



**Indian Health Service
National Pharmacy and Therapeutics Committee
Short-Acting Opioids –Formulary Brief
May 2014**



Background:

The IHS National Pharmacy and Therapeutics Committee (NPTC) reviewed short-acting opioid medications at the May 2014 meeting. The discussion included clinical, utilization and procurement data for this class of medications. This discussion did not lead to a formulary modification; however, it was felt that a formulary brief would be of benefit to IHS providers.

Discussion:

Clinical data support short-acting opioids as effective for acute pain relief including breakthrough pain in patients on chronic long-acting opioids. Over the past several decades the use of opioids has increased dramatically throughout the United States. As prescribing trends have increased, so has the detrimental effects associated with their use including; adverse drug effects, medication misadventures, overdose, abuse and diversion. Additionally, in the recent years unannounced DEA audits have been seen throughout IHS focusing diversion prevention. This has resulted in a second look at prescribing practices and reassessment of opioids place in therapy for the treatment of nonmalignant pain.

Neuropathic Pain: Data has shown that short-acting opioids are effective at relieving neuropathic pain. However, their support for chronic use in neuropathic pain remains controversial as there are limited studies of their use for greater than 12 weeks in duration. Even though most studies show significant efficacy of opioids over placebo, there has been no shown benefit to quality of life. Therefore, analgesic efficacy of short acting opioids in chronic neuropathic pain is subject to considerable uncertainty. Findings in a Mayo Clinic review article suggest that opioids can be used if first line agents (TCAs, SNRIs, gabapentin, or pregabalin) are not effective. Also, there is little to no evidence showing efficacy of long-acting over short-acting opioids in these conditions. 2013 NICE guidelines recommend initial treatment choice for neuropathic pain of amitriptyline, duloxetine, gabapentin, pregabalin, or carbamazepine (trigeminal neuralgia). If the original 1st line agent fails, switching to another non-opioid first line agent is recommended. If multiple 1st line agents fail, the providers should consider combination therapy. If non-opioid chronic therapy fails and the patient experiences breakthrough pain, short term tramadol is recommended for acute rescue therapy. For more severe pain, NICE guidelines also recommend long term treatments with morphine, tramadol, and non-opioid alternatives be managed by a pain specialist.

Nociceptive Pain: In contrast to neuropathic pain, the pharmacologic approach to nociceptive pain largely involves NSAIDs, APAP and opioid analgesia. Medications should be used in conjunction with non-pharmacologic therapies and approaches to relieve the source of the pain.

When pharmacotherapy for nociceptive pain is required, acetaminophen is typically recommended as a first-line therapy for pain related to osteoarthritis and chronic low back pain. However, in clinical trials acetaminophen is less effective than nonsteroidal anti-inflammatory drugs (NSAIDs) and has the potential for hepatic toxicity at doses of >4 g per day.

An alternative 1st line agent to APAP is an oral NSAID, which is effective for mild-to-moderate chronic low back pain or osteoarthritis. Opioid medications should be used on a chronic basis only in patients who are assessed to be at low risk for substance abuse, and who have persistent pain despite trials of non-opioid analgesics and antidepressants. Opioids should be initiated with a short-acting drug and then converted to a sustained-release form to be given on a schedule, although evidence is unclear regarding benefits of a specific regimen or whether long-acting or short-acting medications are preferred. It should be recognized that the evidence for the effectiveness of long-term opioid therapy in terms of pain relief and improved functional outcomes is limited, and that the risk of opioid overdose increases with increasing dosing.

First line agents based on efficacy and lower side effect profile remains nonsteroidal anti-inflammatory drugs (NSAIDs), COX-2 selective inhibitors, acetaminophen (APAP), antiepileptic drugs, antidepressants, local anesthetics, and alpha-2 agonists. The American College of Rheumatology recommends opioids if other therapies (APAP, NSAIDs) are not effective/contraindicated and pain continually interferes with quality of life.

For low back pain, opioids are a treatment option for severe, disabling pain not controlled by APAP or NSAIDs and there is little evidence for long term efficacy of opioids with neither long- nor short-acting having greater efficacy. The studies that show that long-acting opioids may have greater efficacy over short-acting are few and these studies are limited by poor design and sample sizes. Since chronic noncancer pain presents in patients from various causes and patients have different pain profiles, therapeutic goals for optimal treatment must be individualized. The drug of choice in NICE guidelines for chronic lower back pain is APAP. If adequate control is not sufficient with APAP, then NSAIDs can be considered and/or weak opioids such as codeine or possibly tramadol. Finally, they recommend only short-term use in severe pain of strong opioids (buprenorphine, fentanyl, oxycodone, higher doses of tramadol).

Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain: In 2010 the Canadian guidelines were published. They give very few recommendations for specific agents, and mostly related to specific indications. This lengthy document can be summarized by the following:

For Mild to moderate pain:

1. 1st line - codeine, tramadol
2. 2nd line - morphine, oxycodone, or hydromorphone

For Severe pain:

1. 1st line – morphine, oxycodone, or hydromorphone
2. 2nd line – fentanyl
3. 3rd line – methadone

Additionally, in osteoarthritis, if adverse effects outweigh benefits of non-tramadol opioids then they should be avoided. Tramadol is considered effective for fibromyalgia (2 RCTs) and strong opioids are not recommended. Finally, for severe pain in the elderly, controlled-release products are preferred; also oxycodone and hydromorphone have fewer side effects compared to morphine.

Findings:

No single opioid is preferred for all patients. Therapy must be individualized to the patient and indication. Short-acting opioids are an effective treatment modality for acute moderate to severe pain, but should only be used after other non-opioid medications classes have failed or are not indicated due to the acute severity of the pain condition or not indicated due to misuse, abuse, and tolerance toxicities. Each treatment plan and facility utilize short-acting opioids in a different manner, thus their use is too individualized and the healthcare systems policies and procedures vary too greatly to have any one particular short-acting opioid on the NCF. No specific modifications were made to the IHS NCF in this class. There are currently no short-acting opioids on the NCF.

If you have any questions regarding this document, please contact the NPTC at IHSNPTC1@ihs.gov. For more information about the NPTC, please visit the [NPTC website](#).

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