



= YES    = NO

(PLACE PATIENT LABEL HERE)

SURNAME: \_\_\_\_\_ NHI: \_\_\_\_\_

FIRST NAMES: \_\_\_\_\_

Date of Birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_      SEX: \_\_\_\_\_

## LOWER BACK PAIN

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Assessment nurse: \_\_\_\_\_ Sign: \_\_\_\_\_

### INCLUSION CRITERIA

- Lower back pain (*likely mechanical*)
- < 6 weeks duration *Acute flare up of chronic back pain may be included*

### EXCLUSION CRITERIA

- Age < 15 or > 65
- Upper back / neck pain
- Abdominal pain
- Chest pain
- Significant trauma e.g. fall > 1 m, RTC  
*Minor trauma is not an exclusion*

### Select Treatment Pathway on Whiteboard

Enter actual time started  
Data collected for Ministry of Health

### STOP!

Not suitable for this Best Care Bundle  
Select 'BCB removed' Treatment Pathway  
Continue usual nursing cares

### NURSING ASSESSMENT *Aim < 30 minutes*

- History, examination and vital signs      *Document on Nursing Assessment Record*
- Record pain score:
  - At rest** /10
  - On movement** /10
- Administer analgesia      *Nurse initiated analgesia. Standing orders page 4*
- Provide self assessment sheet & pen      *Clip boards available in cubby hole in Acutes*
- Provide Back pain patient advice sheet

### RED FLAGS (URGENT REVIEW) FLAGS *All red flags boxes must be populated* = YES   = NO

- HR < 50 or >120
- Systolic BP < 90
- Fever > 38.5°C
- Spinal surgery < 6 wks
- Known AAA

#### NO RED FLAGS

Continue  
Best Care Bundle

#### RED FLAGS PRESENT (ANY) → Senior Dr review ASAP (*SMO / Senior Registrar*)

- Continue Best Care Bundle. Intervention if any: \_\_\_\_\_
- Exit Care Bundle: Reason: \_\_\_\_\_

↳ *Select 'BCB removed' in TP column, Electronic Whiteboard. This signals the medical staff*

Dr Name: \_\_\_\_\_ Sign: \_\_\_\_\_

### INVESTIGATION INDICATIONS (*ACC Red Flags*) *X-ray indications are in bold*

- Fever / rigors
- IV drug use
- Steroids
- IDDM / NIDDM
- Immunosuppressed
- Age > 50**
- Worse pain supine or at night**
- Loss bladder / bowel function**
- Unintentional weight loss**
- Any numbness / weakness in legs**
- Unrelenting pain for > a few days**
- Significant trauma**
- Cancer history**
- Not recovering as expected**
- Requested by Dr: \_\_\_\_\_

#### None present

No bloods or  
X-Rays indicated

#### Any of the above indications require bloods **and** possibly X-Rays (*X-ray indications in bold*)

↳  Bloods sent    ✓ *General panel bloods, ✓ CRP, ✓ Ca 2+ ✓ β-HCG*    ♀ *14-50y*  
*Blood cultures if temperature ≥ 38 °C*

*Urine only if signs of renal colic or UTI*

↳ X-Rays:  Ordered     Not ordered    *Indications in bold*

*Discuss with lead SMO or clinician if unsure*



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## ACUTE BACK PAIN DISPOSITION PATHWAY (< 2 WEEKS)

This pathway is designed as an inter-service agreement with General Medicine, Emergency Medicine, and Orthopaedics. It supports and does not replace clinical judgment. Use this pathway to decide disposition for patients that are not ready for discharge from ED < 4 hrs

<p><b>Evidence of Cauda Equina or motor deficit?</b> <i>e.g. Decreased anal tone, urinary retention or &gt;150 mL post void bladder volume</i></p> <p style="text-align: right;"><input type="checkbox"/> YES</p>	<p><input type="checkbox"/> X-Rays and bloods as per Best Care Bundle</p> <p><input type="checkbox"/> SMO review</p> <p><input type="checkbox"/> Admit Orthopaedic service</p>
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NO ↓

<p><b>Are any RED FLAGS present?</b></p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Active malignancy</td> <td><input type="checkbox"/> Known AAA</td> </tr> <tr> <td><input type="checkbox"/> Immunosuppression</td> <td><input type="checkbox"/> Fever &gt; 38.5° C</td> </tr> <tr> <td><input type="checkbox"/> Spinal surgery &lt; 6 wks</td> <td><input type="checkbox"/> Raised CRP</td> </tr> <tr> <td><input type="checkbox"/> Haemodynamically unstable</td> <td><input type="checkbox"/> Clinical concern</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> Pain disproportionate to clinical findings</td> </tr> </table> <p style="text-align: right;"><input type="checkbox"/> YES</p>	<input type="checkbox"/> Active malignancy	<input type="checkbox"/> Known AAA	<input type="checkbox"/> Immunosuppression	<input type="checkbox"/> Fever > 38.5° C	<input type="checkbox"/> Spinal surgery < 6 wks	<input type="checkbox"/> Raised CRP	<input type="checkbox"/> Haemodynamically unstable	<input type="checkbox"/> Clinical concern	<input type="checkbox"/> Pain disproportionate to clinical findings		<p><b>SMO review:</b></p> <p>1) Facilitate urgent imaging as appropriate: e.g:</p> <ul style="list-style-type: none"> <li>• ? Ruptured AAA → urgent C+ CT angiogram</li> <li>• Raised CRP → ? Discitis / osteomyelitis</li> </ul> <p>2) Early inpatient referral</p> <ul style="list-style-type: none"> <li>• See below for appropriate service</li> <li>• Do not have to wait for all investigations to be completed</li> </ul>
<input type="checkbox"/> Active malignancy	<input type="checkbox"/> Known AAA										
<input type="checkbox"/> Immunosuppression	<input type="checkbox"/> Fever > 38.5° C										
<input type="checkbox"/> Spinal surgery < 6 wks	<input type="checkbox"/> Raised CRP										
<input type="checkbox"/> Haemodynamically unstable	<input type="checkbox"/> Clinical concern										
<input type="checkbox"/> Pain disproportionate to clinical findings											

NO ↓

<p><b>Are the bloods and X-rays UNREMARKABLE?</b> <i>e.g. no evidence of pathological fractures / normal inflammatory markers</i></p> <p style="text-align: right;"><input type="checkbox"/> NO</p>	
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YES ↓

**REMAIN IN ED / ADU** until all diagnostic tests are available  
Physiotherapy / MDT review if required

↓

**Mobility assessment: Can the patient safely mobilise?**

<p><input type="checkbox"/> YES ↓</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p><b>Mobilising safely <i>and</i></b></p> <p><input type="checkbox"/> All discharge criteria met</p> <p style="text-align: right;"><input type="checkbox"/> YES ↓</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p><input type="checkbox"/> Discharge &amp; transfer care to GP</p> </div>	<p><input type="checkbox"/> NO ↓</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p><b>Unable to mobilise safely <i>and both</i></b></p> <p><input type="checkbox"/> Medically well</p> <p><input type="checkbox"/> Normal functional status <i>(Usually manages independently)</i></p> <p style="text-align: right;"><input type="checkbox"/> YES ↓</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p><input type="checkbox"/> Admit Orthopaedic team</p> </div>	<p><input type="checkbox"/> NO ↓</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p><b>Unable to mobilise safely <i>and any of</i></b></p> <p><input type="checkbox"/> Multiple medical co-morbidities</p> <p><input type="checkbox"/> Functional limitation <i>(Usually needs assistance with ADL's)</i></p> <p><input type="checkbox"/> Active malignancy</p> <p><input type="checkbox"/> Acute medical condition</p> <p style="text-align: right;"><input type="checkbox"/> YES ↓</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p><input type="checkbox"/> Admit AT&amp;R if appropriate <i>or</i></p> <p><input type="checkbox"/> Admit General Medicine</p> </div>
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If your patient does not completely fit into one of these categories discuss disposition at SMO level



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DISCHARGE CRITERIA <b>MUST MEET ALL</b>	ADMISSION CRITERIA <i>Disposition pathway page 2</i>
<input type="checkbox"/> Senior doctor agrees with discharge plan <input type="checkbox"/> Able to mobilise ( <i>even with residual pain</i> ) <input type="checkbox"/> Significant clinical improvement <input type="checkbox"/> All Red flags addressed ( <i>Raised CRP can be an early indicator of discitis / epidural abscess / osteomyelitis. Have you considered alternative non-spinal causes for back pain like AAA or renal colic?</i> ) <input type="checkbox"/> No barriers to discharge identified	<input type="checkbox"/> Clinical Cauda Equina <input type="checkbox"/> Motor deficit <input type="checkbox"/> Persistent abnormal vital signs or red flags <input type="checkbox"/> Severe unremitting pain <input type="checkbox"/> Physiotherapist or MDT advice <input type="checkbox"/> Senior clinician discretion Dr: _____  <i>Refer to 'Disposition pathway' on page 2 for interdepartmental agreement on admitting inpatient team.</i>

DISCHARGE CHECK LIST	FOLLOW UP - <i>please document this in the EDS</i>
<input type="checkbox"/> Meets all discharge criteria above <input type="checkbox"/> Prescription for home analgesia ( <i>formulary page 4</i> ) <input type="checkbox"/> Patient information leaflet ( <i>Bundle pack, EM CeDSS site, BCB page</i> ) <input type="checkbox"/> Medical certificate for 3 days if applicable <input type="checkbox"/> ACC form signed if applicable	<input type="checkbox"/> Ask all patients to follow up with their GP <i>See BCB proforma link from the EDS - it is pre-populated with patient information</i>  <input type="checkbox"/> Consider outpatient physiotherapy referral <i>Not all patients need outpatient physiotherapy. Consider referral especially if yellow flags are present. See below.</i>  <i>See EDS proforma (link from EDS) Already pre-populated with Physiotherapy and other useful patient advice</i>

OUTPATIENT PHYSIOTHERAPY <i>if indicated</i>	
<input type="checkbox"/> <b>ACC patients:</b> give ACC 45 <i>Encourage patient to arrange own appointment with private provider. (Provider list on BCB page, EM CeDSS). If not able we can refer WDHB but advise there may be a long wait</i>	<input type="checkbox"/> <b>Non-ACC patients:</b> WDHB physiotherapy <i>Fax yellow referral form 2497. See BCB page, EM CeDSS. All referrals are prioritised. Advise there may be a long wait.</i>

INDICATIONS AND PROCESS FOR MRI	
<ul style="list-style-type: none"> <li>• Cauda Equina</li> <li>• Abnormal motor neurology</li> <li>• Spinal claudication symptoms</li> <li>• Back pain &gt; 6 weeks</li> </ul>	<p>All MRI requests to be discussed with the on call Orthopaedic team. Case by case discussion will determine timing (inpatient vs outpatient) Orthopaedic team responsible for making the actual request.</p> <p><i>Note: mechanical back pain without neurological compromise or red flags should be managed conservatively without the need for MRI.</i></p>

BARRIERS TO RECOVERY: ACC YELLOW FLAGS	
<ul style="list-style-type: none"> <li>• Belief that pain and activity are harmful</li> <li>• 'Sickness behaviors' (like extended rest)</li> <li>• Low or negative moods, social withdrawal</li> <li>• Heavy work, unsociable hours</li> <li>• Overprotective family or lack of support</li> </ul>	<ul style="list-style-type: none"> <li>• Treatment that does not fit best practice</li> <li>• Problems with claim and compensation</li> <li>• History of back pain, time-off, other claims</li> <li>• Problems at work, poor job satisfaction</li> </ul>



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## FORMULARY / MEDICATION OPTIONS

CHECK ALLERGY STATUS AND SEE MEDSAFE OR OTHER TEXT FOR FULL LIST OF CONTRAINDICATIONS\*\*

ALL MEDICATIONS MUST BE CHARTED ON THE NATIONAL / ELECTRONIC MEDICATION CHART

### ANALGESIA FOR USE IN HOSPITAL AND ON DISCHARGE

Note: Please prescribe regular and PRN dosing, especially on discharge

Medication	Dose	Route	Freq	Notes
Paracetamol	1 g	Oral	Q 6 hourly	Standing order
Ibuprofen	400 mg	Oral	Q 6-8 hourly	Standing order Up to 800 mg TDS. (Max 2400 mg/day) Ensure normal eGFR (> 60 ml / 1.73 m2)
Codeine phosphate	30 - 60 mg	Oral	Q 6 hourly	Standing order. Max 400 mg / day Constipating. Consider laxative or stool softeners
Morphine	5 mg (max)	IV	SLOW push	Standing order. < 50 kg = 0.1 mg/kg IV > 50 kg = 5 mg

### ALTERNATIVE ANALGESIA

Tramadol	50-100 mg	Oral	4-6 hourly	High Side effect profile, ↓ seizure threshold Max 400 mg / day
Diclofenac SR	75 mg	Oral	Twice daily	Ensure normal eGFR (>60 ml/1.73 m2) Max 150 mg Daily. Consider Omeprazole 20 mg PO daily. GI upset common
Amitriptyline	10 mg	Oral	Nocte	Option for discharge. Increasing to 20 mg nocte
Baclofen	5 mg	Oral	TDS	Caution in known Psychiatric patients and elderly. Causes drowsiness, ↓ seizure threshold, and GI upset
Diazepam	2 - 5 mg	Oral		Note: Only at senior doctor discretion where muscle spasm significant. Not for routine use.
Rapid release oxycodone (eg Oxynorm ® liq or cap)	5 mg	Oral	1 hourly PRN	Max 30 mg / 24h. Safer in renal impairment. Constipating Liquid formulation not available in ED. (Source from ADU) 2.5 mg Liquid oxynorm equivalent to 5mg oral morphine
Rapid release morphine (eg Sevredol ®)	5 - 10 mg	Oral	1-4 hourly	Max 60mg/24h. Care in renal impairment. Constipating
Ketamine	10-20 mg	IV		For severe unremitting pain only. SMO guidance.

### ADDITIONAL INFORMATION

Bundle documents	Best Care Bundle Low Back Pain full guideline - via Emergency Medicine CeDSS site
ACC Guideline	<a href="http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_ip/documents/internet/wcm002131.pdf">http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_ip/documents/internet/wcm002131.pdf</a> <a href="#">ACC New Zealand Acute Low Back Pain Guide</a>
Health Point Guidelines	<a href="http://www.healthpointpathways.co.nz">www.healthpointpathways.co.nz</a>

### TOP TIPS

Acute low back pain is a common presentation. Our key roles include:

- Pain relief and mobilisation
- Ensure that serious underlying illness or pathology is absent.

Most patients will be able to leave the hospital after assessment however serious illness does occur and may be subtle and overlooked, especially in the early stages. e.g. epidural abscess, discitis and osteomyelitis. Rarely other conditions cause back pain that is not from the spine. e.g. aortic pathology / renal colic. Beware of the patient with immunosuppression and raised inflammatory markers.