ACOEM’s Guidelines for the Chronic Use of Opioids
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The overuse of opioid therapy to treat chronic pain conditions is becoming epidemic in the United States. While opioid therapy may be appropriate in carefully selected cases, active monitoring and adverse event anticipation are crucial. As part of its commitment to worker health and safety, the American College of Occupational and Environmental Medicine (ACOEM) is providing these ACOEM Guidelines for Chronic Use of Opioid free to the medical community. The opioid guidelines were developed by an evidence-based, multidisciplinary expert panel in order to manage injured workers whose pain has not been controlled by more conservative means. These guidelines have been developed from ACOEM’s updated 2008 Chronic Pain chapter. The chapter is included with the 3rd edition of ACOEM’s Occupational Medicine Practice Guidelines.

Opioids are derived from the opium poppy and have long been used to treat pain. They are potent analgesics widely viewed as helpful in managing moderate to severe acute pain and cancer pain. The prevalence of opioid prescriptions has increased in recent years due to national quality improvement initiatives requiring assessments and treatment of pain. However, for treatment of chronic non-malignant pain, opioids are controversial as the increased rates of prescriptions have not been accompanied by health improvements for such common outcomes as back or neck pain. Management of non-malignant chronic pain with long-term high-dose opioids is also controversial, and these patients require frequent follow-up and documentation of improved function.

Opioids are becoming more controversial in large part because of large scale, population-based studies demonstrating markedly elevated death risks that have paralleled increases in consumption of opioids. Magnitudes of risk reportedly exceed automobile crashes and methadone has been found to be the most hazardous amongst medications reported.

This document includes the evidence-based recommendations for opioid use that are contained in the main Chronic Pain chapter of the Guidelines. In addition, the document includes detailed supplemental guidance for initiation, maintenance, and discontinuation (weaning) of opioid therapy, as well as terms and definitions, and criteria to diagnose addiction, substance abuse, and problematic opioid use from Appendix 1 in the Chronic Pain chapter. Also included are adverse effects and examples of opioid agreements, and forms regarding activities of daily living (see Figure 1a), instrumental activities of daily living (see Figure 1b), and Screener and Opioid Assessment for Patients with Pain (see Figure 1c). The following terminology is of relevance in this document:

**Treatment Goals:** While many clinical trials focus on pain relief as a treatment goal, a task force of 27 representatives from diverse specialties involved in the treatment of chronic pain indicated that the efficacy of interventions should not be measured solely on the basis of pain reduction, but also on the basis of other core outcome domains such as health-related quality of life as measured by physical (disease-specific or generic) and emotional functioning, participant ratings of global improvement, symptoms and adverse effects, and participant disposition (i.e., adherence to treatment regimen). The impact of treatment on other supplemental domains such as role functioning, interpersonal functioning, health care utilization, biological markers, coping, and clinician or surrogate ratings of global improvement were also recommended for consideration when relevant. Improvement in several of these domains would be reasonable treatment goals to set in trials of opioids.¹

**Functional Improvement:** Functional benefit should be represented by improvement in objective parameters of physical, behavioral, or occupational/vocational performance as a result of opioid use. This requires documentation regarding the pain problem, objective physical findings, and current functional status both at home and at work and at the initiation of treatment, including a clear statement regarding what objective or functional goals are to be achieved through use of the opioids if other than full functional recovery. Examples of documentation supporting functional improvement include increased physical output or performance (with focus on job specific activities), resolution of physical findings (such as improvement in radicular symptoms, or weakness); increased active range of motion, strength or aerobic capacity; and increased social engagement accompanied by decreased emotional distress.

**Opioid-responsiveness:** The ability to achieve reduced pain reports, evidence of improved function without the development of unmanageable or intolerable side-effects.

**Physical Dependence:** “A state of adaptation that is manifested by a drug class specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist.”²
Tolerance: A pharmacological effect characteristic of opioids, tolerance does not represent a pathological process, rather a physiological process associated with continuous opioid usage in which drug exposure induces changes that lead to a decrease in drug-effect over time. It may result in the need to either increase the opioid dosage to obtain equi-analgesia to an earlier level, or a decrease in analgesia over time with the same analgesic dosage. Tolerance occurs to analgesic effects of opioids as well as to adverse effects and at differential rates. There is generally little or no tolerance to the constipating effects of opioids.

Opioid-induced Hyperalgesia: Perceived increased sensitivity to painful stimuli that may be seen with opioid use.

Drug Misuse: Intentional or unintentional incorrect use of opioids in a manner other than that prescribed.

Opioid Abuse: Intentional incorrect use of opioids in a manner other than that prescribed (see Table 1a).

Opioid Addiction: In a consensus document by the American Pain Society (APS), American Academy of Pain Medicine (AAPM), and American Society of Addiction Medicine (ASAM), addiction is defined as “a primary, chronic neural biological disease with genetic, psychosocial and environmental factors influencing its development and manifestation. It is characterized by behaviors that include one or more of the following: impaired control of drug use, compulsive drug use, continued use despite harm, and craving.” It is inappropriate to use the term addiction interchangeably with drug abuse or drug dependence (although there may be common features).

Diversion: Allowing others to have access to prescribed opioids. Diversion can be as simple as sharing medications with family members or friends on an occasional basis or it can represent a conscious decision to distribute or sell them to others.

RECOMMENDATIONS FOR OPIOID USE*
The following are the recommendations from the Evidence-based Practice Panel (EBPP) on Chronic Pain regarding the use of opioids to treat chronic pain. For more in depth information, including the rationales and evidence tables, see the main Chronic Pain chapter.

1. **Recommendation: Routine Use of Opioids for Chronic Pain**
   
   Routine use of opioids for treatment of chronic non-malignant pain conditions is not recommended, although selected patients may benefit from judicious use (see below).

   **Strength of Evidence** – Not Recommended, Evidence (C)

2. **Recommendation: Opioids for Chronic Pain in Specific Patient Populations**
   
   Opioids are recommended for select patients with chronic persistent pain, neuropathic pain, or CRPS.

   **Indications** – Select patients with chronic persistent pain that is not well-controlled (manifested by decreased function attributable to their pain) with non-opioid treatment approaches may be tried on opioids. Other approaches that should have been first utilized include physical restorative approaches, behavioral interventions, self-applied modalities, non-opioid medications (including topical agents) and functional restoration. Patients with prior psychological disorders, depression, histories of drug abuse/dependence, and/or a personality disorder are often more at risk for a poor outcome and should be cautiously treated with opioids. Medications such as NSAIDs, acetaminophen and weaker opioids, alone and in combination (including an opioid with an NSAID) should be considered prior to initiation of higher dose therapy.

   **Frequency/Dose** – See Appendix 1. Patients should have ongoing visits to monitor efficacy, adverse effects, compliance and surreptitious medication use.

   **Indications for Discontinuation** – Failure of initial trial to result in objective functional improvement, resolution, improvement to the point of not requiring this intervention, intolerable adverse effects that are not self-limited, non-compliance, and/or surreptitious medication use.

   **Strength of Evidence** – Recommended, Insufficient Evidence (I) – select patients
3. **Recommendation: Screening Patients Prior to Initiation of Opioids for Chronic Pain**

Screening of patients by asking about prior substance abuse with simple tools and using currently available screening tools designed for use in populations on or considering opioid therapy is recommended as there is evidence that patients with a prior history of drug or alcohol abuse or psychological problems are at increased risk of developing opioid related use/abuse problems. A psychological evaluation would also be indicated in most cases.

**Strength of Evidence – Recommended, Insufficient Evidence (I)**

4. **Recommendation: Opioid Treatment Agreement (“Opioid Contract”) for Patients with Chronic Pain**

The use of a treatment agreement to document patient understanding and agreement with the expectations of opioid use is recommended. There is evidence that many patients do not adhere to prescribed treatment (including with an agreement); however, these agreements are felt to be needed and coupled with a urine drug screening program. Patients should be informed about what is responsible use of opioids and how to interact with their physician and pharmacy in obtaining medication. If literacy is a problem, the physician should read the agreement to the patient and ascertain that they understand it or revise the agreement so they can read and understand its content.

**Strength of Evidence – Recommended, Insufficient Evidence (I)**

5. **Recommendation: Urine Drug Screening for Patients Prescribed Opioids for Chronic Pain**

Routine use of urine drug screening for patients on chronic opioids is recommended as there is evidence that urine drug screens can identify aberrant opioid use and other substance use that otherwise is not apparent to the treating physician.

**Indications** – All patients on chronic opioids for chronic pain.

**Frequency** – Screening is recommended at baseline, randomly at least twice and up to 4 times a year and at termination. Screening should also be performed “for cause” (e.g., provider suspicion of substance misuse including over-sedating, drug intoxication, motor vehicle crash, other accidents and injuries, driving while intoxicated, premature prescription renewals, self-directed dose changes, lost or stolen prescriptions, using more than one provider for prescriptions, non-pain use of medication, using alcohol for pain treatment or excessive alcohol use, missed appointments, hoarding of medications and selling medications). Standard urine drug/toxicology screening processes should be followed (consult a qualified medical review officer).

**Strength of Evidence – Recommended, Evidence (C)**

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*Key to recommendations (adapted from the ACOEM Methodology to update the Guidelines (see www.acoem.org/uploadedFiles/Knowledge_Centers/Practice_Guidelines/ACOEM%20Practice%20Guidelines%20Methodology.pdf)).

**Recommended, Evidence (C)** – The intervention is recommended for appropriate patients. There is limited evidence that the intervention may improve important health and functional benefits.

**Recommended, Insufficient Evidence (I)** – Consensus-based; The intervention is recommended for appropriate patients and has nominal costs and essentially no potential for harm. The EBPP feels that the intervention constitutes best medical practice to acquire or provide information in order to best diagnose and treat a health condition and restore function in an expeditious manner. The EBPP believes based on the body of evidence, first principles, and/or collective experience that patients are best served by these practices, although the evidence is insufficient for an evidence-based recommendation.

**Not Recommended, Evidence (C)** – Recommendation against routinely providing the intervention. The EBPP found at least moderate evidence that harms and costs exceed benefits based on limited evidence.
CRITERIA FOR INITIATION
A comprehensive set of criteria and considerations are as follows:

1. **Diagnosis** – Patient has a medical diagnosis that is associated with objective evidence of anatomical or physiologic abnormalities that are ordinarily associated with pain. Examples would be a spinal fusion, or other operative procedure (spinal or otherwise) with retained instrumentation and continued pain in the area of the procedure subsequently, severe degenerative joint disease in which symptoms are reasonably consistent with radiographic findings, clearly identifiable neurologic abnormalities that would be expected to affect function (and cause pain with increased use) in a limb or part of the body that has previously been subjected to significant trauma (crush injury, burns) or multiple surgical procedures. When the diagnosis is CRPS, the diagnosis must be objectively supported as required by the consensus criteria.

2. **Impact** – Patient has measurable functional physical or medical limitations that would be expected to improve if pain were reduced.

3. **Failed Therapy** – Other non-opioids, adjuvants, and alternative pain control modalities have been tried and have either not been tolerated or have been deemed to be inadequate despite the patient’s compliance with treatments. Patients with CRPS Types I and II should have been treated with active physical/occupational therapy, behavioral treatments, NSAIDs, a course of corticosteroids, and anti-convulsants (and potentially bisphosphonates despite lack of widespread use) before opioid use is considered.

4. **Contra-indications** – There is no evidence of significant psychopathology or an elevated risk of abuse, addiction, or adverse outcome (see Figure 1c for a screening tool). These are relative rather than absolute contraindications to opioid therapy. However, their presence requires the practitioner to take added precautions by increasing patient education and the degree to which opioid use is both monitored and controlled.

5. **Expert Consultation** – Patients with a “chronic pain syndrome” or “pain disorder” characterized by behavioral and emotional issues, poor coping, dysfunctional pain behaviors, life disruption, and delayed recovery with symptoms inconsistent with objective findings both clinically and on diagnostic testing should not be considered for opioid therapy until they have had a psychological evaluation and, if warranted, referred for appropriate psychological, behavioral, and/or rehabilitative interventions.

INITIAL EVALUATION AND TREATMENT
The initial evaluation and treatment of the patient being considered for a trial of opioids should be as described in the main chapter (see Basic Principles, Initial Assessment). The following should be stressed:

1. **Evaluation of Pain Complaints** – The patient should be asked to describe the pain location, onset, extent, and exacerbating and modifying factors. The pain history should have findings consistent with the above criteria of a persistent, significant, incapacitating nature. Pain should be daily or continuous to be considered for an opioid trial and chronic opioid use.

2. **Medical History** – A comprehensive medical, psychological, social, and relevant occupational history should be taken in order to identify medical, environmental, familial, occupational, medicolegal, social, cultural, and personal factors that may have affected treatment outcome and may impact the patient’s response to opioids. If there are elements in the patient’s history that are considered as risk factors for delayed recovery these may need to be explored in depth and addressed before opioids can be prescribed.

3. **Description of Functional Limitations** – Detailed information regarding limitations in work and activities of daily living (ADLs) should be obtained and documented in written form. Examples of relevant personal ADLs include bathing, showering, dressing, eating, feeding, personal hygiene activities, toilet hygiene, sleep, ambulation, and sexual activity. ADLs relevant to ones’ ability to function in the community and at work would include capabilities for work, child care, communication (including use of communication devices, use of forms of transportation (other than self-ambulation), shopping, cooking, cleaning, home maintenance, financial management, and participation in “usual” leisure and recreational activities (see Figures 1a and 1b for sample forms).
4. **Physical Examination** – The physical examination should include a thorough musculoskeletal and neurological evaluation in addition to other systems that may be relevant to the patient’s clinical presentation or pain complaints. An assessment of at least some of the factors relevant to functional abilities is also recommended. Limitations may be voluntary or involuntary; it is not relevant to determine the degree to which these are or are not physiologic as the purpose of the examination is to identify limitations that can be monitored for improvement. Hence, even if the patient is “self-limited,” successful use of opioids would presumably reduce these limitations while lack of improvement would suggest that opioids be discontinued. Relevant factors to be assessed by either the physician, physical therapist, or other provider are:

a. Consistency of pain complaints, physical examination findings, and functional limitations.

b. Gait pattern (often the most helpful physical examination maneuver for spine or lower extremity disorders).

c. Agility and balance (different measures can be used depending on age of patient, area of injury, etc.).

d. Patient’s self-report of pain, or ability on a functional scale (particularly seeking synergy or dis-synergy between self report and objective function).

e. Active motion of the relevant joint(s).

f. Generation of muscle force, as noted by:
   - Increased absolute force production (measured by pounds of force, manual muscle test, isokinetic device, etc.);
   - Increased force production before symptom onset, if force production was limited by pain;
   - Increased muscular power-increased rate of muscle contraction (speed of limb motion, gait cadence);
   - Less reliance on external arm support when transferring or moving (e.g., sit to stand, standing to kneeling, squatting, stair climbing, etc.); and
   - Material handling capability – lifting, pushing, pulling, carrying.

g. Neuromuscular control:
   - Activation pattern of muscles during movement; and
   - Improved proximal stability during movement (e.g., core stability during lifting, improved scapular stability during shoulder elevation).

h. Local muscle endurance:
   - Ability to sustain extremity posture.

i. Aerobic endurance:
   - Heart rate response at same submaximal workload; and
   - Ability to sustain activity.

j. Posture

5. **Psychological Evaluation** – A psychological evaluation is strongly recommended in select patients who have a relatively low threshold for consideration of chronic opioid use. Considerations include any dissonance between subjective and objective findings, the need to add or escalate opioid usage, any psychological disorder or prior history of psychological disorder, or any substance use. The purpose of this evaluation is to identify patient, environmental, or work-site characteristics indicating that psychosocial factors may play a role in continuation of the patient’s pain-related dysfunction or hamper the rehabilitation process. Identification of these factors should prompt the practitioner to either include consideration of these factors in his or her approach to treatment or recruit assistance from another provider (such as a psychologist or experienced pain management physician) to further define relevant psychosocial factors and coordinate with the primary physician in developing a comprehensive treat-
6. **Development of a Plan for Patient Follow-up** – Prior unsuccessful attempts at return to purposeful activity should be discussed in depth and, in general, patients should be informed that the use of opioids is usually continued if progress toward functional goals is exhibited. There are circumstances when this will be demonstrated by a patient’s return to work or clear participation in activities that were previously reduced or avoided. When obtaining such concrete information about functional improvement is not possible, consideration should be given to referring the patient to a physical or occupational therapist to assist in the development of a therapeutic strategy combining graded exercise (predominantly home-based) and other activities to improve conditioning and endurance and while at the same time, reducing fear-avoidance beliefs or psychological factors if relevant that may have contributed to the development of persistent pain. This may require participation of a psychologist or other mental health professional.

Opioids should be avoided in patients who have prior psychopathology or risk factors for abuse and addiction. If the benefits are felt to substantially outweigh the risks, it may be reasonable to trial opioid therapy. However, these patients are thought to require especially explicit rules of acceptable conduct (i.e., written agreement), careful follow-up by the prescribing physician, and regular follow-up by an appropriate mental health professional prior to, or in conjunction with, the opioid trial unless the treating practitioner has prior experience in the management of patients with chronic pain and opioid use in particular in this population of patients, and is consequently capable of managing the complex psychosocial issues that often impact on outcomes in these patients. The practitioner providing the physical or psychological intervention should be informed of his or her responsibility for both monitoring objective parameters representing patient progress and communicating information regarding progress, or lack of progress, to the physician managing the opioids.

7. **Use of Opioid Agreement** – Patients should be requested to formally communicate their agreement with the written therapeutic plan and, in particular, their understanding that the goal of opioid therapy is not the elimination of pain but, rather its reduction to the point where measurable and meaningful increases in function are apparent. This would also include agreeing to obtain opioids from one pharmacy and one medical provider, abstain from using other sedatives and tranquilizers without express permission from the physician prescribing the opioids, and not engage in activities that would be interpreted as representing misuse or diversion of the medication (see Figure 1d for a sample agreement).

8. **Screening for Risk of Addiction or Abuse** – While the initial evaluation and treatment plan will not necessarily require urine drug monitoring to ascertain that the prescribed medication is being used and other substances avoided (since opioids use should generally be short-term), this may be warranted if the patient’s past history suggests that there is a risk of substance abuse, misuse, or diversion. Screening for addiction should be done as part of the initial patient evaluation and can be simply performed by asking questions to ascertain whether any of the following are present:

a. history of alcohol, opioid, or other substance abuse, or a history of chronic, benzodiazepine or other sedative use;
b. active alcohol, tobacco, or other substance abuse;
c. borderline personality disorders;
d. mood disorders (e.g., depression) or psychotic disorders;
e. other disorders that are primarily depressive in nature;
f. off work for more than 6 months; and
g. poor response to opioids in the past.3

In addition, the Screener and Opioid Assessment for Patients with Pain (SOAPP), a validated, self-administered questionnaire consisting of 24, 14, or 5 questions (see Figure 1c) can be used. This questionnaire does not replace the need for formal professional assessment of abuse or addiction potential for any patient considered for maintenance therapy.
9. **Choice of Medications** – Based on the literature, the lower dose combination medication of 37.5mg tramadol/325mg acetaminophen has the best safety profile, although there have been reports of problems with addiction especially among health care workers, along with reports of seizures associated with withdrawal. Initial dose is 1 tablet up to 4 times a day (QID) with possible titration up to 8 tablets a day if needed. Efficacy should be assessed at 2 weeks, then managed as below (see “Approach to the Patient”). Tramadol should be used cautiously in patients taking tricyclic, SSRI, or SNRI anti-depressants because of the increased risk of central nervous system depression, psychomotor impairment, seizures, and serotonin syndrome. If tramadol is contraindicated or ineffective, other short-acting opioids such as 5mg oxycodone or 5mg hydrocodone every 4 to 6 hours may be used as needed for pain relief. These may also be infrequently used during active functional and physical restoration of the deconditioned patient with chronic pain who has increased pain with activity on an as-needed basis for musculoskeletal pain following recovery from a period of increased exercise. However, follow-up should be frequent with a response in terms of increased function seen in a few days. High-dose opioids (e.g., morphine, oxycodone) should generally be avoided, as these agents have higher adverse effect profiles. Use of agents such as meperidine, propoxyphene, combination agonists, and mixed agonists/antagonists (butorphanol, nalbuphine, and pentazocine) for management of chronic pain is not recommended.

Most patients initially should be started on low dose PRN short-acting opioids, since monitoring the frequency with which they have pain can help assess whether continued opioid use is necessary once physical limitations have been addressed. Initially, improvement in the degree, duration, and frequency of pain complaints would seem to be difficult to monitor if opioids were given initially as sustained-release formulations. For many patients, PRN usage does increase pain behavior, pain complaints, and dysfunction, and a long-acting opioid taken on a time-contingent basis would be a consideration. (An opioid-dosing calculator developed by the Washington State Agency Medical Directors’ Group is available on-line at [www.agencymeddirectors.wa.gov/Files/DosingCalc.xls](http://www.agencymeddirectors.wa.gov/Files/DosingCalc.xls).)

**FOLLOW-UP OF PATIENTS ON OPIOIDS**

While opioids are prescribed due to their analgesic effects, the purpose of opioid therapy is to improve function. Patients should be informed that there will be periodic re-evaluation of their treatment with the goal of using the lowest clinically effective medication dosage and, if appropriate, ultimately discontinuing opioids.

1. **Follow-up Visits** – A repeat visit should be scheduled 2 to 3 days after initiating opioid therapy. The patient should be asked to describe specific improvements in their daily activities as a result of their opioid use. After 1 or 2 weeks of treatment, the patient should exhibit verifiable changes in daily functional activity (preferably work-related), improvement in several of the objective functional criteria described above, and increased participation in social activities and/or increased engagement with family, friends, and/or co-workers.

2. **Failure to Progress** – Failure of the patient to demonstrate any improvement, or noncompliance with recommended treatments aside from opioid use, should prompt discontinuation of opioids. In rare situations, the physician may decide to continue the trial for an additional 2 weeks and even increase the opioid dose slightly, but failure of the patient to exhibit objective evidence of improvement at the 4-week mark should result in termination of the opioid trial. Statements regarding pain relief in the absence of any evidence of functional improvement would not be grounds for opioid continuation.

3. **Increase in Opioid Dose** – If the patient has improved on opioids but still states that his or her activities are limited by pain, a judicious increase in opioid dose can be considered but must be followed by evidence of appropriate pain reduction and/or increased function.

4. **Attempts at Weaning** – Once patients have demonstrated improvement in function, concomitant reduction in pain suggests that attempts to decrease the opioid dose may be appropriate. This should be done slowly in conjunction with careful monitoring of the patient’s clinical and functional status, with the goal of weaning him or her entirely from opioids after several months. If attempts at weaning are accompanied by increased pain and worsened functional performance, the medication dose can be reinstated and weaning may be attempted again after the patient has stabilized. If weaning remains
problematic, consideration can be given to long-term opioid use. High-dose opioids are never indicated in patients without clear anatomic explanations for their pain. Sustained release formulations may be appropriate for patients who have more than 12 hours of pain a day on a daily basis. Methadone has been used for chronic pain treatment, although this is somewhat controversial. Methadone has different pharmacokinetics and while the analgesic half-life is 6 to 12 hours, the pharmacological half-life of more than 100 hours for some patients is associated with significant risks of toxicity from accumulation. Methadone is also a more difficult opioid analgesic to use in clinical practice and has frequently been thought to be responsible for elevated mortality rates.

5. **Considerations for Long-term Opioid Use** – Patients being considered for long-term opioid use must be made aware of risks and benefits including long-term potential adverse effects of opioids such as tolerance, addiction, hypogonadism (with secondary osteoporosis), and opioid-induced hyperalgesia. All patients placed on chronic opioid therapy should review and sign a formal opioid agreement that includes the risks and benefits of treatment. Agreements executed previously should be updated every month initially, then approximately every 3 months in patients stable on treatment for at least 6 months, then every 6 months in well established, stable patients. Patients must agree to undergo random urine drug screens. Any evidence of dysfunctional medication usage would be a reason to taper off and discontinue opioids.

**APPROACH TO THE PATIENT ALREADY USING OPIOIDS**

Patients on opioids may or may not have been appropriately placed on these agents and may be using excessive doses. A trial of weaning from opioids in conjunction with initiation of treatments and activities aimed at functional restoration is recommended for these patients, although the likelihood of success will be dependent upon the clinical presentation. Even with recognized benefit, opioids are not benign drugs and patients should remain under medical scrutiny and undergo weaning trials no less than yearly. It is recognized by many pain specialists that a subset of patients are no worse off if they do not improve upon opioid detoxification.

1. **Patient Evaluation** – Patients must be thoroughly evaluated. Obtaining a history of functional abilities both prior and subsequent to use of opioids and understanding the rationale for increased opioid dosing and the degree to which this led to functional improvement should be a priority.

2. **Decisions Regarding Opioid Weaning** – The decision to wean off or maintain opioids depends on the information obtained in the patient assessment. In general, use of high doses of extended release opioids or the equivalent forms of immediate action drugs (see Appendix 1 for common doses) should prompt efforts at weaning, especially if the patient has not reported any functional gains despite increases in dose. The presence of adverse effects such as opioid-induced hyperalgesia or simply increased pain and decreased function despite opioid use are also grounds for weaning. There must be judicious assessment for physiologic signs of withdrawal, and these should be managed with appropriate medical therapies when needed (potentially reinstating opioids prior to resuming a more gradual taper for significant withdrawal symptoms). Such withdrawal signs should be clearly discriminated from the patient’s verbal complaints of symptoms, since the latter are often well learned in many patients with chronic pain. It is inappropriate to reduce doses rapidly in patients who have been on opioids for more than a month, as some degree of physical dependence may have already developed. The opioid dose should be reduced slowly – with careful attention paid to patient response for signs of withdrawal.

3. **Referrals and Ancillary Interventions** – In most cases, patients being weaned from opioids should be referred to a mental health professional with experience in substance abuse or management of patients on opioids. This is in order for the patient to be counseled regarding any anxiety associated with reduction of opioid dose as anxiety will complicate the weaning process. A referral to a physical therapist or equivalent for instruction in home exercise and individualized techniques to reduce or prevent muscle pain or stiffness should also be considered. Use of self-applied palliative remedies such as topical analgesics (including lidocaine and capsaicin) or heat (especially heat wraps) may be useful. Judicious participation in aerobic activities that do not exceed patient tolerance is recommended (it is better to build patients up gradually than have exercise lead to increased pain and requests for re-institution of opioids at previous doses). Selected patients with access to a swimming pool may also
benefit from a regular program of aquatic exercise. Use of adjunctive medications such as NSAIDs, acetaminophen, anti-depressants, herbal remedies, anti-convulsants, and any other medications appropriate for the patient’s clinical presentation should be considered.

4. **Maintenance on Opioids** – If the patient is unable to tolerate further dose reduction despite the use of appropriate supportive interventions as described above, and assuming identifiable pathology linked to the chronic pain state, then in some circumstances opioids may be maintained. Such patients should be required to complete a formal opioid agreement and fulfill the other requirements recommended previously as prerequisites for maintaining them on chronic opioids.

**WORK RESTRICTIONS FOR THE PATIENT ON OPIOID THERAPY**

There has been considerable concern regarding the degree to which patients on chronic opioid therapy should be considered suitable for work in safety-sensitive positions or employment that requires operating motor vehicles. There are no large-scale quality studies on the safety risks that acute or chronic opioid use poses for motor vehicle use. There are small-scale experimental studies that suggest a driver might not be at increased risk for a motor vehicle crash yet those studies are not powered to detect that outcome. A review article on medication, driving, and return to work indicated that uncontrolled pain might be a more significant risk factor for driving and/or work accidents than being on stable doses of opioid analgesics.

A structured evidence-based review to assess opioid-related impairment of driving skills indicated that “(1) There was moderate, generally consistent evidence for no impairment of psychomotor abilities of opioid-maintained patients; (2) There was inconclusive evidence on multiple studies for no impairment on cognitive function of opioid-maintained patients; (3) There was strong consistent evidence on multiple studies for no impairment of psychomotor abilities immediately after being given doses of opioids; (4) There was strong, consistent evidence for no greater incidence in motor vehicle violations/motor vehicle accidents versus comparable controls of opioid-maintained patients; and (5) There was consistent evidence for no impairment as measured in driving simulators off/on road driving of opioid-maintained patients.”

Based on these results, the conclusion was that the majority of the reviewed studies appeared to indicate that opioids do not impair driving-related skills in opioid-dependent/tolerant patients. Although a recent prevalence study demonstrated an association between opioid use and an increased risk of being involved in an accident in users of natural opium alkaloids and benzodiazepine tranquilizers and benzodiazepine hypnotics, this was noted in the first 7 days after the date of dispensing.

Thus, while opioid use may in some patients be associated with adverse effects that will decrease driving safety, each patient should be evaluated individually to the extent that appears appropriate given his or her occupational or personal requirements. Even so, health care providers should be aware that prescribing opioids to patients who operate a commercial motor vehicle or pilot an aircraft generally precludes them from working. There are many other workers in safety-sensitive positions in industry (e.g., forklift, construction, heavy equipment operations) whose employers or plant medical departments will also restrict them from returning to their job if an opioid is prescribed. Requests for a specific assessment of the patient’s ability to safely do his or her job may be warranted in certain situations where the use of opioids is questioned by an employer.

**MANAGING RISK OF ABUSE AND ADDICTION**

As noted, there is a significant risk of substance abuse, addiction, and diversion related to genetic factors, a current or prior psychological disorder, or current or prior alcoholism or other substance abuse (including cigarettes). A lifelong history of any substance abuse, history of significant psychopathology, or current unstable psychopathology should markedly increase the concern the health care provider has for potential aberrant medication use, addiction, and/or abuse.

“Screening for risk of addiction should be performed before starting a long-term opioid treatment in patients with chronic pain, thus providing the physician with clues about the necessity for increased attention in susceptible patients. If opioid treatment results in pain control, better functioning and improved health-related quality of life the treatment should of course be continued, even in patients susceptible for addiction”
as “these patients will need special attention with focus on compliance and with an open-minded dialogue about the potential problems and the consequences if the opioid treatment is getting out of control.”

There are also multiple published criteria that should lead the physician to consider the possibility of substance abuse. Of note is that while presence of these criteria does not necessarily imply that opioid use is reflective of addiction or abuse, it should lead practitioners to be alert to the possibility of problematic opioid use, which should in turn be followed by attempts to obtain an explanation for the behavior(s). The Portenoy criteria (see Table 1b) are considered most relevant to the chronic pain population, although the DSM-IV criteria (see Table 1a) are often cited. The Chabal criteria (see Table 1c) also appear to be of more relevance than are those of the DSM in terms of applicability to clinical practice.

Patients on opioids should be regularly screened on a random basis via urine testing, with frequency of testing being at least yearly or more often as needed. The decision to discontinue opioids in a patient with clinical evidence of abuse, misuse, or diversion is a complex one and is based upon factors such as current dosage, degree of dependency or addiction, extent of drug diversion (if relevant), the working diagnosis for which opioids were prescribed, the extent and nature of objective clinical findings associated with this diagnosis, and the degree to which opioid use was associated with meaningful functional improvement. Referral to a provider with experience in dealing with substance abuse and addiction is recommended.

**SUMMARY**

While the routine use of opioids in the management of patients with chronic pain is not recommended, there is a select group of patients who appear to benefit from opioid use. However, there is no reliable method to successfully identify the patient who may be successfully treated with opioids. In these patients, self-reports of improved pain management are accompanied by demonstrable increases in function and minimal or manageable to no untoward side-effects. And in fact, it is the functional benefit that appears to result from these drugs rather than pain reduction per se that supports continued use.

There are large numbers of patients who have been (or will be) placed on opioids and then fail to demonstrate the functional benefit that one would expect from improved pain management. Over time, many do not even report pain reduction below that which was present at the initiation of therapy. Yet drugs are continued and doses escalated even though rational clinical practice would presumably dictate against continued use of a medication or treatment that has not shown efficacy. Tolerance and dependency (physical or psychological) may play a role in this.

The decision to use opioids should not be taken lightly and must occur in the context of a structured functional restoration plan. While use of opioids in chronic pain is prevalent, it does not justify use on that basis alone. There have been many practices in the past that were accepted as the standard of care, that were later discredited based either on improved knowledge about the disease process treated or the availability of results from quality randomized controlled trials. While there have been some questions regarding whether the results of current studies are applicable to all patients, both this guideline and numerous systematic reviews have found insufficient scientific evidence to support the use of opioids in various chronic pain states.

It is the consensus of this Panel that evidence-based medicine supports a shift in medical practices towards recognizing the importance of a biopsychosocial rather than a biomedical model in evaluating and treating patients with chronic pain. There is significant risk with the long-term use of opioids for chronic non-malignant pain syndromes and their use should be limited to selected patients in whom other proven treatments have failed and for whom opioids show continued clear documented benefit. Even with recognized benefit, patients on opioids should remain under medical scrutiny and undergo weaning trials no less than yearly.
REFERENCES


<table>
<thead>
<tr>
<th>DSM-IV Diagnostic Criteria for Substance Dependence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A maladaptive use, leading to clinically significant impairment or distress, as manifested by three or more of the following, occurring at any time in the same 12-month period.</td>
</tr>
</tbody>
</table>

1. **Tolerance**, as defined by either the following:
   a. A need for markedly increased amounts of the substance to achieve intoxication or a desired effect.
   b. Markedly diminished effect with continued use of the same amount of the substance to relieve or avoid withdrawal symptoms.

2. **Withdrawal**, as manifested by either of the following:
   a. The characteristic withdrawal symptom for the substance.
   b. The same (or closely related) substance is taken to relieve symptoms.

3. The substance is often taken in larger amounts over a longer period than was intended.

4. There is a persistent desire or unsuccessful efforts to cut down or control substance use.

5. A great deal of time is spent in activities despite knowledge of having a persistent physical or psychological problem that is likely to have been caused by or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine induced depression or continued drinking despite recognition that a ulcer was made worse by alcohol consumption).

The symptoms for substance abuse are:

1. Recurrent substance use resulting in failures to fulfill major role obligations at work, school or home.

2. Recurrent substance use in physically hazardous situations (e.g. driving or operating a machine when impaired by substance use).


4. Continued substance use despite persistent or recurrent social or interpersonal problems caused by the effects of the substance.

### Table 1b. Criteria for Diagnosing Addiction in the Context of Patients Taking Opioids for Chronic Pain

Addiction is a psychological and behavioural syndrome characterized by:

1. An intense desire for the drug and overwhelming concern about its continued availability (psychological dependence)

2. Evidence of compulsive drug use, characterized, for example by:
   a. Unsanctioned dose escalation
   b. Continued dosing despite significant side effects
   c. Use of drugs to treat symptoms not targeted by therapy, or
   d. Unapproved use during periods of no symptoms

3. Evidence of one or more of a group of associated behaviours, including:
   a. Manipulation of the treating physician or medical system for the purpose of obtaining additional drug (altering prescriptions for example)
   b. Acquisition of drugs from other medical sources or from a non-medical source
   c. Drug hoarding or sales
   d. Unapproved use of other drugs (particular alcohol or other sedatives/hypnotics) during opioid therapy


### Table 1c. Criteria for Problematic Opioid Use

1. Overwhelming focus on opiate issues during clinic visits that occupy a significant proportion of the clinic visit and impedes progress with other issues regarding the patient’s pain. This behavior must persist beyond the third clinic treatment session.

2. Pattern of early refills (3 or more) or escalating drug use in the absence of an acute change in his or her medical condition.

3. Patient generated multiple telephone calls of visits requesting more opiates, early refills or problems associated with the opiate prescription. A patient may qualify with fewer visits if she/he creates a disturbance with the office staff.

4. Pattern of prescription problems for a variety of reasons that may include lost, spilled and/or stolen medications.

5. Supplemental sources of opiates obtained from multiple providers, emergency rooms or illegal sources.

<table>
<thead>
<tr>
<th>System</th>
<th>Adverse Effect</th>
<th>Prevalence</th>
<th>Increased Risk With:</th>
<th>Co-factors That Increase Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Nervous (CNS)</td>
<td>CNS depression&lt;br&gt;Dependence&lt;br&gt;Drowsiness, sedation – 60%&lt;br&gt;Fatigue&lt;br&gt;Headache&lt;br&gt;Hyperesthesia&lt;br&gt;Somnolence-29%&lt;br&gt;Tolerance&lt;br&gt;Abnormal dreams&lt;br&gt;Agitation&lt;br&gt;Altered temp regulation&lt;br&gt;Amblyopia&lt;br&gt;Anxiety, confusion&lt;br&gt;Depression</td>
<td>&gt; 10%&lt;br&gt;1-10%</td>
<td>Alcohol abuse or dependence&lt;br&gt;Drug abuse or dependence&lt;br&gt;Increased intracranial pressure&lt;br&gt;Mental illness&lt;br&gt;Smoking</td>
<td>Barbiturates&lt;br&gt;Benzodiazepines&lt;br&gt;Cimetidine&lt;br&gt;Dextroamphetamine&lt;br&gt;Elderly&lt;br&gt;Ethanol&lt;br&gt;Head injury&lt;br&gt;MAO inhibitors&lt;br&gt;Multiple opioids&lt;br&gt;High fat meals&lt;br&gt;St. John’s Wort&lt;br&gt;Valerian&lt;br&gt;Kava kava&lt;br&gt;Gotu kola</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>Postural hypotension&lt;br&gt;QT prolongation</td>
<td>1-10%</td>
<td>CV disease&lt;br&gt;Conduction defects</td>
<td></td>
</tr>
<tr>
<td>Respiratory</td>
<td>Dyspnea&lt;br&gt;Hicups&lt;br&gt;Respiratory depression</td>
<td>1-10%</td>
<td>Asthma&lt;br&gt;COPD</td>
<td></td>
</tr>
<tr>
<td>Dermatologic</td>
<td>Pruritus&lt;br&gt;Rash</td>
<td>&gt;10%&lt;br&gt;1-10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Constipation-40%&lt;br&gt;Nausea- 32%&lt;br&gt;Abdominal pain&lt;br&gt;Anorexia&lt;br&gt;Biliary spasm&lt;br&gt;Diarhoea&lt;br&gt;Dyspepsia, gastritis&lt;br&gt;Ileus&lt;br&gt;Abnormal LFTs&lt;br&gt;Vomiting&lt;br&gt;Xerostomia</td>
<td>&gt;10%&lt;br&gt;1-10%</td>
<td>Liver disease&lt;br&gt;Pancreatitis</td>
<td></td>
</tr>
<tr>
<td>Genitourinary</td>
<td>Decreased urination&lt;br&gt;Loss of libido&lt;br&gt;Sexual dysfunction&lt;br&gt;Ureteral spasms&lt;br&gt;Urinary retention</td>
<td></td>
<td>Pregnancy&lt;br&gt;Renal insufficiency&lt;br&gt;Urethral stricture&lt;br&gt;BPH</td>
<td></td>
</tr>
<tr>
<td>Endocrine</td>
<td>Amenorrhea&lt;br&gt;Decreased lactation&lt;br&gt;SIADH</td>
<td></td>
<td>Hypothyroidism&lt;br&gt;Addison’s disease</td>
<td></td>
</tr>
<tr>
<td>Neuromuscular</td>
<td>Back pain&lt;br&gt;Weakness</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*The following articles were used to develop this table:


Questions Concerning Activities of Daily Living (ADL)

1. How well can you perform personal self care activities including washing, dressing, using the bathroom, etc?
   - I can look after myself normally without extra discomfort
   - I can look after myself normally but have extra discomfort
   - Self care activities are uncomfortable and are done slowly
   - I manage most of my personal self care with some help
   - I need a lot of help daily in most aspects of my self care
   - I cannot perform self care activities

2. How well can you lift and carry?
   - I can lift and carry heavy objects without extra discomfort
   - I can lift and carry heavy objects but I get extra discomfort
   - I can lift and carry heavy objects
   - I can only lift and carry light to medium objects
   - I can only lift very light objects
   - I cannot lift or carry anything at all

3. How well can you walk (you may check more than one box)?
   - There is no change from before my injury
   - Symptoms prevent me from walking more than 1 mile
   - Symptoms prevent me from walking more than 1/2 mile
   - Symptoms prevent me from walking more than 1/4 mile
   - I walk only short distances
   - I use a cane, crutches or walker
   - I am limited to use of a wheelchair

4. What is the most strenuous level of activity that you can do for at least 2 minutes?
   - Very heavy activity
   - Heavy activity
   - Moderate activity
   - Light activity
   - Very light activity
   - Extremely light to no activity

5. How well can you climb one flight of stairs?
   - No difficulty (and you can easily perform the activity)
   - Some difficulty (but you can still perform the activity)
   - A lot of difficulty (but you can still perform the activity)
   - Cannot climb one flight of stairs

6. How well can you sit for a period of time (even with some pain or discomfort) before you absolutely have to stand, walk or lay down?
   - I can sit without any time limitations
   - I can only sit between 1 hour to 2 hours at a time
   - I can only sit between 30 and 60 minutes at a time
   - I can only sit between 15 and 30 minutes at a time
   - I can only sit for less than 15 minutes at a time
   - I can not sit at all

7. How well can you stand or walk for a period of time (even with some pain or discomfort) before you absolutely have to sit or lay down?
   - I can stand/walk without any time limitations
   - I can only stand/walk between 1 hour to 2 hours at a time
   - I can only stand/walk between 30 and 60 minutes at a time
   - I can only stand/walk between 15 and 30 minutes at a time
   - I can only stand/walk for less than 15 minutes at a time
   - I can not stand or walk at all

8. How well can you reach and grasp something off a shelf at chest level?
   - No difficulty (and you can easily perform the activity)
   - Some difficulty (but you can still perform the activity)
   - A lot of difficulty (but you can still do the activity)
   - Unable (you cannot do this activity)

9. How well can you reach and grasp something off a shelf overhead?
   - No difficulty (and you can easily perform the activity)
   - Some difficulty (but you can still perform the activity)
   - A lot of difficulty (but you can still do the activity)
   - Unable (you cannot do this activity)

10. How well can you push or pull (even with some pain or discomfort)?
    - I can push or pull very heavy objects
    - I can push or pull heavy objects
    - I can push or pull light objects
    - I can push or pull very light objects
    - I can not push or pull anything

11. Do you have any difficulty with gripping, grasping, holding and manipulating objects with your hands?
    - No difficulty (and you can easily perform the activity)
    - Some difficulty (but you can still perform the activity)
    - A lot of difficulty (but you can still do the activity)
    - Unable (you cannot do this activity)

12. Do you have any difficulty with repetitive motions such as typing on a computer?
    - No difficulty (and you can easily perform the activity)
    - Some difficulty (but you can still perform the activity)
    - A lot of difficulty (but you can still do the activity)
    - Unable (you cannot do this activity)
13. Do you have any difficulty with forceful activities with your arms and hands?
   - No difficulty (and you can easily perform the activity)
   - Some difficulty (but you can still perform the activity)
   - A lot of difficulty (but you can still do the activity)
   - Unable (you cannot do this activity)

14. Do you have any difficulty with kneeling, bending or squatting?
   - No difficulty (and you can easily perform the activity)
   - Some difficulty (but you can still perform the activity)
   - A lot of difficulty (but you can still do the activity)
   - Unable (you cannot do this activity)

15. Do you have any difficulty with sleeping?
   - I have no trouble sleeping because of my injury
   - My sleep is slightly disturbed (less than 1 hour sleepless)
   - My sleep is moderately disturbed (1-2 hours sleepless)
   - My sleep is greatly disturbed (3-5 hours sleepless)
   - My sleep is completely disturbed (5-7 hours sleepless)

16. In regards to sexual function (orgasm, ejaculation, lubrication, erection) changes since and because of your injury:
   - There has not been a change because of my injury
   - There has been a slight change because of my injury
   - There has been a moderate change because of my injury
   - There has been a major change because of my injury
   - No sexual functioning because of my injury

17. In regards to your pain at the moment:
   - I have no pain at the moment
   - My pain is mild at the moment
   - My pain is moderate at the moment
   - My pain is severe at the moment
   - My pain is the worst imaginable at the moment

18. In regards to your pain most of the time:
   - I have no pain most of the time
   - My pain is very mild most of the time
   - My pain is moderate most of the time
   - My pain is fairly severe most of the time
   - My pain is the worst imaginable most of the time

19. How much do your injury and/or pain interfere with your ability to travel?
   - None
   - Some or a little of the time
   - A lot or most of the time
   - All of the time – I can’t travel

20. How much do your injury and/or pain interfere with your ability to engage in social activities?
   - None
   - Some or a little of the time
   - Most of the time
   - All of the time – I can’t engage in social activities

21. How much do your injury and/or pain interfere with your ability to engage in recreational activities??
   - None
   - Some or a little of the time
   - A lot or most of the time
   - All of the time – I can’t engage in recreational activities

22. How much do your injury and/or pain interfere with concentrating and thinking?
   - None
   - Some or a little of the time
   - A lot or most of the time
   - All of the time – I can’t concentrate or think very clearly

23. How much has your injury and/or pain caused emotional distress with depression or anxiety?
   - None
   - Some or a little of the time (mild depression or anxiety)
   - A lot or most of the time (moderate depression or anxiety)
   - All of the time (severe depression or anxiety)

24. Has there been any change in your ability to communicate (writing, typing, seeing, hearing, speaking) since and because of your injury?

<table>
<thead>
<tr>
<th>Writing</th>
<th>Mild Change</th>
<th>Moderate Change</th>
<th>Severe Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaking</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. If zero indicates "no pain" and ten indicates "pain as bad as it can be," on a scale of 0 to 10, what is your level of pain for the following questions?

   - What was your pain level on average during the past week (circle the appropriate number)?
     - No Pain 0 1 2 3 4 5 6 7 8 9 10 Pain as bad as it can be

   - What was your pain level at its worst during the past week (circle the appropriate number)?
     - No Pain 0 1 2 3 4 5 6 7 8 9 10 Pain as bad as it can be
Figure 1b. Instrumental Activities of Daily Living Scale (IADLs)

<table>
<thead>
<tr>
<th>Instrumental Activities of Daily Living Scale (IADLs)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Ability to use telephone</strong></td>
<td></td>
</tr>
<tr>
<td>1. Operates telephone on own initiative: looks up and dials numbers, etc.</td>
<td>1</td>
</tr>
<tr>
<td>2. Dials a few well-known numbers</td>
<td>1</td>
</tr>
<tr>
<td>3. Answers telephone but does not dial</td>
<td>1</td>
</tr>
<tr>
<td>4. Does not use telephone at all.</td>
<td>0</td>
</tr>
<tr>
<td><strong>B. Shopping</strong></td>
<td></td>
</tr>
<tr>
<td>1. Takes care of all shopping needs independently</td>
<td>1</td>
</tr>
<tr>
<td>2. Shops independently for small purchases</td>
<td>0</td>
</tr>
<tr>
<td>3. Needs to be accompanied on any shopping trip</td>
<td>0</td>
</tr>
<tr>
<td>4. Completely unable to shop</td>
<td>0</td>
</tr>
<tr>
<td><strong>C. Food Preparation</strong></td>
<td></td>
</tr>
<tr>
<td>1. Plans, prepares and serves adequate meals</td>
<td>1</td>
</tr>
<tr>
<td>independently</td>
<td></td>
</tr>
<tr>
<td>2. Prepares adequate meals if supplied with</td>
<td>0</td>
</tr>
<tr>
<td>ingredients</td>
<td></td>
</tr>
<tr>
<td>3. Heats, serves and prepares meals or prepares</td>
<td>0</td>
</tr>
<tr>
<td>meals but does not maintain adequate diet.</td>
<td></td>
</tr>
<tr>
<td>4. Needs to have meals prepared and served.</td>
<td>0</td>
</tr>
<tr>
<td><strong>D. Housekeeping</strong></td>
<td></td>
</tr>
<tr>
<td>1. Maintains house alone or with occasional</td>
<td>1</td>
</tr>
<tr>
<td>assistance (e.g., &quot;heavy work domestic help&quot;)</td>
<td></td>
</tr>
<tr>
<td>2. Performs light daily tasks such as dishwashing,</td>
<td>1</td>
</tr>
<tr>
<td>bed making</td>
<td></td>
</tr>
<tr>
<td>3. Performs light daily tasks but cannot maintain</td>
<td>1</td>
</tr>
<tr>
<td>acceptable level of cleanliness.</td>
<td></td>
</tr>
<tr>
<td>4. Needs help with all home maintenance tasks.</td>
<td>1</td>
</tr>
<tr>
<td>5. Does not participate in any housekeeping tasks.</td>
<td>0</td>
</tr>
<tr>
<td><strong>E. Laundry</strong></td>
<td></td>
</tr>
<tr>
<td>1. Does personal laundry completely</td>
<td>1</td>
</tr>
<tr>
<td>2. Launders small items, rinses stockings, etc.</td>
<td>1</td>
</tr>
<tr>
<td>3. All laundry must be done by others.</td>
<td>0</td>
</tr>
<tr>
<td><strong>F. Mode of Transportation</strong></td>
<td></td>
</tr>
<tr>
<td>1. Travels independently on public transportation or drives own car.</td>
<td>1</td>
</tr>
<tr>
<td>2. Arranges own travel via taxi, but does not</td>
<td>1</td>
</tr>
<tr>
<td>otherwise use public transportation.</td>
<td></td>
</tr>
<tr>
<td>3. Travels on public transportation when</td>
<td>1</td>
</tr>
<tr>
<td>accompanied by another.</td>
<td></td>
</tr>
<tr>
<td>4. Travel limited to taxi or automobile with</td>
<td>0</td>
</tr>
<tr>
<td>assistance of another.</td>
<td></td>
</tr>
<tr>
<td>5. Does not travel at all.</td>
<td>0</td>
</tr>
<tr>
<td><strong>G. Responsibility for own medications</strong></td>
<td></td>
</tr>
<tr>
<td>1. Is responsible for taking medication in correct dosages at correct time</td>
<td>1</td>
</tr>
<tr>
<td>2. Takes responsibility if medication is prepared in advance in separate dosage.</td>
<td>0</td>
</tr>
<tr>
<td>3. Is not capable of dispensing own medication.</td>
<td>0</td>
</tr>
<tr>
<td><strong>H. Ability to Handle Finances</strong></td>
<td></td>
</tr>
<tr>
<td>1. Manages financial matters independently (budgets, writes checks, pays rent, bills goes to bank), collects and keeps track of income.</td>
<td>1</td>
</tr>
<tr>
<td>2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.</td>
<td>1</td>
</tr>
<tr>
<td>3. Incapable if handling money.</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 1c. Screener and Opioid Assessment for Patients with Pain (SOAPP)*

*The 14-question version is provided in this Guideline.

Name: _____________________________________________ Date: __________________________

The following are some questions given to all patients at the (name of clinic or practice) who are on or being considered for opioids for their pain. Please answer each question as honestly as possible. This information is for our records and will remain confidential. Your answers alone will not determine your treatment. Thank you.

Please answer the questions below using the following scale:

0 = Never, 1 = Seldom, 2 = Sometimes, 3 = Often, 4 = Very often

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often do you have mood swings?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>2. How often do you smoke a cigarette within an hour after you wake up?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>3. How often have any of your family members, including parents and grandparents, had a problem with alcohol or drugs?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>4. How often have any of your close friends had a problem with alcohol or drugs?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>5. How often have others suggested that you have a drug or alcohol problem?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>6. How often have you attended an AA or NA meeting?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>7. How often have you taken medication other than the way that it was prescribed?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>8. How often have you been treated for an alcohol or drug problem?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>9. How often have your medications been lost or stolen?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>10. How often have others expressed concern over your use of medication?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>11. How often have you felt a craving for medication?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>12. How often have you been asked to give a urine screen for substance abuse?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>13. How often have you used illegal drugs (for example, marijuana, cocaine, etc.) in the past five years?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>14. How often, in your lifetime, have you had legal problems or been arrested?</td>
<td>0 1 2 3 4</td>
</tr>
</tbody>
</table>

Please include any additional information you wish about the above answers. Thank you.

*Item is included in the 5-item SOAPP Version 1.0-SF.

The score is the sum of ratings for all of the questions. A score of 7 or higher on the SOAPP Version 1.0-14Q or of 4 or higher on SOAPP Version 1.0-SF is considered positive (i.e., detects a patient at risk for developing problems when placed on long-term opioid therapy).

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### Opioid Treatment Agreement

This Agreement is made and entered into this ______ day of __________, ______ by and between Dr. __________, a duly licensed physician practicing his profession in the State of Washington, hereinafter referred to as the “Provider”, and ______, hereinafter referred to as the “Patient”. A copy of this Agreement shall be given to the Patient and a copy mailed to the Department of Labor and Industries, PO Box 44291, Olympia WA 98504-4291.

**Patient Name: ________________________________**
**Claim No. ________________________________**

Opioid (narcotic) treatment for chronic pain is used to reduce pain and improve what you are able to do each day. Along with opioid treatment, other medical care may be prescribed to help improve your ability to do daily activities. This may include exercise, use of non-narcotic analgesics, physical therapy, psychological counseling or other therapies or treatment. Vocational counseling may be provided to assist in your return to work effort. I, ________________________________, understand that compliance with the following guidelines is important in continuing pain treatment with Dr. _____________________.

#### 1. I understand that I have the following responsibilities:

- **a.** I will take medications only at the dose and frequency prescribed.
- **b.** I will not increase or change medications without the approval of this provider.
- **c.** I will actively participate in RTW efforts and in any program designed to improve function (including social, physical, psychological and daily or work activities).
- **d.** I will not request opioids or any other pain medicine from providers other than from this one. This provider will approve or prescribe all other mind and mood altering drugs.
- **e.** I will inform this provider of all other medications that I am taking.
- **f.** I will obtain all medications from one pharmacy, when possible. By signing this agreement, I give consent to this provider to talk with the pharmacist.
- **g.** I will protect my prescriptions and medications. Only one lost prescription or medication will be replaced in a single calendar year. I will keep all medications from children.
- **h.** I agree to participate in psychiatric or psychological assessments, if necessary.
- **i.** If I have an addiction problem, I will not use illegal or street drugs or alcohol. This provider may ask me to follow through with a program to address this issue. Such programs may include the following:
  - 12-step program and securing a sponsor
  - Individual counseling
  - Inpatient or outpatient treatment
  - Other: __________________

#### 2. I understand that in the event of an emergency, this provider should be contacted and the problem will be discussed with the emergency room or other treating provider. I am responsible for signing a consent to request record transfer to this doctor. No more than 3 days of medications may be prescribed by the emergency room or other provider without this provider’s approval.

#### 3. I understand that I will consent to random drug screening. A drug screen is a laboratory test in which a sample of my urine or blood is checked to see what drugs I have been taking.

#### 4. I will keep my scheduled appointments and/or cancel my appointment a minimum of 24 hours prior to the appointment.

#### 5. I understand that this provider may stop prescribing opioids or change the treatment plan if:

- **a.** I do not show any improvement in pain from opioids or my physical activity has not improved.
- **b.** My behavior is inconsistent with the responsibilities outlined in #1 above.
- **c.** I give, sell or misuse the opioid medications.
- **d.** I develop rapid tolerance or loss of improvement from the treatment.
- **e.** I obtain opioids from other than this provider.
- **f.** I refuse to cooperate when asked to get a drug screen.
- **g.** If an addiction problem is identified as a result of prescribed treatment or any other addictive substance.
- **h.** If I am unable to keep follow-up appointments.

**Patient Signature** ________________ **Date** ________________

**Provider Signature** ________________ **Date** ________________

**PLEASE READ AND SIGN REVERSE SIDE**

**Provider:** Keep signed copy in file, give a copy to patient and send a copy to L&I. Must renew Agreement every 6 months.

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**Figure 1d: Therapeutic Agreement – Trial of Opioid Therapy (Washington State Treatment Guidelines)**

Reprinted with permission from Washington State Department of Labor and Industries.
Your safety risks while working under the influence of opioids
You should be aware of potential side effects of opioids such as decreased reaction time, clouded judgment, drowsiness and tolerance. Also, you should know about the possible danger associated with the use of opioids while operating heavy equipment or driving.

Side effects of opioids

| Confusion or other change in thinking abilities | Problems with coordination or balance that may make it unsafe to operate dangerous equipment or motor vehicles | Breathing too slowly – overdose can stop your breathing and lead to death |
| Nausea | Sleepiness or drowsiness | Aggravation of depression |
| Constipation | Vomiting | Dry mouth |
| Vomiting |

These side effects may be made worse if you mix opioids with other drugs, including alcohol.

Risks
Physical dependence. This means that abrupt stopping of the drug may lead to withdrawal symptoms characterized by one or more of the following:

| Runny nose | Diarrhea | Difficulty sleeping for several days |
| Abdominal cramping | Sweating | Goose bumps |
| Rapid heart rate | Nervousness |

Psychological dependence. This means it is possible that stopping the drug will cause you to miss or crave it.

Tolerance. This means you may need more and more drug to get the same effect.

Addiction. A small percentage of patients may develop addiction problems based on genetic or other factors.

Problems with pregnancy. If you are pregnant or contemplating pregnancy, discuss with your provider.

Payment of medications
State law forbids L&I from paying for opioids once the patient reaches maximum medical improvement. You and your provider should discuss other sources of payment for opioids when L&I can no longer pay.

Recommendations to manage your medications

- Keep a diary of the pain medications you are taking, the medication dose, time of day you are taking them, their effectiveness and any side effects you may be having.
- Use of a medication box that you can purchase at your pharmacy that is already divided in to the days of the week and times of the day so it is easier to remember when to take your medications.
- Take along only the amount of medicine you need when leaving home so there is less risk of losing all your medications at the same time.

I have read this document, understand and have had all my questions answered satisfactorily. I consent to the use of opioids to help control my pain and I understand that my treatment with opioids will be carried out as described above.

| Patient Signature | Date | Provider Signature | Date |

PLEASE READ AND SIGN REVERSE SIDE

Provider: Keep signed copy in file, give a copy to patient and send a copy to L&I. Must renew Agreement every 6 months.
Appendix 1. Equianalgesic Dosing of Opioids for Pain Management

Equianalgesic doses contained in this chart are approximate, and should be used only as a guideline. Dosing must be titrated to individual response. There is often incomplete cross-tolerance among these drugs. It is, therefore, typically necessary to begin with a dose lower (e.g., 25% to 50% lower) than the equianalgesic dose when changing drugs and then titrate to an effective response. Dosing adjustments for renal or hepatic insufficiency and other conditions that affect drug metabolism and kinetics may also be necessary. A website with an equianalgesic dose calculator is available at http://www.hopweb.org.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Equianalgesic Doses (mg)</th>
<th>Approximate Equianalgesic 24Hour Dose (Assumes Around-the-Clock Dosing)*</th>
<th>Usual Starting Dose (Adults) (Doses NOT Equianalgesic)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parenteral</td>
<td>Oral</td>
<td>Parenteral</td>
</tr>
<tr>
<td>Morphine (immediate-release tablets, oral solution)</td>
<td>10</td>
<td>30</td>
<td>3-4mg q 4 h</td>
</tr>
<tr>
<td>Controlled-release morphine (e.g., MS Contin, Kadian)</td>
<td>NA</td>
<td>30</td>
<td>NA</td>
</tr>
<tr>
<td>Extended-release morphine (Avinza [U.S.], Embeda [with naltrexone, U.S.])</td>
<td>NA</td>
<td>30</td>
<td>NA</td>
</tr>
<tr>
<td>Hydromorphone (Dilaudid)</td>
<td>1.5-2</td>
<td>7.5-8</td>
<td>0.5-0.8mg q 4 h</td>
</tr>
<tr>
<td>Extended-release hydromorphone (Éxalgo, Jurnista [Canada])</td>
<td>NA</td>
<td>See footnote b.</td>
<td>NA</td>
</tr>
<tr>
<td>Oxycodone (e.g., Roxicodone [U.S.], OxyIR [Canada], also in Percocet, others)</td>
<td>NA</td>
<td>20-30</td>
<td>NA</td>
</tr>
<tr>
<td>Controlled-release oxycodone (OxyContin)</td>
<td>NA</td>
<td>20-30</td>
<td>NA</td>
</tr>
<tr>
<td>Oxymorphone (Opana, [U.S.])</td>
<td>1</td>
<td>10</td>
<td>0.3-0.4mg q 4 h</td>
</tr>
<tr>
<td>Extended-release oxymorphone (Opana ER, [U.S.])</td>
<td>NA</td>
<td>10</td>
<td>NA</td>
</tr>
<tr>
<td>Hydrocodone (in Lortab [U.S.], Vicodin [U.S.], others)</td>
<td>NA</td>
<td>30-45</td>
<td>NA</td>
</tr>
<tr>
<td>Codeine</td>
<td>100-130</td>
<td>200</td>
<td>30-50mg q 4 h</td>
</tr>
<tr>
<td>Methadone (Dolophine [U.S.], Metadol [Canada])</td>
<td>Variable</td>
<td>Variable</td>
<td>The conversion ratio of methadone is highly variable depending on factors such as patient tolerance, morphine dose, and length of dosing (short term versus chronic dosing). Because the analgesic duration of action is shorter than the half-life, toxicity due to drug accumulation can occur within 3 to 5 days. (See Detail-Document “Opioid Dosing.”)</td>
</tr>
</tbody>
</table>
Fentanyl 0.1 NA All non-injectable fentanyl products are for opioid-tolerant patients only. Do not convert mcg for mcg among fentanyl products (i.e., patch, transmucosal [Actiq (U.S.)], buccal [Fentora (U.S.)], buccal soluble film [Onsolis]). See specific product labeling for dosing.

Meperidine (Demerol) 75 300 Should be used for acute dosing only (short duration of action (2.5 to 3.5 hours) and neurotoxic metabolite, normeperidine). Avoid in renal insufficiency and use caution in hepatic impairment and in the elderly (potential for toxicity due to accumulation of normeperidine). Seizures, myoclonus, tremor, confusion, and delirium may occur.

NA = not available

Most of the above opioids are available as generics. Exceptions (with example cost from drugstore.com) include: Kadian ($4.81/30mg cap), Avinza ($4.47/30 mg cap), Opana, Opana ER ($4.40/10mg tab), Embeda ($4.60/20mg cap), and Exalgo ($10/8mg [AWP]). As a comparison, generic morphine controlled release = $1.63/30mg tab.

a. Product labeling for hydromorphone recommends a starting dose of 1 mg to 2 mg IV every four to six hours, or 2 mg to 4 mg orally every four to six hours. Some institutions use even lower doses of hydromorphone (e.g., 0.2 mg to 0.5 mg every two hours as needed). One regimen starts opioid-naïve patients at 0.2 mg IV every two hours as needed for mild or moderate pain, with the option in moderate pain to give an extra 0.2 mg after 15 minutes if relief is inadequate after the first 0.2 mg dose. For severe pain, 0.5 mg IV every two hours as needed is used initially. In adults <65 years of age, the 0.5 mg dose can be repeated in 15 minutes if relief is inadequate, for a maximum of 1 mg in two hours.

b. Per the product labeling, convert to Exalgo 12 mg from oral codeine 200 mg, hydrocodone 30 mg, morphine 60 mg, oxycodone 30 mg, and oxymorphone 20 mg. The Jurnista product monograph recommends a 5:1 oral morphine: oral hydromorphone conversion ratio.

c. Per the product labeling, oral oxymorphone 10 mg ER is approximately equivalent to hydrocodone 20 mg or oxycodone 20 mg.

d. Dilaudid Canadian monograph recommends parenteral starting dose of 2 mg. See footnote “a” for additional information and precautions.

e. No initial dose for Exalgo. For opioid-tolerant patients only. Initial Jurnista dose (opioid-naive or <40 mg daily oral morphine equivalents) is 4 to 8 mg q 24 h.

f. Tramadol (e.g., Ultram [U.S.], Ralivia [Canada], potency is about one-tenth that of morphine, similar to codeine. The maximum daily dose of tramadol is 300 mg to 400 mg, depending on the product. Also check product information regarding appropriate dosing in elderly, or in renal or hepatic dysfunction.

g. Examples of doses seen in clinical practice, taking into account available dosage strengths.

h. Labeling for some products (MS Contin [U.S.], Kadian, Jurnista) suggest beginning treatment with an immediate-release formulation.

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