HSC Health and Social Care Board

Opioid Prescribing for Persistent Non-Malignant Pain*

Frequently Asked Questions - For Prescribers

August 2018

*** *Persistent pain* (also known as chronic or long-term pain) is referred to pain that continues beyond 3 months, the time that tissue healing would normally be expected to take.**

Why do we need to review opioid prescribing for persistent non-malignant pain?

1. There is a lack of evidence that opioids are beneficial for persistent non-malignant pain.
2. Opioids have the potential to cause serious harm in terms of long term effects and addiction.
3. Northern Ireland is a significant outlier for opioid prescribing compared to other parts of the UK. Recent data also indicates that in Northern Ireland more people died from opioid misuse than in road accidents.

What type of pain are opioids most effective for?

Opioids provide good analgesia when used for **acute and palliative pain**. For acute pain, the lowest effective dose of immediate-release opioids should be prescribed for the expected duration. Three days or less will often be sufficient.

Opioids may be of benefit in a **minority of patients with persistent pain.** In these cases, doses should be kept low and, if possible, used intermittently**.** Where there is neuropathic /mixed pain, neuropathic agents, e.g. amitriptyline, should be considered. Opioids should only be used as part of a broader management plan including non-medication treatments and self-management.

Why are opioids not very effective for persistent non-malignant pain?

Persistent non-malignant pain is a more complex interaction of biological, psychological and social factors compared with acute pain. Once pain becomes persistent, changes are triggered in the spinal cord and brain, which probably explains why no drugs are particularly effective.

What is a realistic reduction in persistent pain when opioids are prescribed?

1. Medicines play only one part in managing persistent pain. Patients should not expect complete pain relief from medication alone.
2. Achieving a 30-50% pain reduction from medication is considered a good outcome. Worthwhile benefit could be improvement in pain, function or quality of life, or a decrease in sleep disturbance (rather than 100% pain relief).

What are the alternatives to opioid prescribing for persistent pain?

At all stages, patients should be empowered to self-manage their pain to enable them to function as well as possible. Non-pharmacological methods should be discussed/reinforced at every opportunity. Non-pharmacological methods of pain self-management for consideration include, for example, maintaining fitness, weight loss, pacing activities, physiotherapy, heat or cold pack application and meditation techniques such as mindfulness.

The 'Pain Toolkit' (www.paintoolkit.org) illustrates simple tools or skills which can help people to self-manage their pain. GP Practices and community pharmacies can obtain Pain Toolkit booklets free of charge (normally valued at £4), by emailing pharmacystationeryorders@hscni.net

Prescribers and pharmacists should also utilise the techniques and resources available on the 'The 'Live Well with Pain' website, http://livewellwithpain.co.uk/ This website has been developed **by clinicians, for clinicians** to help people with persistent pain towards better self-management. Pain self-management programmes are also available in some areas, e.g. Arthritis Care, www.arthritiscare.org.uk

What are the long-term risks of opioids?

Long term use of opioids is associated with:

- an increased incidence of falls (and fractures)
- endocrine abnormalities (e.g. amenorrhoea, erectile dysfunction)
- depression
- fatigue
- opioid induced hyperalgesia
- altered immune function
- dependence and addiction

What is opioid induced hyperalgesia and how can it be managed?

Prolonged use of opioids can lead to a state of abnormal pain sensitivity, sometimes known as opioid induced hyperalgesia (OIH). OIH results in a decreased pain threshold and manifests as apparent opioid tolerance, with increasing pain despite increasing opioid dosage. The most effective management for OIH is to carefully decrease the opioid dose.

How should an opioid be initiated?

Opioids should be considered only if expected benefits for both pain and function are anticipated to outweigh risks. Before starting and periodically during opioid therapy, prescribers should discuss and agree with patients:

- **Treatment goals** for both pain and function, and realistic benefits. This should include a one to two week opioid trial in the first instance, to establish if there is an improvement.
- **Known risks** and side-effects including the potential to impair driving
- Patient and prescriber **responsibilities** for managing therapy and regular review
- How the opioid will be **discontinued** if ineffective or benefits do not outweigh risks.
- Recommendations for **safe storage** and **disposal**

Consideration should also be given to:

- Potential for interactions with concomitant medication e.g. risk of respiratory depression can increase significantly when opioids are taken with pregabalin, gabapentin, benzodiazepines and other sedatives such as zolpidem
- Other individual risk factors e.g. history of drug misuse.

Before prescribing or increasing dose, always think!

- Safety first: is it safe for the patient and their family or household?
- Are there other safer options?

Opioids should be prescribed in line with local formulary guidance (see below).

What are the opioids of choice for persistent non-malignant pain?

There is little evidence that one opioid is more effective or associated with fewer side-effects than another. The Northern Ireland formulary* advises the following for persistent non-malignant pain :

⇒ **Paracetamol 500mg or if ineffective, co-codamol 8/500, 15/500 or 30/500 (codeine 8mg, 15mg or 30mg with paracetamol 500mg), with or without an NSAID.**

This regime should be tried for up to 6 weeks. If worthwhile benefit is not achieved, the following modified-release opioid regime should be tried (and codeine stopped):

⇒ **Tramadol MR+/- NSAID/Paracetamol or Buprenorphine (Butec®)*patch (sole agent)**

If worthwhile benefit is not achieved, the following should be tried (and previous opioid stopped):

⇒ **Morphine MR (first line) or Fentanyl (Mezolar®) Patch (second line)**

- **Do not prescribe more than one opioid at the same time on a regular basis.**
- Avoid liquid and immediate–release opioids due to increased risk of tolerance and dependence
- Consider neuropathic agents in line with formulary choices for neuropathic /mixed pain: http:// niformulary.hscni.net

How often should patients on opioids be reviewed?

Frequency of review will depend on individual patient factors. Patients should be reviewed within at least four weeks of opioid initiation or dose increase. Once a regime has been established, frequency of review will depend on factors such as the initial effectiveness of treatment, incidence of side effects, planned interventions (e.g. surgery) and any concerns in relation to the patient's use of opioids. When a regimen is stable and there are no concerns to dictate otherwise, opioid treatment should be reviewed at least six monthly.

The following points should be checked at each review as appropriate:

- pain self-management strategies
- therapeutic benefit /continued appropriateness including dose /medication changes
- dosage and compliance
- adverse effects including long term risks e.g. addiction
- effects of other co-morbidities e.g. renal impairment
- drug interactions/contraindications

Details of each review should be recorded in the patient's notes.

Note: Under The Controlled Drugs (Supervision of Management and Use) (Amendment) Regulations (Northern Ireland) 2015, **practices must have procedures in place for the clinical monitoring of all CDs (Sch 2-5)** . http://www.legislation.gov.uk

What is considered to be a high opioid dose?

A high opioid dose is considered to be an oral morphine equivalent of 120mg/day or greater. Higher doses should not be prescribed for persistent non-malignant pain as:

- The risk of harm increases substantially, with no additional benefit
- There is an increased risk of long-term adverse effects including hyperalgesia
- Pain relief should be linked to ability and improved function. Adverse effects are more likely to impact on function at high opioid doses

⇒ **Patients prescribed greater than 120mg/day oral morphine equivalent for persistent pain should be reviewed with the aim of reducing the dose in line with guidance and with careful monitoring**

⇒ **Plans should be agreed on an individual basis, discussing with other prescribers and healthcare professionals involved in the patient's care, as appropriate**

What are the opioid equivalences of:

Morphine and oxycodone:

- Oral oxycodone 20mg is equivalent to oral morphine 40mg

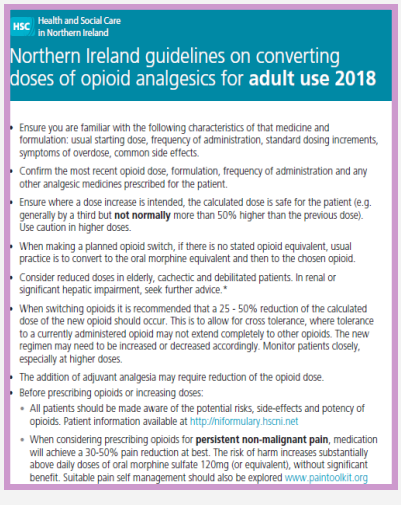
Transdermal opioids:

- Buprenorphine (Butec®) 5micrograms/hour is equivalent to 10–12mg oral morphine daily
- Fentanyl (Mezolar®) 25micrograms/hour is equivalent to 60-89mg oral morphine daily

Note the significant potency of fentanyl patches.

Consider **all of the opioids** that the patient is taking when calculating total oral morphine equivalent, including for example, tramadol and codeine. The following opioid dose calculator may help with this http://www.paindata.org/calculator.php .
(This is a verified tool used in Secondary care Pain Clinics including SHSCT)

Prescribers should be familiar with the 'Northern Ireland guidelines on converting doses of opioid analgesics for adult use' which can be found at:
http://www.medicinesgovernance.hscni.net


HSC Health and Social Care in Northern Ireland

Northern Ireland guidelines on converting doses of opioid analgesics for **adult use 2018**

- Ensure you are familiar with the following characteristics of that medicine and formulation: usual starting dose, frequency of administration, standard dosing increments, symptoms of overdose, common side effects.
- Confirm the most recent opioid dose, formulation, frequency of administration and any other analgesic medicines prescribed for the patient.
- Ensure where a dose increase is intended, the calculated dose is safe for the patient (e.g. generally by a third but **not normally** more than 50% higher than the previous dose). Use caution in higher doses.
- When making a planned opioid switch, if there is no stated opioid equivalent, usual practice is to convert to the oral morphine equivalent and then to the chosen opioid.
- Consider reduced doses in elderly, cachectic and debilitated patients. In renal or significant hepatic impairment, seek further advice.*
- When switching opioids it is recommended that a 25 - 50% reduction of the calculated dose of the new opioid should occur. This is to allow for cross tolerance, where tolerance to a currently administered opioid may not extend completely to other opioids. The new regimen may need to be increased or decreased accordingly. Monitor patients closely, especially at higher doses.
- The addition of adjuvant analgesia may require reduction of the opioid dose.
- Before prescribing opioids or increasing doses:
  - All patients should be made aware of the potential risks, side-effects and potency of opioids. Patient information available at http://niformulary.hscni.net
  - When considering prescribing opioids for **persistent non-malignant pain**, medication will achieve a 30-50% pain reduction at best. The risk of harm increases substantially above daily doses of oral morphine sulfate 120mg (or equivalent), without significant benefit. Suitable pain self management should also be explored www.paintoolkit.org

What points should be considered when prescribing transdermal opioids?

- They have a slow onset and prolonged duration of action
- They lack dosing flexibility and therefore should not be used to treat fluctuating or uncontrolled pain
- They should be prescribed by brand name due to significant differences in bioavailability between brands of transdermal opioids
- Heat exposure can cause increased opioid absorption and risk of opioid toxicity
- There is a risk of multiple patch application
- Skin reactions occur in about 9% of patients prescribed transdermal opioids
- Used patches contain significant residual opioid and require careful disposal. They should be folded so that the adhesive sides adhere to themselves. They should then be wrapped in a bag/paper and safely discarded in the household waste

Patients should be given appropriate advice on the safe use of transdermal patches.

Further guidance on the prescribing and use of opioid patches can be found at: https://www.prescqipp.info

When should an opioid be stopped?

Opioids should be **carefully** reduced and stopped if:

- they are not providing worthwhile benefit e.g. improvement in pain relief or function. Reminder: doses above 120mg oral morphine equivalent are unlikely to yield further benefits but increase the risk of harm
- the underlying condition resolves
- the patient receives a definitive pain relieving intervention e.g. surgery
- the patient develops intolerable side-effects
- there is evidence of diversion

How should an opioid be stopped?

The decision to reduce and stop an established opioid regimen should be discussed and agreed carefully with each patient. This should include an explanation of the rationale for reducing/stopping opioids e.g. avoidance of long term harms and improvement in ability to engage in self-management strategies. **Other healthcare professionals who are involved in the patient's care should be consulted as appropriate.**

Reduction/tapering plans and their merits should be discussed and agreed on an individual basis and clearly recorded. **Patients should be monitored closely for signs of withdrawal**. Cessation of high opioid doses is more likely to succeed when any emotional or mental health needs are identified and addressed.

It is recommended that:

- **Opioid doses are reduced by 10% every one to two weeks**
- **Patients are not normally switched to an alternative opioid for the purpose of reduction**
- **Immediate-release opioids are reduced/stopped first before modified-release preparations**

A range of resources to support safe prescribing of opioids including opioid reduction and cessation, is available at: https://www.rcoa.ac.uk

Further useful resources can be found in the 'Opioid Zone' of the 'Live Well with Pain' website: http://livewellwithpain.co.uk*(continued over)*

How should a transdermal opioid be dose reduced?

Opioid patches should be dose reduced **as a patch**. It is not recommended to switch to morphine or other strong opioid for the purpose of tapering as conversions can be unreliable and may result in toxicity.

- Patients who are on a dose greater than 12 micrograms/hour of fentanyl should continue to use patches but be reduced by increments of 12micrograms at a time. The frequency of dose reduction will be determined by how the patient reacts, however a dose reduction interval of every 10 days is tolerated by most patients
- Patients on a dose of fentanyl 12micrograms/hour via patch can normally be stopped without any further tapering. Serum concentrations decrease gradually and thus the analgesic effect is maintained for a certain amount of time, preventing withdrawal. It takes at least 17 hours for serum concentrations to decrease by 50%
- Only where absolutely necessary, consider adding low dose morphine (age appropriate) for breakthrough pain when tapering fentanyl especially at lower doses, e.g. 5mg, 4-6 hourly prn up to a maximum of 20 mg/day for shortest period of time. Usually ≤3 days is sufficient
- The lowest strength of Transtec® patch (buprenorphine) is 35micrograms/hour –this is equivalent to approximately 63-97mg oral morphine equivalent daily. A reduction in dose of approximately 10% every 1-2 weeks is recommended. This may require the use of a lower strength buprenorphine patch, e.g. Butec®

Remember: Transtec® patches are changed every 4 days and Butec® patches every 7 days.

Caution with incomplete cross-tolerance of opioids: When switching between opioids a 25-50% reduction of the calculated dose of the new opioid should occur to allow for incomplete cross-tolerance. The new regimen should then be re-titrated according to patient response. The patient should be monitored closely, especially at higher doses. It is recommended to use the dose conversion calculator available at http://www.paindata.org/calculator.php***.***

Reminder: Patients should be supported and empowered with Pain Self-Management strategies throughout opioid reduction programmes.

What if the patient is unwilling to engage in a reduction programme?

The objective of medical treatment is to improve the patient's condition. Prescribers must make a judgement on whether treatment is more likely to be beneficial than harmful. If that judgement is against treatment it is considered unethical to prescribe it. Prescribers should explain why treatment is not recommended and explain any other options that are available.

Sometimes conflict arises when a patient's wish for treatment is against the prescriber's recommendation. In these circumstances it would be wrong for a prescriber to collude with the patient's wishes against their professional judgement. This view is supported by the General Medical Council: https://www.gmc-uk.org/Prescribing_guidance.

In most cases however it is possible for the patient and prescriber to resolve any conflict. This may be through:

- Careful consideration and sharing of evidence
- Reviewing other causes of symptoms
- Shared decision-making
- Negotiation
- Formulation of a short and long-term strategy. This should include limitation of potential harm, an overall holistic approach and where appropriate seeking other expert opinion.

What other points should be considered when prescribing opioids?

Safety:

- Set ground rules with patients around prescribing and reviews
- Be alert to signs of drug seeking behaviour, emerging dependence and addiction
- Overuse or misuse should be identified early and challenged
- If opioids are not working, they should be stopped (carefully) even if there is no alternative

Prevention:

- Where possible, avoid opioids in the first place; use simple analgesics instead. Remember medication has limited benefit and should be combined with self-management strategies. It should be noted that the WHO Pain Ladder aims to provide freedom from pain in cancer patients and does not apply to the management of persistent non-malignant pain
- Recognize emerging persistent pain early in its course – special consideration should be given to vulnerable groups (e.g. mental health problems, drug/alcohol problems)
- Keep opioids on 'acute' rather than add to 'repeat'. This allows regular review and early intervention if required
- Be vigilant to potentially unsafe prescribing, e.g. early repeat requests (even a few days early can add up to a large volume over a period of time), lost prescriptions, lost medicines, going on 'holiday', requests to increase dose, co-use of alcohol
- Agree a common approach within the practice for prescribing and reviewing ALL opioids. Regularly review progress and address issues as they arise

Where can I find further information on pain management and opioid prescribing?

- Pain Section - Primary Care intranet: http://primarycare.hscni.net
- Pain Management Newsletters - http://niformulary.hscni.net/PrescribingNewsletters
- Patient Zone of the NI Formulary Website - http://niformulary.hscni.net/PatientZone
- Pain Concern: http://painconcern.org.uk/
- Prescqipp: https://www.prescqipp.info/
- Opioids and Chronic Pain Management Webinars
- Opioid Patches: Appropriate prescribing and Use - https://www.prescqipp.info/opioid-patches/
- Management of non-neuropathic pain - https://www.prescqipp.info/
- General Practice Guidance and Review Tools - https://www.prescqipp.info/

References

- Operation Torus: Opioids killed more than road deaths: http://www.bbc.co.uk/news/uk-northern-ireland-39352345
- Expect analgesic failure; pursue analgesic success. Moore A et al. BMJ 2013; 346:bmj.f2690. http:www.bmj.com/content/346/bmj.f2690
- Opioids Aware: A resource for patients and healthcare professionals to support the safe use of opioids for pain http://www.fpm.ac.uk/faculty-of-pain-medicine/opioids-aware
- Prescqipp: https://www.prescqipp.info/
- Live Well with Pain: http://livewellwithpain.co.uk/resources-for-clinicians/opioid-zone/

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