alberta physicians, and each one offers a different opportunity for learning, as described below.

1. HQCA Primary Healthcare Panel Report

Health Quality Council of Alberta (HQCA) provides physicians with a confidential report of the health services received by their specific panel of patients, regardless of where those services were ordered and received in Alberta. This report compares the rate of L-spine imaging (x-ray, CT, MRI) services used by the physician's panel of patients to the rate used by the PCN panel of patients, and to the zone (see Figure 1: HQCA L-Spine Panel Report Sample).

The HQCA report is updated annually. It is recommended for provider learning, service delivery planning, and identifying areas of potential improvement.

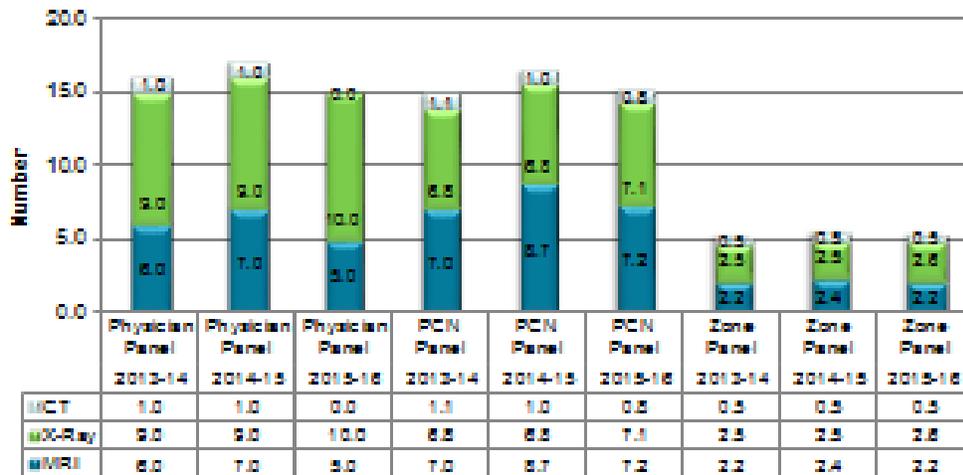
Figure 1: HQCA L-Spine Panel Report Sample

Screening-Lumbar Spine Imaging (new)

Lumbar spine scans, 2013-14 to 2015-16

The graph below represents, for each panel, the number of lumbar spine scans done by x-ray, CT, and MRI. The Choosing Wisely Canada website has more information on recommendations for lumbar spine scans (www.choosingwiselycanada.org/recommendations/family-medicine/).

The Physician Learning Program has more information about a multi-faceted educational intervention designed to support family physicians to learn about and implement the lumbar spine imaging and other Choosing Wisely Canada (CWC) recommendations (www.alberta.ca/plp.ca).



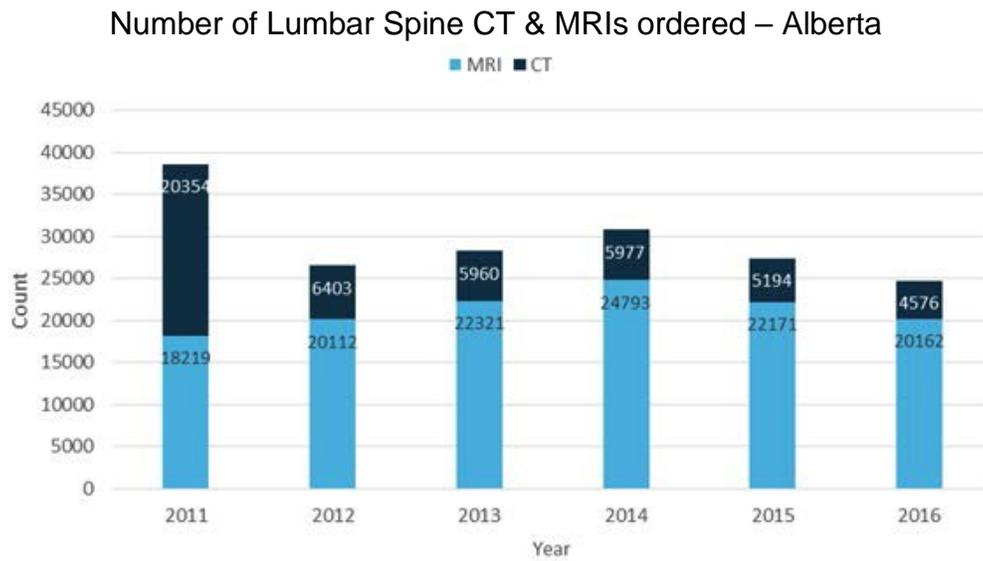
Note: Original data provided by AHC (2016) and the QI Shared Data Portal (group). Comparison group values for the PCN Panel and Zone Panel are averaged over the number of active physicians (i.e. physicians within panel at least one appointment) in each group.

2. PLP Physician Report for Audit and Feedback

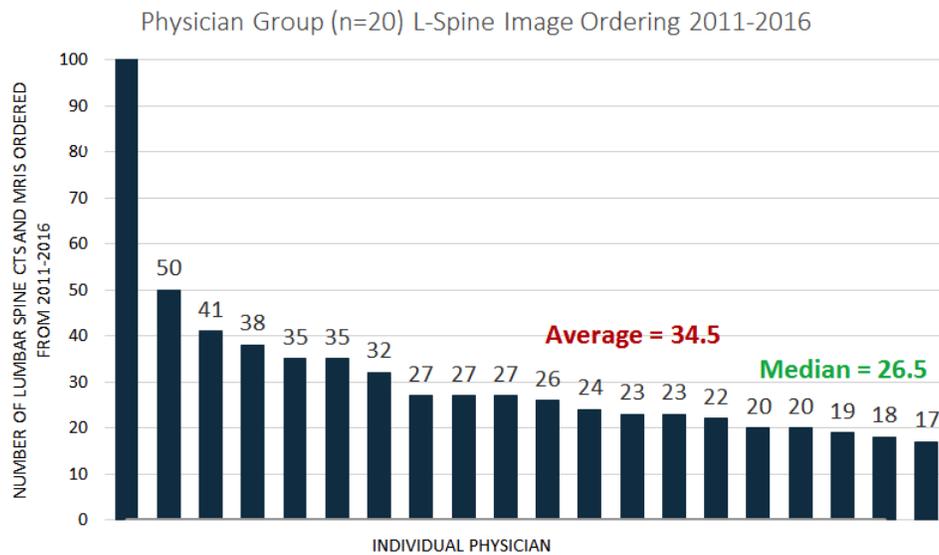
The Physician Learning Program (PLP) works with groups of physicians to provide them with confidential individual reports of the services ordered by that physician for any patient, regardless of panel affiliation. This report compares the number of L-spine imaging (CT, MRI) services ordered by that physician compared their peer group, and scans ordered in their zone over a 6-year period. It can be used by individuals to reflect on their own practice and also identify unperceived variance across a group of providers.

The PLP report can be repeated to measure improvements after an intervention. It is recommended for provider learning, service delivery planning, identifying areas of potential improvement, and intervention follow-up.

Figure 2: PLP Physician Report Sample



Total number of L Spine CTs and MRIs ordered per year.



3. Practice EMR Reports

Electronic Medical Record (EMR) reports can be generated by the practice to review patient profiles, reasons for visits, tests ordered, information provided, repeat visit rates, referrals and more. It provides in-depth view of a provider and/or provider group delivery of services.

EMR reports can be generated as needed. They are recommended for provider learning, service delivery planning, identifying areas of potential improvement, and specifically for tracking improvements based on changes made.

D. Review of Evidence and Skills for Low Back Pain Care

Consider using one or more of these practical tools to kick-off a group discussion about low back pain care, and opportunities to improve.

- Overview of 3 minute physical assessment of low back pain:
<https://www.youtube.com/watch?v=by3cBYXxXew>
- Detailed explanation of 3 minute physical assessment of low back pain:
<https://www.youtube.com/watch?v=YcivUFHpKo4>
- TOP/IHE Clinical Practice Guidelines: <http://www.topalbertadoctors.org/cpgs/885801>
- [Core Back Tool:](#)
https://thewellhealth.ca/wpcontent/uploads/2016/04/CEP_CoreBackTool_2016-1.pdf

E. Enhanced Communication of Key Messages to Patients

Choosing Wisely has recognized the importance of the ‘healthy conversation’ between patients and providers at the point of care. The following low back pain key messages for patients (amended from the Centre for Effective Practice Core Back Tool) have been found to be important for optimal quality and satisfaction:

- “Pain medication might help you to return to your daily activities sooner and to initiate exercise more comfortably. However, it is the activity and exercise that is important for your recovery, and not the medication.”
- “Low back pain is often recurring and recovery can happen without needing to see a healthcare provider. You can learn how to manage low back pain when it happens and use this* information to help you recover next time. “

Choosing Wisely Alberta engaged the PaCER (Patient and Community Enhanced Research) team to conduct focus groups with patients with low back pain (absence of red flags). Patients reported that they counted on their trusted physician to give them a clear diagnosis, action plan and warm hand-off to allied providers if required, and were likely to be dis-satisfied if they were advised to consider seeing allied providers without a clear continuity of care plan. They were confused about the referral processes and decision-making within the larger healthcare system. Patients wanted explanations on the rationale for non/referral to diagnostic imaging. They were concerned about the costs of alternative treatments and wanted advice from their provider to guide their next steps. Patients also emphasized their need to be heard and have their healthcare professional understand the impact that low back pain was having on their lives.

Physician interviews focused on the drivers which affected physician decision-making. It was found that there was not a lack of knowledge, they were familiar with the Low Back Pain guidelines, and that the two main drivers were evidence and relationships. They also identified system requirements for imaging based on referrals and care coordination.

The key skills required for effective patient communication include:

1. **elicit patient concerns and beliefs**
2. **providing patients with clear information**
3. **provide empathy, partnership and legitimation**
4. **confirm agreement/overcome barriers**

There is a demonstration of these skills through the ABIM Choosing Wisely website: http://modules.choosingwisely.org/modules/m_02/default_FrameSet.htm. Alberta physician leaders have provided examples of phrases to promote healthy conversations with patients with low back pain in Table 2.

Table 2: Provider Communication Element Scripting

CW Provider Communication Elements	Phrases and questions that can be used for each communication element
1.Elicit patient concerns/beliefs	<ul style="list-style-type: none"> ● “I am interested to hear your thoughts on low back pain (LBP). Could you tell me what you know about LBP and what concerns you have about it?” ● “What happened to you?” ● “What are you not able to do that you would like to be able to?” ● “What do you think would be helpful?”
2.Provide patients with clear information	<ul style="list-style-type: none"> ● "Let's take a few minutes to review low back pain. I'm also happy to give you an updated handout concerning LBP which you might find helpful in further understanding it ● “Based on what you have told me and the findings from my physical examination....” ● “These are not unusual findings for someone in your age group.”
3.Provide empathy, partnership and validation	<ul style="list-style-type: none"> ● "Thank you for sharing your thoughts regarding LBP. I can see why you are concerned how LBP may affect your health and wellbeing. Let's make a plan to address LBP together.” ● “We will work on this together.” ● “While investigations aren’t indicated now, we won’t forget that they may be indicated later and I will see you back at X time to see how things are going.”
4.Confirm agreement and overcome barriers	<ul style="list-style-type: none"> ● "Now that we've made our plan to deal with LBP let's review it together to ensure it will address your needs. We will also book a follow-up to deal with any challenges that arose in the process of addressing LBP.” ● “How likely is it that you can make this change?” ● “What is preventing you from being able to make this change now?”

F. Reinforce Care Plan with Patients

Patient pamphlets have been shown to reduce expectations of imaging for Low Back Pain. They are used to reinforce key messages related to care options. Patient handouts are most effective when provided to patients by providers at the point of care. Work with your team to anticipate the need for these handouts as part of the preparations for the visit. They can be printed as needed, or made available on your website.

- Review issues of:
 - a) harm caused by low value imaging rates
 - i) incidental findings which lead to further low-value testing
 - ii) risk of worsening condition
 - iii) exposure to unnecessary radiation
 - b) practice variance that can lead to constructive reflection
 - i) related to physical assessments of low back pain
 - ii) related to scripting which addresses patient concerns
 - iii) related to care planning and patient information materials
 - iv) related to lumbar spine imaging practices
- Based on gaps in practice, plan changes related to:
 - a) Patient provider interactions; including shared action plan and handouts
 - b) Provider team approach; including standard assessments across providers
 - c) Referral and coordination
- Use a quality improvement approach to test changes
 - a) Use a simple Model for Improvement to engage the whole practice

Table 3: Low Back Pain Model for Improvement example

Model for Improvement	Purpose	Example
Aim	What are we trying to accomplish?	<i>Improve patient care by eliminating imaging for low back pain unless red flags are present.</i>
Measure	How will we know that a change is an improvement?	<i>Outcome: how often do we order L-spine images? (absence of red flags)</i>
		<i>Process: are we doing things differently? (i.e., giving patient pamphlets)</i>
		<i>Balancing: are there undesirable consequences? (i.e., appointments going overtime).</i>
Changes	What changes can we make that will result in an improvement?	<i>See Table 1</i>

2. Engage Staff

In primary care, allied team members often have contact with patients in relation to their presenting issues or concerns. They typically have positive working relationships with patients, and are well positioned to deliver patient pamphlets or reinforce key messages.

When offering Low Back Pain education, include multi-disciplinary team members and outline the important role each can play in improving patient safety by reinforcing key messages and approaches.

Staff will be most engaged when they understand the importance of low back pain care for the patients you serve. How prevalent is low back pain among your patients? Are patients satisfied with the plans for care, or do they have ongoing concerns? Nationally, low back pain is one of the top two reasons for visits to a healthcare provider, and account for 40% of missed work days.

3. Commit to Measure ‘Just Enough’ for Improvement

When testing changes, start small to make sure that things are working well. Temporary manual tracking can help gather just enough information to make sure that the change is an improvement. There are three types of measures that health care teams have found to be useful; outcome, process and balancing measures.

- **Outcome** measures track the result you want to achieve. It is focused on something that would be of value to the patient. Are things improving?
- **Process** measures track the things you will do differently in order to reach your outcome or new result. How often do you do those new things?
- **Balancing** measures are done if there is concern that there may be inadvertent downsides. Was the concern validated?

Table 4: Examples of measures for improved Low Back Pain care communication

Measures	Examples (choose only a few measures, as useful)
Outcome	<ul style="list-style-type: none"> ● Number of images ordered monthly in absence of red flags (others driven by ● Rate of patients satisfied with action plan for low back pain
Process	<ul style="list-style-type: none"> ● Rate of patients with low back pain provided with pamphlet OR Exercise Prescription ● Rate of patients with low back pain who receive a physical assessment, as per IHE 3 minute assessment ● Rate of patients with low back pain provided with warm referral to allied provider (i.e. list of providers who've agreed to shared evidence based approach). ● Rate of patients with low back pain with whom provider confirmed agreement and discussed potential barriers to action plan
Balancing	<ul style="list-style-type: none"> ● Number of times Low Back Pain appointment went overtime. ● Number of patients who sought imaging orders elsewhere.

The measures you choose to track are only the ones that capture changes that are important to you and/or your patients.

4. Sustaining Early Success

Once the intervention for low back pain care has been implemented and you start to see improvements, there are several important ways to help sustain the progress.

- share the success story with the whole practice team
 - share a patient story that illustrates the improvement. It is best if it is a real story, but it could be a fictional 'typical' story
 - put up a chart showing the data of the improvement
- have the leader set a time in 3 months and again 6 months to review the data
- look for ways to build the changes fit easily into your normal system. For example, upload patient resources on your website, then you can refer to them with ease.

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Provider Resources

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Patient Resources

13. Choosing Wisely Canada patient website. 2017 [cited 2017 Feb 22]. Available from: <http://choosingwisely.ca/>

Appendix A: Lumbar Spine Order Imaging Form



Lumbar Spine Imaging Screening Record

Patient label here or information below is required	
Last Name	First Name
Birthdate (yyy-Mm-dd)	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female
Personal Health Number	Daytime Phone

The following information is required in order for us to process your request for lumbar spine imaging.

Patient Age	Referring Physician (Print first and last name)	
Was an MRI or CT recommended on a previous imaging report? <input type="checkbox"/> Yes (include a copy of the report) <input type="checkbox"/> No		
In suspected disc herniation or spinal stenosis, are symptoms severe enough that surgery would be considered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable		
Duration of symptoms		
<input type="checkbox"/> Less than 6 weeks <input type="checkbox"/> 6 to 12 weeks <input type="checkbox"/> Greater than 12 weeks		
Back Dominant Pain (Pain above gluteal fold and below the T12 rib)	<input type="checkbox"/> Back Dominant Pain OR	
Leg Dominant Pain, Sensory Radiculopathy (Below the gluteal fold, specific root distribution and Radiation below the knee)	<input type="checkbox"/> Leg Dominant Pain	
Objective Motor Weakness In Lower Extremity on Examination	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Typical Neurogenic Claudication (Bilateral buttock and posterior thigh pain aggravated by walking or standing, relieved by sitting)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are any of the following "Red Flags" present?		
Cauda equina syndrome (Sudden or progressive onset of new urinary retention, fecal incontinence, saddle or perianal anesthesia, loss of voluntary rectal sphincter contraction)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Unexplained Weight Loss, Fever, Immunosuppression	<input type="checkbox"/> Yes	<input type="checkbox"/> No
History of Cancer	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Use of IV Drugs or Steroids	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Progressive Neurologic Deficit on Examination and Disabling Symptoms	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Significant Acute Traumatic Event Immediately Preceding Onset of Symptoms	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Severe Unremitting Worsening of Pain at Night and When Laying Down	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Age over 65 with first Episode of severe Back pain	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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This toolkit was prepared by:

Dr. Ted Findlay
Dr. Scott Beach
Eileen Patterson
John Lester

This toolkit was peer- reviewed by:

Dr. Anthony Train
Dr. Allan L. Bailey

Use and reproduction of the Choosing Wisely Alberta Low Back Pain Toolkit is encouraged and authorized, with a request to acknowledge the organizational sources.

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Please send any questions to John.Lester@topalbertadoctors.org.