MODEL OF CARE

Management of people with acute low back pain

Musculoskeletal Network

Executive summary

Introduction
Internationally and nationally, LBP is a major cause of disability, with a quarter of Australians having LBP at any one time. High levels of disability result in personal and societal economic costs. It is the most common health condition to result in someone retiring from the workforce early. The direct costs of managing ‘back problems’ in Australia in 2012 is estimated to be almost $A4.8 billion. Approximately $220 million was reimbursed by Medicare in 2013 for spinal imaging, much of which could have been avoided if the numerous international guidelines for ALBP were followed.

Studies have shown that about 40% of those reporting an episode of ALBP recover within six weeks. However, 48% still have pain and disability after three months and of these almost 30% do not recover by 12 months.

A key problem in the management of ALBP is the number of people who develop chronic LBP following an ALBP episode. We expect that early appropriate care may reduce such a transition.

The key objective of this model of care (MoC) is to reduce pain and disability associated with acute low back pain. An episode of ALBP is defined as a new episode of pain between the twelfth rib and buttock crease, with or without leg pain, that has a duration of less than three months and is preceded by one month of no pain.

The model of care
A model of care has been developed through the ACI Musculoskeletal Network in consultation with the ACI Pain Management Network. This collaboration ensures consistent interventions and messaging across acute and chronic pain management. Emergency care, neurosurgical and orthopaedic specialties were also involved.

The MoC is primarily a primary-care based model that will be supported as required by specialty clinicians and the NSW health system. This approach is backed by evidence and by the experience of practitioners in NSW who agree that people with ALBP should ideally be managed in primary care where follow-up over time can be provided and self-management supported in a wellness model.

The MoC was developed for people aged 16 years and over who present to their general practitioner (GP), emergency department or other entry point to health care with a new episode of ALBP. It provides different care pathways for people with ALBP using three triage classifications: non-specific LBP, LBP with leg pain, and suspected serious pathology (red flag conditions).

While multiple practitioners could be involved in care of these patients, the primary team members are the patient and their family and their GP, practice nurse and physiotherapist. It will also be used by clinical teams, health managers and administrators in public and private health services across NSW.

Basic standards of care
The MoC is underpinned by basic standards of care in six areas:

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>TRIAGE (see Appendices 1–5)</th>
<th>NO IMAGING IN NON-SPECIFIC LBP</th>
<th>PERSONALISED EVIDENCED-BASED HEALTH EDUCATION</th>
<th>MANAGEMENT IN LINE WITH EVIDENCED-BASED PRACTICE GUIDELINE</th>
<th>SCHEDULED FOLLOW-UP REVIEW IS PLANNED</th>
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Key principles

**Principle 1: Assessment – history and examination**
A systematic and formal history and examination including the consideration of red flags is required at the outset to determine the pathway of care for each individual patient.

**Principle 2: Risk stratification**
Prognostic risk stratification tools, such as the STarT Back and Örebro questionnaires, stratify patients into low, medium or high risk groups, determining the amount and type of treatment that they require.

**Principle 3: Patient education**
From the first assessment, each person will receive one-on-one discussion and support of self-management, along with electronic and paper-based education packs that detail the best practice management.

**Principle 4: Active physical therapy encouraged**
Physical therapies will primarily be a ‘hands off’ approach. The emphasis is on self-management assisting the patient to understand their condition and a staged resumption of normal activities. Consultation with team members may include a physiotherapist or practice nurse.

**Principle 5: Begin with simple analgesic medicines**
Where pain medicines are required it is best to begin with simple analgesics using time-contingent dosing. Non-steroidal anti-inflammatory medications can be used for short time-frames after consideration of possible adverse reactions. Opiates should be avoided.

**Principle 6: Judicious use of complex medicines**
In the presence of persisting severe leg pain, some complex medication regimens may support pain control. These include tricyclic anti-depressants, anticonvulsant agents and serotonin noradrenaline reuptake inhibitors. However, caution is required considering the impact of potential mood changes and somnolence. Opiates are less effective in this patient group, and corticosteroid spinal injections offer only short-term pain relief and should not be initiated in the primary care setting.

**Principle 7: Cognitive behavioural approach**
The principles of cognitive behavioural therapy are used to ensure the patient is supported to understand the relationship between beliefs and behaviours, and to develop a goal-orientated plan of care.

**Principle 8: Only image those with suspected serious pathology**
Imaging is only indicated when a thorough patient history and physical examination indicates that there may be a medically serious cause for the lower back pain.

**Principle 9: Pre-determined times for review**
Review each individual’s progress at two, six and twelve weeks. If there has been insufficient progress then change the treatment plan as outlined in the MoC.

**Principle 10: Timely referral and access to specialist services**
If the patient has not recovered by twelve weeks arrange for review by a musculoskeletal specialist as outlined in the MoC.
**Implementation**

Five implementation strategies will be pursued in 2016–2018, including:

- dissemination across sites in NSW and localised development of a HealthPathway for the management of people with ALBP
- support and encouragement for the MoC to be used in Aboriginal Medical Services
- Local Health Districts encouraged to implement the MoC in their health services
- collaboration with Ambulance Service NSW regarding calls they receive for people with ALBP
- development of consumer oriented version of the MoC based on the outcomes of focus groups with people who have had experience of ALBP.

Evaluation and refinement strategies to determine outcomes and need for any changes of the MoC will include:

- an audit of patient files pre- and post-implementation to determine the change after adopting the key principles
- focus group and individual consultation with consumers pre- and post-implementation
- ‘before and after’ focus groups and individual consultations with a wide range of health professionals who have agreed to support implementation of the MoC
- a community awareness strategy to provide general understanding of the management of non-specific LBP.