A Summary of the Guideline for the Evidence-Informed Primary Care Management of **Low Back Pain**

This evidence-informed guideline is for non-specific, non-malignant low back pain in adults only

**Red Flags** help identify rare, but potentially serious conditions. They include:
- Features of Cauda Equina Syndrome including sudden onset or loss of bladder/bowel control, saddle anaesthesia (emergency)
- Severe worsening pain, especially at night or when lying down (urgent)
- Significant trauma (urgent)
- Weight loss, history of cancer, fever (urgent)
- Use of steroids or intravenous drugs (urgent)
- Patient with first episode over 50 years old (soon)
- Widespread neurological signs (soon)

**Emergency** - referral within hours
**Urgent** - referral within 24 - 48 hours
**Soon** - referral within weeks

**Yellow Flags** indicate psychosocial barriers to recovery. They include:
- Belief that pain and activity are harmful
- ‘Sickness behaviours’ (like extended rest)
- Low or negative mood, social withdrawal
- Treatment expectations that do not fit best practice
- Problems with claim and compensation
- History of back pain, time-off, other claims
- Problems at work, poor job satisfaction
- Heavy work, unsociable hours (shift work)
- Overprotective family or lack of support


Conduct a full assessment
Including:
• history taking
• physical and neurological exam
• evaluation of Red Flags
• psychosocial risk factors/ Yellow Flags

Any Red Flags? **Yes**
Refer for immediate evaluation and treatment
e.g., emergency room, relevant specialist

Any Red Flags? **No**
**Acute and Subacute** (within 12 weeks of pain onset)
• Educate patient that low back pain typically resolves within a few weeks (refer to Patient Information Sheet)
• Prescribe self-care strategies including alternating cold and heat, continuation of usual activities as tolerated
• Encourage early return to work
• Recommend physical activity and/or exercise
• Consider analgesics in this order:
  - Acetaminophen
  - NSAIDs
  - Short course muscle relaxants
  - Short-acting opioids (rarely, for severe pain)

**1-6 Weeks**
Reassess (including Red Flags) if patient is not returning to normal function or symptoms are worsening

Consider Referral
• Physical therapist
• Chiropractor
• Osteopathic physician
• Physician specializing in musculoskeletal medicine
• Spinal surgeon (for unresolved radicular symptoms)
• Multidisciplinary pain program (if not returning to work)

**Chronic** (more than 12 weeks since pain onset)
• Prescribe physical or therapeutic exercise
• Analgesics Options
  - Acetaminophen
  - NSAIDs
  - Low dose tricyclic antidepressants
  - Short term cyclobenzaprine for flare-ups
• Referral Options
  - Community-based active rehabilitation program
  - Community-based self management/cognitive behavioural therapy program
• Additional Options
  - Progressive muscle relaxation
  - Acupuncture
  - Massage therapy, TENS as adjunct to active therapy

**Moderate to Severe Pain**
• Opioids (for appropriate patients: refer to the Canadian National Opioid Guideline endorsed by the College of Physicians and Surgeons of Alberta)
• Referral Options
  - Multidisciplinary chronic pain program
  - Epidural steroids (for short-term relief of radicular pain)
  - Prolotherapy in conjunction with exercise

For complete guideline refer to the TOP Website: www.topalbertadoctors.org

Toward Optimized Practice
Low Back Pain

Key Messages

- Do a full clinical assessment; rule out red flags
- In the absence of red flags, reassure the patient there is no reason to suspect a serious cause
- Reinforce that pain typically resolves in a few weeks without intervention
- Encourage patient to keep active
- Consider evidence-based management as per the guideline
- Recommend physical activity and/or exercise to prevent recurrence
- If pain continues beyond 6 weeks, reassess and consider additional treatment and referrals
- The goal of chronic pain management is improved quality of life
- Encourage and support pain self-management
- Monitor patient for relative benefit versus side effects

Contraindications

- Lab tests and diagnostic imaging in the absence of red flags
- Prolonged bed rest
- Traction
- Oral steroids

Medication Table

<table>
<thead>
<tr>
<th>Pain Type</th>
<th>Medication</th>
<th>Dosage range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute and sub-acute low back pain or flare-up of chronic low back/spinal pain</td>
<td><strong>1st line</strong></td>
<td>Acetaminophen</td>
</tr>
<tr>
<td></td>
<td><strong>2nd line</strong></td>
<td>Ibuprofen</td>
</tr>
<tr>
<td></td>
<td>NSAIDs</td>
<td>Diclofenac</td>
</tr>
<tr>
<td></td>
<td>Add: Cyclobenzaprine</td>
<td>for prominent muscle spasm</td>
</tr>
<tr>
<td></td>
<td>If taking controlled release opioids: add a short-acting opioid or increase controlled release opioid by 20 to 25%</td>
<td>See opioids below</td>
</tr>
<tr>
<td>Chronic low back/spinal pain</td>
<td><strong>1st and 2nd lines</strong></td>
<td>See acute pain, above</td>
</tr>
<tr>
<td></td>
<td><strong>3rd line</strong></td>
<td>Codeine</td>
</tr>
<tr>
<td></td>
<td>Weak Opioids</td>
<td>Controlled release codeine</td>
</tr>
<tr>
<td></td>
<td>Tricyclics (TCAs)</td>
<td>Amitriptyline</td>
</tr>
<tr>
<td></td>
<td>Nortriptyline</td>
<td>fewer adverse effects</td>
</tr>
<tr>
<td></td>
<td><strong>4th line</strong></td>
<td>Tramadol (not currently covered by Alberta Blue Cross)</td>
</tr>
<tr>
<td></td>
<td><strong>5th line</strong></td>
<td>Morphine sulfate</td>
</tr>
<tr>
<td></td>
<td>Strong Opioids (controlled release)</td>
<td>Hydromorphone HCl</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oxycodone HCl</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fentanyl patch</td>
</tr>
</tbody>
</table>

1 Adapted from the Calgary Regional Pain Program. September 19, 2006

- This guideline was written to provide healthcare providers and patients with guidance about appropriate prevention, assessment and intervention strategies
- It was developed by a multidisciplinary team of Alberta clinicians and researchers
- This guideline is for adults 18 years of age or older with low back pain and is not applicable to pregnant women
- It is recognized that not all recommended treatment options are available in all communities
- For further details on the recommendations, see the guideline and background document