



**Five reasons not to prescribe opioids**

- ▶ Consider de-prescribing at every visit



**Management strategies used by people with chronic pain**

- ▶ Medicines are only one aspect of chronic pain management

# Chronic pain

Because of the biopsychosocial contributors to chronic pain, a multidimensional approach to treatment is required.



## KEY POINTS

- ▶ Chronic pain is common<sup>1-5</sup> and encompasses a variety of aetiologies and presentations.<sup>1,6,7</sup>
- ▶ Evidence suggests that medicines are overused to treat chronic pain,<sup>5,8</sup> guidelines recommend medicines only as an adjunct to non-pharmacological options.<sup>1</sup>
- ▶ Opioids have a limited role in chronic pain.<sup>1</sup> Current evidence does not support long-term opioid therapy.<sup>1,9-11</sup>
- ▶ Because of the low efficacy and high risk of harm with long-term opioid use, consider de-prescribing at every visit.<sup>1,12</sup>

## Defining 'chronic pain'

Chronic (non-cancer) pain, or persistent pain, has been defined as constant daily pain for a period of three months or more in the last six months.<sup>7</sup>

By its definition, chronic pain is a complex issue with varied pathology and presentation.<sup>1,6,7</sup> People experiencing chronic pain report osteoarthritis (48%) and back problems (29%) as the most common causes, followed by musculoskeletal problems, other arthritis conditions, neurological disorders and cancer.<sup>3-5,8</sup> Chronic pain may also appear seemingly spontaneously, with no easily identified pathology.<sup>7,13</sup>

Factors such as comorbid anxiety or depression, medical history and social and familial context also alter an individual's experience and interpretation of chronic pain.<sup>6,14,15</sup> Thus a biopsychosocial approach is required to explain the aetiology and maintenance of chronic pain.<sup>6,14,15</sup>

### Chronic pain is common

Around one in five Australians experience chronic pain.<sup>1-5,8</sup> BEACH data collected in 2013 indicate that 19.2% of patients attending general practice report chronic pain using the above definition.<sup>3</sup>

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# Five reasons not to prescribe opioids: consider de-prescribing at every visit

## Opioid prescribing practices: the case for change

Opioids present a unique challenge because they are addictive<sup>16</sup> and can lead to significant harm.<sup>17-20</sup> Over the last decade there has been a 15-fold increase in opioids dispensed.<sup>18</sup> Over the course of a year, 20% of Australians over 45 years of age will be prescribed at least one opioid for either acute or chronic pain.<sup>21</sup>

Opioids account for about 6% of all medicines prescribed by GPs, and 44% of these were for chronic pain.<sup>22</sup> Of people prescribed opioids, 23% were on opioid therapy longer than three months.<sup>21</sup> Patients on longer-term therapy were also more likely to be prescribed a higher-dose opioid.<sup>21</sup>



### 1. Increased risk of adverse events with long-term opioid use

Around 80% of people taking opioids long term will experience an adverse event, most commonly constipation, nausea and somnolence.<sup>17</sup> More serious adverse events can occur with long-term use of opioids, such as: respiratory depression; central and/or obstructive sleep apnoea; fluid retention; impaired cognition, co-ordination or driving ability (especially in combination with benzodiazepines); dermatological symptoms; diffuse musculoskeletal, neuroendocrine and urinary problems.<sup>1</sup> Adverse events are a commonly cited reason for people discontinuing opioids.<sup>17</sup>

Hospitalisations due to opioid poisoning have risen and an increasing proportion of these are being attributed to legitimately prescribed opioids.<sup>18,23</sup>

#### Clinical implications of increased risk of harm from opioids

- ▶ The aim of managing chronic pain is to minimise any harm or adverse events as a result of taking analgesics and to improve quality of life.<sup>1</sup>
- ▶ Consider de-prescribing opioids at every visit, especially when people report adverse effects.<sup>1</sup>
- ▶ When the decision to de-prescribe has been made, reduce the dose gradually and monitor for withdrawal symptoms, level of pain and effect on quality of life.<sup>12</sup>

#### Avoid dose escalation

Consider alternative options before increasing opioid dose.<sup>1</sup> The linear relationship between opioid dose and analgesic effect is counter-balanced by the concurrent linear relationship between opioid dose

and adverse effects.<sup>11,16,24</sup> Thus, avoid dose escalation using the primary opioid to restore analgesia as this may lead to increased adverse events.<sup>1,11,24</sup>

### 2. Insufficient evidence of opioid efficacy in the longer term

A review of randomised trials and observational studies in 2015 found there were no trials examining opioid use beyond one year.<sup>11</sup> Thus, the effectiveness of opioid therapy in reducing pain or improving function or quality of life compared with other therapies, has not been established beyond one year; most trials lasted less than 16 weeks.<sup>11</sup>

An examination of systematic trials of long-term opioid effectiveness revealed that some patients report clinically significant reductions in pain in the longer term.<sup>25</sup> The evidence was weak mainly due to high dropout rates by reason of adverse events or lack of effectiveness.<sup>25</sup> There was also insufficient evidence to determine the effectiveness of opioids in improving function and quality of life.<sup>25</sup>

#### Clinical implications of lack of long-term effectiveness

- ▶ Opioids have a limited role in chronic pain because of a lack of evidence for their long-term benefit.<sup>1</sup>
- ▶ If opioids are started, *Therapeutic Guidelines* recommend limiting trials of opioids to four weeks after exploring all other treatment options, both physical and psychological.<sup>1</sup> Currently, GPs report poor concordance with time-limited trials of opioids.<sup>26</sup>
- ▶ Look for measurable improvements in quality of life (sleep, mood, libido), function (activities) and pain scores to gauge the effectiveness of opioids during the trial phase.<sup>1</sup> If a functional improvement is not seen within four weeks, longer-term use of opioids is not recommended.<sup>1</sup>

#### A multidimensional approach to pain management is required

Consider a multidimensional approach, including self-management strategies beyond medicines, as opioids have a limited role in chronic pain management.<sup>1</sup> People who engaged in a multidisciplinary pain

program reported lower pain levels and better coping at the end of the program, even if they discontinued opioids during this time.<sup>27</sup>

**'The initiation of a trial of opioids for long-term management should be done with extreme caution, especially after a comprehensive assessment of potential risks.'**

– Chaparro, et al. COCHRANE DATABASE SYST REV, 2013

**'Evidence is insufficient to determine the effectiveness of long-term opioid therapy for improving chronic pain and function.'**

– Chou, et al. ANN INTERN MED, 2015

### 3. Central sensitisation and tolerance can occur within four weeks

Over time, the experience of pain can shift from a peripheral sensory experience to a central nervous system response.<sup>13</sup> This is termed central sensitisation and manifests as an increased response to painful stimuli (hyperalgesia), a novel response to non-painful stimuli due to a reduced pain threshold (allodynia) or spontaneous pain.<sup>13,28</sup>

Opioid-induced hyperalgesia is a type of central sensitisation observed in people with chronic pain.<sup>29</sup> Tolerance is distinct from central sensitisation and is a progressive lack of a response to a drug.<sup>29</sup> The two phenomena are still being investigated to determine the underlying mechanisms and possible biomarkers of each condition.<sup>28</sup>

#### Clinical implications of tolerance and central sensitisation

- ▶ Tolerance and central sensitisation reduce the effectiveness of opioids over time, which limits the viability of opioids as a clinical intervention.<sup>30</sup>
- ▶ Differentiating between central sensitisation and tolerance in a clinical setting may not be possible as both result in a reduced analgesic effect of opioids.<sup>31</sup>
- ▶ Tolerance can be overcome (at least for a time) by dose escalation of the primary analgesic, however this is not always effective<sup>32</sup> and can lead to increased adverse effects.<sup>11</sup>

#### Treat opioid-induced hyperalgesia differently

The clinical prevalence of opioid-induced hyperalgesia is unknown.<sup>29</sup> Opioid-induced hyperalgesia should be suspected when opioids are entirely ineffective or when pain increases and becomes more widespread (diffuse allodynia), particularly in the absence of disease

progression.<sup>1,29,31</sup> Address opioid-induced hyperalgesia by dose reduction, and possibly use an alternative analgesic as the central nervous system may have become sensitised to that opioid.<sup>29,31</sup>

### 4. Risk of abuse, misuse and addiction

Repeated exposure to exogenous opioids alters the reward system of the brain, resulting in tolerance and dependence.<sup>28,33</sup> There is also a risk of abuse, misuse and addiction because of the nature of opioids.<sup>16,34</sup> Reports on the prevalence of drug addiction and abuse vary across trials. But it is known that a number of people using opioids long term will develop an opioid-use disorder or exhibit problematic drug-seeking behaviour.<sup>28,35</sup>

GPs report difficulty in adhering to guidelines for strategies designed to reduce abuse, such as the management of aberrant behaviours.<sup>26</sup>

In this study only a quarter of GPs reported having a written agreement in place for patients prescribed opioids for chronic pain.<sup>26</sup>

Because of the heterogeneity of people who misuse, abuse or overdose on opioids, they can be difficult to identify in general practice.<sup>36,37</sup>

#### Clinical implications of increased risk of abuse, misuse and addiction

- ▶ *Therapeutic Guidelines* recommend discontinuing opioids if there is evidence of abuse or misuse during the four-week trial.<sup>1</sup>
- ▶ Written contracts can provide a reference point for both parties and be used to manage aberrant behaviour.<sup>26</sup>
- ▶ Rather than looking for people who might misuse opioids,<sup>38</sup> an approach may be to identify those who adhere to their non-pharmacological interventions and who do not avoid activities when in pain.<sup>15</sup> These people may be better able to manage an opioid trial as an adjunct to their existing self-management strategies.<sup>15</sup>

#### Use management plans and opioid contracts

Opioid contracts that stipulate the conditions of opioid use, and management plans that detail the range of interventions – including self-management strategies – can help structure conversations and ensure both parties are aware of the limitations of opioids in the management of chronic pain.<sup>1</sup>

#### Patients who are prescribed opioids respond best when:<sup>38</sup>

- ▶ conversations are framed as protecting them from opioid-related harms
- ▶ opioid management practices, such as establishing a written contract, are employed uniformly across the practice
- ▶ they feel that opioid adherence monitoring and ground rules for opioid prescribing are being employed because the GP has their best interests in mind.

### 5. Comorbid conditions complicate management with opioids

Major depression is the most common condition co-occurring with chronic pain.<sup>39</sup> Around 18% of people with chronic pain report comorbid depression in population-based studies, compared with 27% in primary care and up to 52% in pain clinics.<sup>39</sup> Long-term users of opioids are twice as likely to have sought treatment for anxiety and depression in the past month and to cite higher levels of psychological distress compared with non-users.<sup>21</sup>

Long-term users of opioids are also twice as likely to report four or more comorbid conditions,<sup>21</sup> and are more likely to be prescribed antidepressants.<sup>21</sup> Psychotropic medicines that are prescribed to treat comorbid psychiatric illnesses like depression and anxiety can interact with opioids to cause excessive sedation and respiratory depression.<sup>1,20</sup>

#### Clinical implications of comorbid conditions

- ▶ Include a comprehensive and integrated assessment of physical and psychological comorbidities with a thorough clinical history and examination.<sup>1</sup>
- ▶ Consider guidelines addressing upper dosing thresholds and pay attention to drug–drug and drug–disease interactions, to avoid opioid overdose in patients with comorbidities.<sup>40</sup>
- ▶ A multidimensional/multidisciplinary approach to chronic pain is often required because of the biopsychosocial nature of chronic pain and common comorbidities.<sup>6,15,41</sup>

## Management strategies used by people with chronic pain



**People experiencing chronic pain use a variety of medicines and non-pharmacological strategies to manage their pain.**<sup>3,5,8</sup>

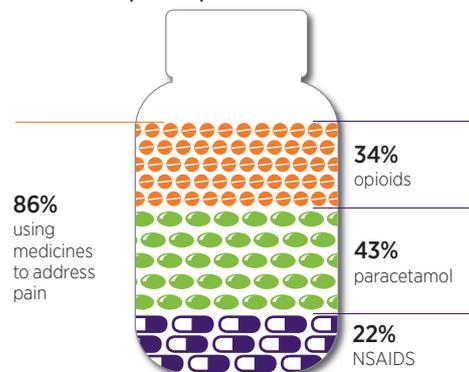
Management practices for chronic pain<sup>5,8</sup> are not always in line with guidelines.<sup>1</sup> *Therapeutic Guidelines* promote non-pharmacological strategies first-line for chronic pain.<sup>1</sup> Current figures suggest that 50–60% of people with chronic pain use only medicines to manage their condition.<sup>5,8</sup>

BEACH data show that most people with chronic pain are currently taking at least one medicine (Fig 1).<sup>3</sup>

As analgesic medicines only modify chronic pain to a modest extent, it is recommended that they are used as an adjunct (eg, paracetamol) to non-pharmacological strategies or in small doses for a short time (eg, NSAIDs).<sup>1</sup> Adjuvants (eg, antidepressants, anticonvulsants) can be considered for pain that responds poorly to analgesics, such as neuropathic pain.<sup>1</sup> Opioids have a limited role in treating chronic pain.<sup>1</sup>

People with chronic pain also report using non-pharmacological options (38%), either alone or with medicines.<sup>3,5,8</sup> Most commonly this includes physiotherapy or some form of exercise.<sup>3</sup>

**FIGURE 1: BEACH data on chronic pain patients**<sup>3</sup>



## GPs manage the majority of chronic pain patients

Most visits to health professionals by people experiencing chronic pain are made to their GP.<sup>42</sup>

Chronic pain is a complex and challenging area for healthcare providers to manage.<sup>3,36</sup> Australian GPs report lack of education about effective treatments, poor access to specialists and short consultation times as barriers to effective chronic pain management.<sup>43</sup> GPs also report feeling ill-equipped to identify and manage diversion and misuse of opioids.<sup>43</sup>

### Non-pharmacological strategies: an essential part of management

- ▶ Chronic pain management is always multidimensional.<sup>1,44</sup>
- ▶ Educate people about the biopsychosocial nature of chronic pain.<sup>14,15</sup>
- ▶ Involve people in developing management plans that encompass a variety of non-pharmacological interventions, including active self-management strategies, to place them at the centre of their care.<sup>1,44,45</sup>
- ▶ Consider chronic disease management programs that offer multidisciplinary team care and referrals to allied health practitioners.<sup>46</sup>

### EXPERT REVIEWER

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