



# Guidance for opioid reduction in primary care

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## Headlines

Reducing long-term opioids is a difficult thing to do

Patients will be scared to do it, and will be concerned about withdrawal symptoms and increased pain

**Patient engagement** is key, so give them as much control over the process as possible

Opioid reduction done badly has real and **devastating consequences**, with a risk of mental health crisis, opioid overdose (particularly from non-prescribed opioids), and suicide

For some patients the goal may not be complete cessation of opioids but a reduction to a safer dose

Encourage other **elements of pain management** to support patients move to a better quality of life

Many patients with chronic pain taking long-term opioids have co-morbid anxiety and depression. All of these – pain, anxiety and depression – will temporarily worsen during opioid reduction, so **safety-netting** is essential

## Background

Over the past 10-20 years it has become clear that opioids are not the safe and effective treatment for chronic non-cancer pain that was originally thought.

The message in the 1990s, taken from experience in palliative care, was that any pain can be treated with opioids providing the dose was high enough, and that addiction was unlikely in the presence of pain. Opioid prescribing increased as a result and, indeed, is increasing still.

It is now clear that, although opioids provide effective analgesia for acute pain and in palliative care, there is little evidence of benefit for long-term opioids in patients with persistent non-cancer pain as regards pain, quality of life or functioning. Further, there is now a better appreciation of the risks, including dependence and opioid-related mortality.

The British Pain Society recommends a maximum of 120mg morphine equivalent dose (MED) in 24 hours for patients with chronic pain. Above this level there is no evidence of better pain management, but there is clear evidence of increased risk. If the patient still describes significant pain at this dose, it can be assumed that the pain is not opioid-sensitive so the opioids should be reduced and stopped.

***The 120mg MED per day maximum is for an otherwise healthy adult, with normal renal and hepatic function, and not at extremes of age or weight. If this is not the case, the maximum dose should be regarded as being lower than this.***

## **Dose calculator: Calculation of Morphine Equivalent Daily Dose (MED)**

The following calculator can be used to estimate MED to include all of a patient's opioids. [Remember to ask about over-the-counter medications too]:

### **Opioid calculator**

Opioids Aware (<https://www.fpm.ac.uk/faculty-of-pain-medicine/opioids-aware> [1]) is a website resource for patients and healthcare professionals to support safe prescribing of opioid medicines for pain. It was developed in collaboration with Public Health England, the Faculty of Pain Medicine and the British Pain Society with representatives from the Royal College of General Practitioners, the Royal Pharmaceutical Society and the Faculty of Addictions, Royal College of Psychiatrists.

### **Opioids Aware headline points include:**

- Opioids are very good analgesics for acute pain and for pain at the end of life but there is little evidence that they are helpful for long-term pain.
- A small proportion of people may obtain good pain relief with opioids in the long-term if the dose can be kept low and especially if their use is intermittent (however it is difficult to identify these people at the point of opioid initiation).
- **The risk of harm increases substantially at doses above an oral morphine equivalent of 120mg/day, but there is no increased benefit.\*** Tapering or stopping high dose opioids needs careful planning and collaboration.

*\* For an otherwise healthy adult, with normal renal and hepatic function, and not at extremes of age or weight. If this is not the case, the maximum dose should be regarded as being lower than this.*

The following information is produced by the Oxford Pain Management Centre as a guide to managing the patient on opioids: which factors would cause concern, how to perform an opioid trial and how to wean high dose opioids.

## **The opioid trial**

A small number of patients with chronic non-cancer pain derive some functional benefit from low-dose opioids (less than 120mg morphine equivalent dose per day). Some patients find that a **small dose of immediate-release opioid (weak or strong)**

**taken before activity** may improve their quality of life. This may mean that they can do their exercises or go to the gym, tolerate a long car journey to see friends, or kneel on the floor and play with their grandchildren. An opioid trial can determine whether opioids may prove useful as part of a pain management strategy or not. It is important to remember that short term response to opioid therapy does not predict long-term benefit which may be limited by adverse effects or declining efficacy.

A structured approach to how to perform an opioid trial can be found [here](#).

A successful short-term opioid trial does not predict long-term efficacy.

## Side effects of long-term opioids

- **Constipation**
- **Nausea**
- **Daytime somnolence**
- **Poor concentration and memory loss**
- **Increased risk of falls**
- **Opioid-induced ventilatory insufficiency**

The respiratory effects of opioids are more pronounced during sleep. Fatalities have been reported in patients with obstructive sleep apnoea who are prescribed opioids, such that sleep apnoea may be a relative contraindication to opioid therapy. This is particularly important if patients are taking other central respiratory depressants such as benzodiazepines or gabapentinoids.

- **Effects on hormones**, particularly reduced testosterone levels (in men and women), leading to infertility, reduced libido, amenorrhoea, sexual dysfunction, fatigue, hot flushes, depression and osteoporosis.
- **Effects on the immune system.** Both animal and human studies have demonstrated that opioids have an immunomodulating effect. This is particularly important in patients about to undergo surgery, where pre-operative opioid use has been found to increase wound infection. [2]
- **Opioid-induced hyperalgesia (OIH)**  
OIH may be diagnosed if the patient on long-term opioid therapy presents with increased pain. This might be qualitatively and anatomically distinct from pain related to disease progression, or to breakthrough pain resulting from development of opioid tolerance. Pain associated with hyperalgesia tends to be more diffuse than the pre-existing pain and less defined in quality. Stopping opioids completely will reverse OIH, although it can take months after cessation for the pain sensitivity to recover.
- **Problem opioid use, or opioid analgesic dependence**
- **Increased mortality**

Prescription of long-acting opioids for chronic non-cancer pain, compared with anticonvulsants or tricyclic antidepressants, is associated with a significantly increased risk of all-cause mortality.[3] Research from the USA shows that patients who take more than 100mg of morphine equivalent per day have a 7 times increased risk of death compared to patients who take 20mg per day or less, such as codeine 30mg four times a day. [4]

## Opioid analgesic dependence

Risk factors (these may not necessarily preclude the use of opioids for pain, but ongoing use will need very careful supervision):

- Previous history of addiction
- Family history of addiction
- Reluctance to acknowledge psychological contributors to pain
- Significant psychiatric comorbidity

## Alarm bells during opioid treatment

- Descriptions of increasing pain with requests for increased opioid dose
- Psychological deterioration
- Reliance on pharmacological treatment only, with no engagement with self-management of exercise, physio, psychological support etc.
- Lost prescriptions / dropped bottles / extra doses needed for trips away etc.
- Continued use despite side effects (constipation, sedation)

## Reducing opioids

Over the last two decades, patients with chronic non-cancer pain have been prescribed opioids in good faith based on evidence that we now know to be misleading. We now have a population of patients who are taking long-term high-dose opioids and exposed to the associated substantial risks. The majority will still have continuing pain and a poor quality of life reflecting the little benefit provided by opioids. These patients should be supported in reducing their opioids to a safer level (at least down to 120mg MED) or, where possible, stopping them completely.

Equally if a patient's behaviour towards opioids causes concern, they too should be supported in ceasing their use.

The following is a guide, with more advice available via the Oxford PMC email advice line: [oxonpainadvice@nhs.net](mailto:oxonpainadvice@nhs.net)

## Five practical steps to reduce high dose opioids

1. **Education:** explain the importance of reducing opioids to the patient

2. **Engagement:** give the patient as much choice as possible around how to reduce their opioids.
3. **Ensure everyone knows the weaning plan**
4. **Emotional impact:** manage anxiety and depression
5. **Expectations:** ensure the patient understands that this can be difficult, and that they need support

### 1. Education: explain the importance of reducing opioids to the patient

The “[Patient information for opioid reduction](#)” sheet provides the background for the need for opioid reduction. Patients engage best with the process if they recognise opioid side effects that are personally relevant to them.

#### [Patient information leaflet](#)

This may be constipation, day-time somnolence or poor night-time sleep, or it may be the [drug driving law](#) [5] introduced in March 2015. Patients with a blood level of 80mcg/l of morphine, corresponding to a steady dose of around 209mg morphine equivalent per day, should not drive. More information is available [here](#) (from page 119).

### 2. Engagement: give the patient as much choice as possible around how to reduce their opioids

It doesn't matter how the opioids are reduced as long as the overall daily dose continues to decrease, and that there is an understanding that the opioid doses will **not** increase once reduced. Giving the patient choice over how this is achieved gives them more control and ownership of the process, improves their engagement and is more likely to succeed. The opioid reduction templates (below) are a useful guide to a reduction, and the patient can choose whether to reduce every week (rarely chosen) or every fortnight; and whether to reduce both morning and evening doses of a modified-release (MR) preparation at the same time, or to reduce them sequentially. None of it matters except to listen to the patient's preferences and give them some ownership of the process.

Successful weaning follows a personalised and shared decision-making approach [6] and, for some patients who have been taking opioids for years, may take months or years to achieve.

The opioid reduction templates are thus a guide. Most patients will start with a cautious taper every fortnight. Some may find that the process isn't as bad as dreaded, so may choose to speed up the taper from every fortnight to every week, while most will stay with a slow fortnightly taper. If patients still struggle, they could slow the taper to every 3 or 4 weeks, bearing in mind that this will prolong the process overall.

Patients can occasionally pause a taper for a week or two (no more, or it becomes difficult to restart) if they are struggling psychologically, or if they are going on holiday or are visiting the family at Christmas, for example.

**A slow, flexible taper where the patient feels they are in control and are being listened to will be more successful** and less stressful for everyone, compared to a rigid adherence to a fixed plan. There are many fixed plans encouraging a 10% taper every week, but usually fail for those on higher doses as this feels too overwhelming and unachievable to the patient. Indeed the 10% per week taper is no longer recommended for patients who have been taking opioids for more than a year [7].

Hyperbolic deprescribing has been advocated using a percentage dose decrease (eg 10%) [8]. This means that the initial reduction is relatively large and the subsequent dose reductions get smaller over time, and is commonly used for tapering of antidepressants. Using a fixed dose reduction of 10mg, as recommended in the opioid reduction templates, is a pragmatic plan. It makes dosing easier as it conforms to tablet doses; and patients are often nervous about starting the reduction, so small decreases at the beginning should gain their confidence and reassure them that withdrawal is not a major issue. However, when the doses are small at the end of a taper, it is often worth discussing more gradual decreases with the patient, eg 5mg rather than 10mg, or sometimes adding in codeine to soften the decreases further (30mg codeine = 3mg MED).

Most patients find it easier to reduce their modified-release opioids first (option 1).

**Option 1.** Reduce the modified release (MR) dose first by around **10mg per dose per fortnight**, and keep the prn immediate release dose steady, but caution the patient against increasing the prn doses which would negate the effect of the MR wean.

It is often useful to let the patient decide whether to reduce the morning or evening MR dose first to allow them more control. For example, a patient who feels that their pain is worse at night may choose to reduce the morning dose first:

	MST am (mg)	MST pm (mg)
<b>Week 0</b>	80	80
<b>Week 2</b>	70	80

<b>Week 4</b>	70	70
<b>Week 6</b>	60	70
<b>Week 8</b>	60	60

As the MR doses decrease, the patient's opioid tolerance will lessen, so that the prn doses can then naturally be reduced without any change in perceived potency.

**Option 2.** Keep the modified-release (MR) dose stable first and wean down the immediate-release (IR) prn doses. The patient can be given the choice of:

- a) keep the same frequency of IR doses (e.g. 4 times per day) and decrease the dose each week or fortnight (e.g. 15mg to 10mg to 5mg), or
- b) maintain the same dose but reduce the frequency each week (e.g. from 4 times a day, to 3 times to twice).

Most patients find option a) easier initially as the frequency of taking prn IR opioid is as much habit as anything else.

If necessary, the patient could replace their prn dose with paracetamol or ibuprofen to maintain the mechanical habit of taking a tablet, although they should concentrate on using non-pharmacological means of managing their pain during exacerbations. The pain tool kit provides useful strategies: <http://www.paintoolkit.org/>

### 3. Ensuring everyone knows the weaning plan

Many patients find it frustrating if the pharmacy doesn't have the right tablets available during the opioid reduction, so make sure that the patient, carer, pharmacist and GP all have a copy of the weaning plan. If the patient is seen in the Opioid Clinic, we give the patient a copy to pass on to all of these people and we keep a copy in their notes. The plan may change over time so everyone should be given an up-to-date copy.

However, we do emphasize to the patient that life rarely follows an Excel spreadsheet. As mentioned above, the patient may decide to pause the reduction for a week if needed, if they are feeling too stressed or overwhelmed to continue, and it is important that they know they have that control. The reduction schedule should then change to accommodate that, rather than expect the patient to stick to the rigid plan.

#### a) Change liquid formulations to tablets

Change Oramorph to sevredol tablets: both are immediate-release morphine, with the same absorption time, same duration of action, same dose, but dispensing a fixed number of tablets allows the GP more control over the patient's use and subsequent reduction. We find that many of our patients find it almost impossible to reduce the

amount of Oramorph they take when there is a whole bottle available. This is particularly important when the patient describes unsafe behaviour such as “swigging” from the bottle rather than measuring doses. The same applies to OxyNorm liquid.

Oramorph contains 10% alcohol (OxyNorm liquid does not), so any patient who reports that Oramorph is much better than sevredol could possibly be flagging an alcohol dependence issue (even if not conscious by the patient).

#### b) Plan the reduction

The attached templates can be used to plan the initial reduction, and are based on reducing the modified-release opioid. Enter the date of the first reduction and the date column will self-populate as weekly or fortnightly (depending on template chosen). Enter the current doses of opioid and the rest of the table will self-populate based on a decrease of usually 10mg per dose. The plan can then be adjusted during the course of the wean if necessary to increase the time between reductions or reduce the dose decreases if the patient is struggling.

### Opioid reduction templates

#### Opioid reduction templates

Fentanyl patch template – monthly reductions are recommended as the dose decreases of 12.5mcg/h, as dictated by patch sizes, are thus greater than the other opioid reductions. Fentanyl patches must NOT be cut.

NOTE: Fentanyl patches of 12.5mcg/h are labelled as 12mcg/h

#### 4. Emotional impact: manage anxiety and depression

Patients with chronic pain and long-term opioid use often have high anxiety and depression, with catastrophic thinking and low self-efficacy. [9] Anxiety is to be expected during opioid reduction. If a patient has taken opioids for many years they are likely to feel that they won't be able to cope without them.

Evidence suggests that withdrawal symptoms are to be expected at significant reductions, but if the reduction is less than 50-75% of the previous day's dose then the patient shouldn't experience withdrawal. Theoretically, therefore, a patient would need to go from 80mg oxycodone one day to 20-40mg the next before getting true withdrawal.

In practice we find that many patients experience what they perceive as withdrawal symptoms with even small dose reductions, and this is likely to be related to anxiety rather than opioid withdrawal (anxiety exacerbates withdrawal symptoms). Plenty of

reassurance is needed that this is not dangerous and is a safe reduction. If necessary, it is wise to work with the patient to reduce the size of the dose reductions (e.g. to 5mg rather than 10mg) or increase the duration between step decreases (e.g. every 3-4 weeks rather than every fortnight) to maintain their engagement in a continued wean. Do not be tempted to treat withdrawal symptoms with more opioids or benzodiazepines. The clinical opiate withdrawal scale (COWS) can be used to quantify the severity of opioid withdrawal and help distinguish between objective and subjective symptoms that can be reassuring to both the patient and clinician. [COWS tool](#) [10]

Anxiety and depression often worsen during an opioid reduction, either because the long-term opioids have suppressed noradrenaline and dulled usual emotions (in which case the increased anxiety then settles back down again), because the reduction unmasks pre-existing psychopathology, or due to neurobiological changes resulting from long-term opioid use.[11] If not managed well, this can derail the opioid reduction. Opioid reduction done badly has real and devastating consequences, with a risk of mental health crisis, opioid overdose (particularly from non-prescribed opioids), and suicide.[12]

Psychological support with psychologists, counsellors or IAPT (improving access to psychological therapies) services such as [Talking Spaces](#) will be helpful.

### 5. Expectations: ensure the patient understands this can be difficult, and that they need support

We make it clear to patients that the pain is likely to worsen in the short term during opioid weaning. Despite slow reductions they may also experience withdrawal symptoms, together with increased anxiety and depression. For this reason it is important that they have engagement, understanding and support from friends and family during the process. They should also develop non-drug techniques (relaxation, distraction, music, DVDs, walks etc.) to manage their pain and reduce the reliance on pharmacological treatment. The [Pain Toolkit](#) provides useful strategies, and the [Live Well with Pain](#) website has excellent resources including patient videos. It can take 4-6 months after the cessation of opioids before patients feel back to normal, i.e. for the pain, anxiety and depression to reduce.

In the longer term, the pain will reduce to a degree due to the reversal of opioid induced hyperalgesia (where long-term opioids increase, rather than decrease, pain sensitivity). For patients with abdominal pain, this pain may also improve as the opioids will have been contributing to gut dysmotility.

## Useful resources for patients

The **Live Well with Pain** website has [resources for patients](#) as well as information and [resources for clinicians](#).

It includes this great video of a patient, Louise, who was on opioids for 12 years and talks about her life now without them: [Life after opioids](#). Importantly, this is a video of the carer's story – Louise's partner – and the impact opioids had on her: [The carer's story](#) [*You may need to sign up to get access to this, but it's free*]

The Oxford University Hospitals website also has a recording of an interview with a man and his wife about their experiences when he weaned his opioids: [Quitting prescription opioids](#)

- The [Pain Toolkit](#) website and app give practical advice and techniques to manage pain.
- This is an excellent five minute [explanation of chronic pain](#) by the Hunter Integrated Pain Service in Australia.
- There is a follow up video called [Brainman stops his opioids](#)
- And a good explanation of how your mood can affect pain: [Tame the beast](#)
- This is a great video explaining the difference between acute pain (after injury) and chronic (long-term) pain: [Pain and Me](#)
- **Managing chronic pain - NHS website**
  - [Sheffield Persistent Pain](#)
- **Videos about chronic pain and how to manage it**
  - Chronic pain - [www.healthtalk.org](http://www.healthtalk.org)
  - Chartered society of physiotherapy - <http://www.csp.org.uk/publications/10-things-you-need-know-about-your-back>  
with a very good video about back pain: <https://youtu.be/24P7cTQjsVM>
- **World Health Organization (WHO) animated videos**
  - [The Black Dog of depression](#)

- [How to manage stress](#)
- **Apps:**
  - [Mindfulness](#)
  - [Active 10 app](#)
- **Advice about sleep**
  - [Getting a better night's sleep](#)
  - <https://www.sleepio.com/>
- **Support for patients with pain**
  - [British Pain Society](#)
  - [Pain Concern](#)
- **NHS websites**
  - [NHS Scotland-exercise videos for chronic pain](#)

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