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 of 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, especially over 65 (soon)
- Widespread neurological signs (soon)

**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** → Consider referring for evaluation and treatment
  - e.g., emergency room, relevant specialist
- **No** → Acute and Subacute (within 12 weeks of pain onset)
- Chronic (more than 12 weeks since pain onset)

**1-6 Weeks**
- 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)

**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)

**Moderate to Severe Pain**
- Prescribe physical or therapeutic exercise
- Analgesics Options
  - Acetaminophen
  - NSAIDs (consider PPI)
  - 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
  - Aqua therapy and yoga

**For complete guideline refer to the TOP Website:**
www.topalbertadoctors.org
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 (including motorized)
- Ultrasound
- Oral and systemic steroids
- Epidural steroid injections in the absence of radicular pain
- Massage and TENS for acute pain
- Massage and TENS as solo treatments for chronic pain
- Back schools for acute pain

### Medication Table

<table>
<thead>
<tr>
<th>Pain Type</th>
<th>Medication</th>
<th>Dosage range</th>
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</thead>
<tbody>
<tr>
<td>Acute and sub-acute low back pain or flare-up of chronic low back/spinal pain</td>
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<td></td>
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<tr>
<td><strong>1st line</strong></td>
<td>Acetaminophen</td>
<td>Up to 1000 mg QID (max of 3000 mg/day)</td>
</tr>
<tr>
<td><strong>2nd line</strong> NSAIDs (consider PPIs if &gt;45 years of age)</td>
<td>Ibuprofen</td>
<td>Up to 800 mg TID (max of 800 mg QID)</td>
</tr>
<tr>
<td>Diclofenac</td>
<td>Up to 50 mg TID</td>
<td></td>
</tr>
<tr>
<td>Add: Cyclobenzaprine for prominent muscle spasm</td>
<td>10 to 30 mg/day; Greatest benefit seen within one week; therapy up to 2 weeks may be justified</td>
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<tr>
<td>If prescribing controlled release opioids: add a short-acting opioid or increase controlled release opioid by 20 to 25%</td>
<td>See opioids below</td>
<td></td>
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<tr>
<td>Chronic low back/spinal pain</td>
<td></td>
<td></td>
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<tr>
<td><strong>1st and 2nd lines</strong></td>
<td>See acute pain, above</td>
<td></td>
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<tr>
<td><strong>3rd line</strong> Tricyclics (TCAs)</td>
<td>Amitriptyline</td>
<td>10 to 100 mg HS</td>
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<tr>
<td>Nortriptyline fewer adverse effects</td>
<td></td>
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<tr>
<td><strong>3rd line</strong> Weak Opioids</td>
<td>Codeine</td>
<td>30 to 60 mg every 3 to 4 hours</td>
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<tr>
<td>Controlled release codeine</td>
<td>50 to 100 mg Q8h, may also be given Q12h</td>
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<tr>
<td><strong>4th line</strong> Tramadol (not currently covered by Alberta Blue Cross)</td>
<td>Slow titration max 400mg/day. Note: Monitor total daily acetaminophen dose when using tramadol - acetaminophen combination</td>
<td></td>
</tr>
<tr>
<td><strong>5th line</strong> Strong Opioids (controlled release)</td>
<td>Morphine sulfate</td>
<td>15 to 100 mg BID</td>
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<tr>
<td>Hydromorphone HCl</td>
<td>3 to 24 mg BID</td>
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<tr>
<td>Oxycodone HCl</td>
<td>10 to 40 mg BID -TID</td>
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<tr>
<td>Fentanyl patch</td>
<td>25 to 50 mcg/hr Q3 days</td>
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</tbody>
</table>

- This guideline was written to provide primary 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