LOW BACK PAIN STRATEGY

CORE Back Tool: A Guide

This tool is an educational guide for primary care providers on the appropriate use of the CORE (Clinically Organized Relevant Exam) Back Tool. This guide is intended to provide clinicians with quick reminders, context, and any necessary clarification for appropriate use of the tool.

A. HISTORY (5 High Yield Questions)	
Rationale	These questions will help you to identify the mechanical pattern of back pain and to screen for serious, non-mechanical pathology.
Key Message	Over 90% of low back pain is mechanical. It can be identified on clinical assessment and follows a predictable course.
Clinical PEARLS	• Back dominant, intermittent pain is never the result of infection or malignancy. • Any presentation that does not fit a mechanical pattern justifies additional assessment and investigation. • In addition to the 5 High Yield Questions, you may also find the following question helpful to consider: "What can you NOT do now that you could do before the onset of your low back pain?".

B. SCREENING	
Red Flags[1]	
Rationale	Red flag conditions are a result of serious medical disorders that require emergent, urgent and /or specialized assessment and management.
Key Message	Screening for red flags is a mandatory part of a back assessment.
Clinical PEARLS	• Red flags are readily determined by an appropriate back assessment. • Emergent or urgent red flags do not present with intermittent symptoms.
Resources	• POCKET Card for Red and Yellow Flags available at www.iwh.on.ca • Toward Optimized Practice. Guideline for the evidence-informed primary care management of low back pain. Edmonton (AB): Toward Optimized Practice 2011. Appendix A: Red and Yellow Flags. http://www.topalbertadoctors.org
Radiology Criteria	
Rationale	While the structural origins of low back pain are well recognized, pinpointing the specific pain generator of back dominant pain or "fixing" a specific pain generator is often not possible.
Key Message	With appropriate clinical assessment, spinal imaging for low back pain does not alter management or ultimate outcome in the majority of patients.
Clinical PEARLS	• The majority of diagnostic imaging tests of the lumbar spine demonstrate abnormalities that are typically non-specific in both symptomatic and asymptomatic individuals. • In the absence of red flags, diagnostic imaging for low back pain is not a helpful test (i.e. does not change the management or outcome of the patient) unless there is a specific clinical scenario that necessitates a specific intervention requiring pre-intervention imaging. • If imaging is indicated, in some geographic areas CT may be more readily available than MRI and could be considered.
Resources	Chou R, Deyo RA, Jarvik JG. Appropriate use of lumbar imaging for evaluation of low back pain [review]. Radiol Clin North Am 2012;50(4):569–85.

Centre for Effective Practice

Let's Make Healthy Change Happen

Ontario

Canadian Spine Society

Ontario College of Family Physicians

Nurse Practitioners' Association of Ontario

Surgical Criteria	
Rationale	Surgery is indicated only for specific conditions and referrals should be based on clear clinical indications.
Key Message	Patient wait times can be reduced by more clinically specific non-surgical and surgical referrals to enable the right care at the right time.
Clinical PEARLS	• Elective surgical referral is indicated for disabling, non-responsive or recurring leg dominant pain. • Surgery for back dominant pain is rarely indicated in the absence of spinal deformity and /or instability (e.g. spondylolisthesis).
Resources	Cheng F, You J, Rampersaud YR. Relationship between spinal magnetic resonance imaging findings and candidacy for spinal surgery. Can Fam Physician 2010;56(9):e323–30.
Yellow Flags/Barriers[2]	
Rationale	The Yellow Flags are psychosocial indications of risk for chronicity based on patient factors related to dependency, fear, dissatisfaction and low mood.
Key Message	If you are feeling symptoms of sadness or anxiety, this could be related to your condition and could impact your recovery.
Clinical PEARLS	• By having a quick checklist of "yellow flags", the clinician can easily screen for psychosocial factors that may require counselling treatment. Further assessment for depression or anxiety may be required. • Early identification and treatment of psychosocial risk factors will improve recovery and overall outcomes (including risk of chronicity).
Resources	• POCKET Card for Red and Yellow Flags available at http://www.iwh.on.ca • Toward Optimized Practice. Guideline for the evidence-informed primary care management of low back pain. Edmonton (AB): Toward Optimized Practice 2011. Appendix A: Red and Yellow Flags. http://www.topalbertadoctors.org • New Zealand Acute Low Back Pain Guide. Incorporating the Guide to Assessing Psychosocial Yellow Flags in Acute Low Back Pain. October 2004 edition. Available at: http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_ip/documents/internet/wcm002131.pdf

C. PHYSICAL EXAMINATION	
Pain Diagram[3]	
Rationale	The pain diagram provides a common understanding for patient and clinician to discuss the location and description of pain. It can be used in follow-up and can be used to clarify pain.
Key Message	For acute and recurrent low back pain, analgesics can be considered. Refer to the resource section for information on first line, second line etc.
Clinical PEARLS	• The pain diagram can be used in follow up to clarify pain progression or resolution. • These types of patient scale questions can also be used to determine pain with activities or readiness for treatment.
Resources	• Brief Pain Inventory Tool: Short Form available at: http://medicine.iupui.edu/RHEU/Physicians/bpisf.pdf • Pharmacy Tables: St. Michael's Hospital, Department of Family and Community Medicine. Acute and Subacute Low Back Pain (LBP) - Pharmacological Alternatives & Acute and Subacute Low Back Pain (LBP) - Topical and Herbal Products. Available as part of the Provincial Low Back Pain Toolkit at www.effectivepractice.org/lowbackpain and ontario.ca/lowbackpain. • Toward Optimized Practice. Guideline for the evidence-informed primary care management of low back pain. Edmonton (AB): Toward Optimized Practice 2011. http://www.topalbertadoctors.org
Physical Examination Tests	
Rationale	The physical examination is not an independent event; it is based on the pattern found in the history. It is used to confirm the pattern found in the history (e.g. back vs. leg dominant)
Key Message	The examination focuses on reproduction of the typical pain with specific movements and irritative tests, basic screening for nerve conduction and upper motor and lower sacral involvement.

Clinical PEARLS	• Assess flexion and extension for reproduction of typical pain. • Rule out upper motor and lower sacral pathology.
Pain Scales[4]	
Rationale	The scales provide a patient specific range of pain that can be used to determine need for medication as well as outcome comparison in follow-up visits.
Key Message	You may need pain medication to help you return to your daily activities and initiate exercise more comfortably.
Clinical PEARLS	Functional questions can be used in conjunction with pain scales to determine low back pain patterns as well as provide relevant patient activity education.
Resources	• Brief Pain Inventory Tool: Short Form available at: http://medicine.iupui.edu/RHEU/Physicians/bpisf.pdf • Tan G, Jensen MP, Thornby JI, Shant BF. Validation of the brief pain inventory for chronic non-malignant pain. The Journal of Pain. March 2004 Vol. 5 Issue 2, 133-137

D. ASSESSMENT[5]	
Rationale	Mechanical back pain can be categorized into four clearly defined patterns.
Key Message	The clinical pattern dictates initial management and prognosis.
Clinical PEARLS	• The essential first step is to differentiate back dominant from leg dominant pain. • The most common pattern is back dominant pain aggravated by flexion.
Resources	• Hall H, McIntosh G, Boyle C. Effectiveness of a low back pain classification system. Spine J 2009;9(8):648–57. • Saskatchewan Spine Pathway: http://www.health.gov.sk.ca/back-pain

E. PATIENT EDUCATION	
Rationale	Patient specific education based on confident clinical assessment reduces patient fear and anxiety.
Key Message	Low back pain is often a chronic recurring condition that requires patient specific education, follow-up and modification of management strategies as required over time.
Clinical PEARLS	Directionally dominant pain provides a simple means of patient specific reassurance, education, and functional management.
Resources	There are a number of patient education booklets and handouts available including handouts specific to the pattern of low back pain. A Patient Education Inventory Tool is available as part of the Provincial Low Back Pain Toolkit at www.effectivepractice.org/lowbackpain and ontario.ca/lowbackpain.

F. GOAL SETTING & PATIENT SELF-MANAGEMENT[6]	
Rationale	This three-question approach to patient self-management allows the clinician to determine readiness and motivation while engaging the patient in their own healthcare. A more detailed Personal Action Planning tool can be used to focus the process.
Key Message	You can learn how to manage low back pain when it happens and use this information to help you recover next time.
Clinical PEARLS	• Engaging the patient as a partner in their health care is imperative to best practice outcomes. • Assessing patient confidence in their ability to succeed is key to role of the clinician as a facilitator of patient self-management.
Resources	Personal Action Planning for Patient Self Management Tool. Available as part of the Provincial Low Back Pain Toolkit at www.effectivepractice.org/lowbackpain and ontario.ca/lowbackpain.

G. RECOMMENDATIONS	
Rationale	This section is meant to assist the clinician is organizing treatment goals and action for patient communication, referrals and monitoring.
Key Message	Schedule a follow-up appointment.
Clinical PEARLS	• Goal specific therapy is indicated when the patient is not improving with education and exercise. This is common in non-directional mechanical low back pain. • Monitoring medication is useful to ensure patient compliance for pain management and also to avoid unnecessary or prolonged medication. This is not meant to be mandatory. • Assessment of Yellow Flags may lead to a referral for cognitive behavioural therapy (CBT) or another mental health care or social service.
Resources	Pharmacy Tables: St. Michael's Hospital, Department of Family and Community Medicine. Acute and Subacute Low Back Pain (LBP) - Pharmacological Alternatives & Acute and Subacute Low Back Pain (LBP) - Topical and Herbal Products. Available as part of the Provincial Low Back Pain Toolkit at www.effectivepractice.org/lowbackpain and ontario.ca/lowbackpain.

The complete Provincial Low Back Pain Toolkit is available from

www.effectivepractice.org/lowbackpain or ontario.ca/lowbackpain.

Where existing tools were used and/or modified for the CORE Back Tool, the developers and authors were contacted for permission. For more information on the CORE Back Tool and the toolkit, please visit www.effectivepractice.org/lowbackpain or ontario.ca/lowbackpain

1 Adapted from: Red and Yellow Flag Indicator Cards. Physicians of Ontario Collaborating for Knowledge Exchange and Transfer (POCKET). 2005. Available from: www.iwh.on.ca/physicians-network-tool-kit
2 Adapted from: Red and Yellow Flags. Toward Optimized Practice (TOP) Program. 2011. Available from: www.topalbertadoctors.org/cpgs.php?sid=65&cpg_cats=90
3 Image from: Brief Pain Inventory Short Form. Charles S. Cleeland, PhD. 1991.
4 Adapted from: Brief Pain Inventory Short Form. Charles S. Cleeland, PhD. 1991. Available from: http://www.mdanderson.org/
5 Adapted from: Patterns of Back Pain. CBI Health Group. Available from: www.cbi.ca
6 Adapted from: Supporting Self-Management – Goal Setting Tool. Developed by Practice Support Program (PSP), a joint project of the BC Medical Association and the BC Ministry of Health. 2013.

This guide is intended to accompany the CORE tool.
This guide was created through the Government of Ontario's Provincial Low Back Pain Strategy under the clinical leadership of Drs. Julia Alleyne, Hamilton Hall and Raja Rampersaud with the review and advice of the Education Planning Committee and primary care focus groups facilitated by Centre for Effective Practice. This tool and further information on the development of the Low Back Pain Toolkit, including committee membership and additional tools, are available at www.effectivepractice.org/lowbackpain and ontario.ca/lowbackpain.