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# OPIOIDS AND CHRONIC NON-MALIGNANT PAIN: A CLINICIAN'S HANDBOOK

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## INTRODUCTION

Our goal in creating this handbook is to assist clinicians in managing adult patients with chronic non-malignant pain. We have attempted to provide information and resources that can be easily referenced as individual patient treatment plans are being developed. The information contained in this handbook is based on current consensus guidelines, expert opinion and studies when available. Despite an obvious need, the medical literature does not yet contain the high quality randomized controlled trials required to establish evidenced-based clinical standards for the management of chronic non-malignant pain.

Our discussion focuses on the use of long-term opioids because this is reported to be the area that is most challenging for clinicians, holding both the potential for benefit and the potential for social and medical adverse outcomes. We acknowledge that opioids represent only one component of pain management and expect treatment plans to be highly individualized based on the medical, psychological and social needs of a particular patient. We welcome feedback to improve subsequent editions.

The handbook is organized in two major parts:

Part I: Principles of Prescribing Opioids—identifies basic issues relating to the use of opioids in chronic non-malignant pain.

Part II: Guide to Prescribing Opioids for Chronic Non-Malignant Pain—provides detailed prescribing information that can be referenced quickly while seeing patients.

Key references used to create this handbook are listed at the end of the handbook.

### *Disclaimer*

*The information contained herein is provided in good faith to assist clinicians in managing patients with chronic pain. Recommendations are based on consensus guidelines, published medical literature, and expert opinion, and are not to be considered evidence-based or comprehensive in nature. Additionally, these recommendations are dynamic and will be revised as new information becomes available. This information is advisory only and is not intended to replace FDA-approved labeling information, or sound clinical knowledge, judgment, and expertise in the provision of healthcare. CareOregon assumes no responsibility for the actions of clinicians based upon their reliance on the information contained herein. Selection and management of drug therapy for individual patients is ultimately based on clinicians' assessment of clinical circumstances and patient needs.*



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*\* photocopy-ready form*

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PART I:  
**PRINCIPLES OF PRESCRIBING OPIOIDS**

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## SECTION 1: STARTING POINTS

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### *Current Consensus on Opioids in Chronic Non-Malignant Pain*

There is general consensus that:

- **Opioid analgesics are accepted as part of a comprehensive management plan for chronic non-malignant pain.**
  - A comprehensive treatment plan should include physical activity, treatment of physical and psychological co-morbidities, and other adjunctive and complementary medicines.
  - An effective, comprehensive pain management plan may take months to develop. Patients need to be informed of this early on.
  - While first line therapy for pain remains non-opioid analgesics, a trial of opioids may be indicated.
  - Opioids are not recommended as sole therapy to treat chronic non-malignant pain but are often combined with non-opioid analgesics (e.g. NSAIDs, adjuvants) for a dose-sparing and additive analgesic effect.
  - Prescription of opioids for chronic non-malignant pain is governed by state and federal laws (see Part I, Section 2).
- **Not all pain responds to opioids.**
  - There are no well defined “types” of pain, either nociceptive or neuropathic, that are known to be consistently opioid responsive.
  - Opioid responsiveness can be determined only by therapeutic trial.
- **Success of therapy needs to be defined on a case-by-case basis.**
  - The desired outcome of treatment is improvement of both pain and function. Improvement of pain should result in some improved function, whether in social, physical, psychological, and/or work activities.
- **Opioids may not provide complete pain relief.**
  - For many patients with chronic pain, it is unrealistic to expect complete relief. Reduction in pain is an acceptable goal and should be made explicit.

- **Abuse and diversion of opioids can be minimized by making expectations and goals explicit and by careful documentation.**
  - Tools that may minimize ambiguity and misunderstanding about treatment goals and medication use are available. These include standardized quantitative pain scales, pain diaries, medication flow sheets, and medication contracts.
  - Accurate documentation of all medications prescribed and all refill requests is essential. Regularly scheduled follow-up appointments for reassessment of compliance, analgesic efficacy, adverse effects, adherence to the treatment plan, and physical and psychosocial functioning can help identify and address aberrant drug taking behavior.
  - **Concern about abuse should not override the patient’s right to respectful consideration and access to medical management for pain.**
  
- **Patients must be engaged in taking an active part in their recovery.**
  - Let the patient set the treatment goals. Ask the patient to describe their perception of the problem, how it affects their life physically and emotionally, and exactly what they expect from treatment.
  - Help patients build self-management skills. Discuss at each visit what they are currently doing to manage their pain and how those “strategies” might be improved.

### ***Patient Education and Self-Management***

As with other chronic conditions such as diabetes, congestive heart failure, or asthma, the outcome of chronic pain management is highly dependent on what the patient does on a daily basis between office visits. The more the patient knows about their pain and has a realistic understanding of the options for medical and non-medical treatment, including behavior and lifestyle changes, the more they will be able to manage it.

- It is important for the patient to understand from the start the potential limitations of opioid therapy: that it is offered on a trial basis, may not be helpful or only partially helpful, and is only one part of the management for chronic pain. The following statements may help make this explicit.
  - “Some types of pain are improved with opioid pain medicine but some are not. The only way to know is to try.”
  - “No pain medicine is likely to make all of your pain go away.”

- “The goal is to help you feel better and be able to lead a better life. This usually takes more than medicine.”
  - “Since medicine usually cannot make all the pain go away, it is important for you to learn what you can do to improve your pain.”
  - “With or without medication, chronic pain only improves in small steps and with continued effort. We can use clinic visits to set realistic goals for things you want to do and figure out ways to accomplish them.”
- Focus from the beginning on concrete self-management goals in order to give as much emphasis on the patient learning new ways to manage their pain as on the medical management.
- Identify something that the patient wants to do, letting the patient be the key decision maker in setting the goal.
  - Do not try to change too much at one time. Break the goal down into smaller parts that can be accomplished within a reasonable amount of time.
  - Describe in measurable terms what is to be accomplished (how, what, when, where, how often) so that it is easy to see progress or lack thereof.
  - Discuss potential barriers to progress and list possible alternative solutions that might be tried.
  - Reaffirm that learning new ways to manage pain takes time and practice and that not all plans are initially successful.
  - Agree on a follow-up time to review the plan.
  - If a patient is unwilling to set goals for behavior change this visit, maintain goal setting as an expectation for future visits.
  - A copy of the patient information on the next page, or similar materials, may be helpful to reinforce these points.

EXAMPLE: A 33-year-old morbidly obese patient with non-surgical back pain complains that she is unable to care for her family because of her pain. Together you list the different activities she would like to be able to do (grocery shopping, cooking meals, doing laundry, etc) and narrow the list down to two or three things she feels she most wants to try. She would like to try grocery shopping but worries that the weekly trip is “too much.” Reviewing alternatives, it is decided that instead of shopping for an entire week’s groceries, she will go more frequently, do as much as she can even if it is just buying a few items, and return home. She agrees to keep track of how often she goes and how long it takes on a calendar that she can bring back to the next visit in two weeks.



## Patient Information

### *Using Opioid Pain Medications for Your Pain*

- “Opioids” or “narcotics” are medications like morphine that come from the opium poppy. They have been used for hundreds of years all over the world for pain relief. Their medical use is tightly controlled by state and federal laws. They should only be used as directed and only by the person for whom they are prescribed.
- Opioid pain medications may help with chronic pain. Some types of pain get better with opioid pain medications, but some do not. The only way to know is to try the medication as it has been prescribed and talk about the results with your medical provider.
- No pain medication is guaranteed to make all of your pain go away. Sometimes partial improvement in pain is the best that can be done.
- The goals of pain management are to help you feel better and be able to lead a more active life. This usually takes more than medications.
- Pain medications work best when they are combined with other pain management methods. Non-drug treatments such as exercise, relaxation, or counseling may also be recommended to help give you relief.
- When used to treat pain, opioid pain medications rarely cause addiction, which is an emotional need for medication. However, your body may react physically if you stop taking these medications suddenly. Do not stop your medications on your own. Stopping the medications gradually, and with your provider’s help, is recommended.
- Most side effects from opioid medications can be managed. Nausea, drowsiness, itching, and other side effects usually last only a few days. Constipation often does not go away but can be managed by eating the right foods, drinking enough liquids, and taking medications.
- Work as a team with your health care provider. Learn about your pain and what can be expected from treatment. Ask what you can do to have a more active role in your health care. Do your part by trying different ways to manage your pain and talking about the results with your provider.
- Set goals. Use clinic visits to set realistic goals for the things you most want to do, such as sleeping, working, exercising, improving your social life, etc. Begin with the easiest goals first and use follow-up visits to keep you moving in the right direction.



## SECTION 2: OPIOID PRESCRIBING AND OREGON LAW

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In Oregon, management of the patient with chronic non-malignant pain using opioid analgesics is governed by the Intractable Pain Act of 1995. The Oregon Board of Medical Examiners summarizes this legislation as follows:

“Both this statute and its facilitating Oregon Administrative Rule (847-030-0015) assure that the patient with chronic non-malignant intractable pain:

- (1) receives careful assessment, documentation, and management of the pain;
- (2) receives the assessment and recommendations of a physician specializing in the body area, system or organ perceived as the source of pain; and
- (3) executes a signed material risk notice acknowledging receipt of information disclosing the material risks associated with the prescription or administration of controlled substances used in the course of his or her treatment.”

*(BME Statement of Philosophy on Pain Management – BME Report Fall, 1999)*

In practice, this requires providers to take specific additional steps beyond their own assessment in order to prescribe chronic opioids in non-cancer patients:

- The requirement for referral to a physician specializing in the treatment of the “body area, system or organ” thought to be the source of pain – such as a gastroenterologist for abdominal pain – ensures that a potentially treatable cause of pain has not been overlooked and that chronic pain management with controlled substances is appropriate.
  - There is no specific requirement to refer to a specialist in pain management or a pain management clinic.
  - In 1999, the Oregon Legislature modified the Intractable Pain Act to allow providers who are unable to obtain consultation because of cost or access to petition the BME for assistance or modification of this requirement. Contact the BME at 503-229-5770 for further information.
- The requirement for “material risk notice” directs the prescriber to discuss with the patient the risks associated with the controlled substance, the anticipated benefits, and possible alternatives. This discussion must be documented and signed by the patient in a manner similar to obtaining informed consent for a procedure.

## PART I: PRINCIPLES OF PRESCRIBING OPIOIDS

### *Section 2: Opioid Prescribing and Oregon Law*

- A model Material Risk Notice created by the Oregon Medical Association (OMA) follows. The OMA checklist of the elements required by law for prescribing for intractable pain and a sample letter to the specialist consulting on the case are also attached.
- Material Risk Notice (informed consent) is not the same as a “narcotic contract” defining rules and conditions of medication use with the patient. Medication contracts are not required by law (See Part I, Section 3).

***Referral Letter Re: Management of Chronic Pain***

Dear Dr. \_\_\_\_\_:

I am referring \_\_\_\_\_ for assistance in evaluating his/her chronic pain. I am contemplating the use of opioid pain medication for long term use. In accordance with the Intractable Pain Law of the State of Oregon (ORS 677.470-485), I am requesting your opinion regarding the appropriate treatment of this patient. Relevant clinical notes are attached. Pertinent clinical information is as follows: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

I am asking you specifically to address several questions in the consultation.

1. The current working diagnosis is \_\_\_\_\_ (ICD \_\_\_\_\_).

Do you concur with this diagnosis, or would you offer a different one?

2. Diagnostic workup has included \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_.

Are there other diagnostic measures that you would recommend? \_\_\_\_\_

\_\_\_\_\_.

3. Current treatment plan includes: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_.

Do you concur with the chronic use of narcotics as noted under treatment plan?

\_\_\_\_\_.

4. Do you request to see the patient again in the future? If so, when and how often?

\_\_\_\_\_.

5. Other \_\_\_\_\_

\_\_\_\_\_.

Thank you for seeing this patient in consultation. Please contact me if you need additional information or would like to address this with me personally. Otherwise, I will look forward to receiving your recommendations.

Sincerely,



***Patient Informed Consent and Notice of Material Risks  
For Treatment of Intractable Pain With Controlled Substances***

Dear \_\_\_\_\_:

This will confirm your diagnosis of \_\_\_\_\_, a condition causing you intractable pain. I have recommended treating your condition with \_\_\_\_\_ . I anticipate that this treatment will \_\_\_\_\_ .

We have discussed the following alternative therapies: \_\_\_\_\_

We have discussed potential side effects and risks of controlled substances, including:

- sleepiness, confusion, difficulty thinking
- nausea, vomiting, constipation
- difficulty breathing, shortness of breath, wheezing
- rash, itching
- potential for allergic reaction
- potential for interaction with other medications (increasing effects or side effects of drugs taken together)
- potential for dose escalation/tolerance (need for higher doses for the same effect may occur with long term use)
- potential for dependence (after the body adjusts to these medications, they cannot be stopped abruptly without causing physical symptoms)
- potential for withdrawal (stopping medications abruptly may cause nausea, vomiting, abdominal pain, sweating, aching, abnormal heartbeat or other symptoms that can be life threatening; medication changes should be under provider supervision)
- potential for addiction (compulsive drug use not related to pain relief)
- potential for impaired judgment and/or motor skills (driving or operating machinery may be hazardous due to effects on the brain and nerves)
- other: \_\_\_\_\_

This confirms that I asked you if you wanted a more detailed explanation of the proposed treatment, the alternatives **and the material risks, and you (check one):**

- Are satisfied with that explanation and desire no further information.**
- Requested and received, in substantial detail, further explanation of the treatment, alternatives and material risks.**

If this form accurately represents our discussion, and if you are satisfied with the explanation given, you must sign this document indicating your consent to the use of controlled substances in treating your intractable pain prior to commencing the treatment.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Explained by me and signed in my presence:

Signed: \_\_\_\_\_ Date: \_\_\_\_\_



## *Intractable Pain Checklist*

### 1. Attending clinician's diagnosis of intractable pain:

- "Intractable pain" defined: Chronic, non-malignant pain, the cause of which cannot be removed or otherwise treated and for which no generally accepted relief or cure of the cause has been found after reasonable efforts.
- Medical record documentation:
  - Examination
  - Diagnosis
  - Supporting diagnostic evaluations
  - Documentation of therapeutic trials

### 2. Consult with specialist(s):

- Evaluation by one or more physicians specializing in the treatment of the body area, system or organ perceived as the source of the intractable pain, concurring in the treatment plan.
- Medical record documentation:
  - Corroborating findings
  - Corroborating diagnosis
  - Recommendations

### 3. Material risk notice:

- Written notice must be discussed with and signed by the patient prior to commencing treatment.
- The executed notice must be maintained as a permanent component of the patient's medical record.
- Written notice should include:
  - Diagnosis
  - Controlled substance or group of controlled substances to be used
  - Anticipated therapeutic results
  - Potential side effects if applicable, including:
    - Allergy potential
    - Interaction/potentiation of other medications
    - Potential dose escalation/tolerance
    - Withdrawal precautions
    - Potential dependence and addiction
    - Potential impaired judgment and/or motor skills
    - Other: \_\_\_\_\_
  - Desire for further explanation
  - Satisfaction with explanation
  - Patient's dated signature on notice

### 4. Follow-up and dispensing records:

- Continued need for controlled substance therapy must be documented and maintained in the patient's permanent medical record. A record of the amount and dose of prescribed or administered controlled substances must be maintained in the patient's permanent medical record.



## SECTION 3: MEDICATION CONTRACTS

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Although not required by Oregon law, medication contracts should be considered for patients on long-term opioid therapy. Medication contracts can improve provider-patient relations by allowing expectations to be made explicit and communicated. Depending on the context, they can emphasize provider concerns regarding appropriate medication use and/or patient concerns that their reports of pain be accepted and acted upon.

- Contracts should not be used in a way that violates the patient’s right to respectful care, the right to medical care for pain, or the right to make decisions about their care.
- Written and signed medication contracts can be modified for the individual patient. Examples of both a comprehensive and a basic contract follow.

### **Pain Patient’s Bill of Rights**

Pain patient “Bill of Rights” statements have been issued by a number of organizations. They emphasize that the person in pain has:

1. The right to considerate and respectful care that accepts and acts upon their reports of pain.
2. The right to have their pain thoroughly assessed and addressed no matter what its cause or severity.
3. The right to be fully informed concerning the diagnosis and prognosis of their condition, the proposed treatments, and the benefits, risks and costs of each.
4. The right to participate in decisions about pain management, including the right to refuse specific treatments.
5. The right to privacy concerning their medical care.

For more information consult the American Pain Foundation at [www.painfoundation.org](http://www.painfoundation.org) or the American Academy of Pain Management at [www.aapainmanage.org](http://www.aapainmanage.org).



## *Medication Contract*

I, \_\_\_\_\_, have agreed to use the following medications as part of my treatment for chronic pain. I understand that these medications may not eliminate my pain but may reduce it and improve what I am able to do each day.

| MEDICATION | DOSE  | DIRECTIONS | QUANTITY PER MONTH |
|------------|-------|------------|--------------------|
| _____      | _____ | _____      | _____              |
| _____      | _____ | _____      | _____              |
| _____      | _____ | _____      | _____              |
| _____      | _____ | _____      | _____              |

I understand the following guidelines for continuing pain treatment under the care of \_\_\_\_\_

1. I understand that I have the following responsibilities:

- I will take medications at the dose and frequency prescribed.
- I will not increase or change how I take my medications without the approval of this health care provider.
- I will arrange for refills at the prescribed interval ONLY during regular office hours. I will not ask for refills earlier than agreed, after-hours, on holidays or on weekends.
- I will obtain all refills for these medications only at \_\_\_\_\_ pharmacy (phone number: \_\_\_\_\_), with full consent for my provider and pharmacist to exchange information in writing or verbally.
- I will not request any pain medications or controlled substances from other providers and will inform this provider of all other medications I am taking.
- I will inform my other health care providers that I am taking these pain medications and of the existence of this contract. In event of an emergency, I will provide this same information to emergency department providers.
- I will protect my prescriptions and medications. I understand that lost or misplaced prescriptions will not be replaced.
- I will keep medications only for my own use and will not share them others. I will keep all medications away from children.
- I agree to participate in any medical, psychological or psychiatric assessments recommended by my provider.

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- I will actively participate in any program designed to improve function, including social, physical, psychological and daily activities.
2. I will not use illegal or street drugs or another person's prescription. If I have an addiction problem with drugs or alcohol and my provider asks me to enter a program to address this issue, I agree to follow through. Such programs may include:
- 12-step program and securing a sponsor
  - Individual counseling
  - Inpatient or outpatient treatment
  - Other: \_\_\_\_\_

If in treatment, I will request that a copy of the program's initial evaluation and treatment recommendations be sent to this provider and will not expect refills until that is received. I will also request written monthly updates be sent to verify my continuing treatment.

3. I will consent to random drug screening to assure I am only taking prescribed drugs. I understand that 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 all my scheduled appointments. If I need to cancel my appointment, I will do so a minimum of 24 hours before it is scheduled.
5. I understand that this provider may stop prescribing the medications listed if:
- I do not show any improvement in pain or my activity has not improved.
  - I develop rapid tolerance or loss of improvement from the treatment.
  - I develop significant side effects from the medication.
  - My behavior is inconsistent with the responsibilities outlined above, ***which may also result in being prevented from receiving further care from this clinic.***

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Provider: \_\_\_\_\_ Date: \_\_\_\_\_

**Medication Contract**

I, \_\_\_\_\_, agree to the following rules and conditions regarding refills of prescribed medications.

The medication(s) covered by this agreement include:

| MEDICATION | DOSE  | DIRECTIONS | QUANTITY PER MONTH |
|------------|-------|------------|--------------------|
| _____      | _____ | _____      | _____              |
| _____      | _____ | _____      | _____              |
| _____      | _____ | _____      | _____              |
| _____      | _____ | _____      | _____              |

1. I will limit my dose of medications to the dose prescribed. I will discuss any future changes in my dose with my provider.
2. I am responsible for my medications. Lost, misplaced or stolen prescriptions will not be replaced.
3. Refills will be made only at the prescribed level. No early refills will be authorized.
4. No refills will be authorized after-hours, on holidays or on weekends.
5. I will obtain all refills for these medications only at \_\_\_\_\_ pharmacy (phone number: \_\_\_\_\_).
6. I will request all refills through my primary care clinic during these hours:  
\_\_\_\_\_.
7. I understand that my provider may stop prescribing opioids or change the treatment plan if I do not show any improvement in pain from opioids or my level of activity has not improved.
8. Other: \_\_\_\_\_
9. I understand that failure to comply with any of these conditions or failure to make regular follow-up appointments with my primary care provider may result in termination of prescriptions for the medications listed above. ***It may also result in being prevented from receiving any further care.***

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Provider: \_\_\_\_\_ Date: \_\_\_\_\_



## ***Getting the Best Result from Opioid Pain Medication: A Partnership Agreement***

The greatest success in chronic pain management comes when there is a partnership based on mutual respect between patient and health care provider.

As patient and health care provider, we respect each other's rights and accept our individual responsibilities.

The health care provider understands that it is important for patients with pain to know that the provider will:

- Listen and try to understand the patient's experience living with pain.
- Accept the patient's reports of pain and response to treatment.
- Thoroughly assess the patient's pain and explore all appropriate treatment options, including those suggested by the patient.
- Explain what is known and unknown about the causes of the patient's pain.
- Explain the meaning of test results or specialty visits/consultations, and what can be expected in the future.
- Explain the risks, benefits, side effects and limits of any proposed treatment.
- Respect the patient's right to participate in making pain management decisions, including the right to refuse some types of treatment.
- Make sure that the patient has access to acute care, even when the provider is not personally available.
- Not allow the patient to be treated disrespectfully by other providers or staff because of the patient's use of opioids for pain.

The patient understands that it is equally important for providers that their patients on opioid pain medications will:

- Take medication only at the dose and time/frequency prescribed.
- Make no changes to the dose or how the medication is taken without first talking to the provider.
- Not ask for pain medications or controlled substances from other providers. The patients will also tell every provider all medications they are taking.
- Arrange for refills only through the provider's clinic during regular office hours. Not ask for refills earlier than agreed upon.

*continued on back*

- Protect their prescriptions and medications, keeping all medicines away from children.
- Keep medications only for their own use and not share them with others.
- Be willing to be involved in programs that can help improve social, physical, or psychological functioning as well as daily or work activities.
- Be willing to learn new ways to manage their pain by attempting step-by-step behavior and lifestyle changes in their daily life.

We agree that the provider may stop prescribing the medication or the patient may decide to stop taking the medication if there is no improvement in pain or activity, there is loss of improvement from the medication, or there are significant side effects from the medication.

We both realize and have discussed that there can be limitations to opioid therapy. We acknowledge that it may not be helpful or only partially helpful and that it is only one part of the treatment of chronic pain.

We agree to work together in an active partnership, learning from both successes and failures, to find the most effective ways to control pain and improve functioning.

Patient: \_\_\_\_\_ Date: \_\_\_\_\_

Provider: \_\_\_\_\_ Date: \_\_\_\_\_

## SECTION 4: CHRONIC PAIN AND SUBSTANCE ABUSE

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The presence of chronic pain and substance abuse presents two challenges:

- How to treat pain effectively.
- How to identify and manage addictive behavior.

### *General Principles*

- Appropriate pain management, including opioids, should not be withheld in patients with current or past substance abuse disorders.
  - A fear of triggering or worsening addictive disease should not preclude the use of effective therapy. While some clinicians consider a history of addiction to be a contraindication to opioid therapy, failure to provide effective pain management may ultimately reinforce addictive behavior.
  - Respect all patients' rights to pain management.
  - **No scientific evidence suggests that providing opioid analgesia worsens addictive disease.**
- Addiction is a chronic disease.
  - The medical model best guides the approach to the patient with chronic pain and an addiction history—addiction is a chronic disease with biological, genetic and environmental factors. It is characterized by periods of remission and relapse and responds best to open communication and provider consistency.
- Clinicians should differentiate between patients with current and past addiction problems and manage them according to whether they are:
  - “recovering” – both abstinent from substance use for more than 12 months and involved in an ongoing process of well-being that acknowledges their addiction history.
  - “at risk” – not currently using substances but not in active recovery, as defined above; or in early recovery (1-12 months abstinent).
  - “actively using” – actively using or abstinent less than 1 month.

- As with all patients, non-drug and non-opioid therapy are first line. However, if pain relief is inadequate, opioids may be indicated.

### **When opioids are indicated**

- Openly discuss the history of addiction and the patient’s current state of recovery.
- Discuss, develop, and consistently enforce written treatment plans and contracts with the patient and caregivers.
  - Provide the patient with a copy.
  - Consider notifying other clinicians and the health plan involved in the patient’s care.
- Be consistent in pain assessment, using the same method and evaluator.
- Consider the use of a pain diary.
- Use a single opioid when possible.
- Avoid fast-onset drugs with short half lives (e.g. Vicodin, Percocet), which have been reported to produce more euphoria or “high” than long-acting drugs in some patients.
- Prescribe opioids on a regular schedule rather than PRN.
- Document all aspects of pain management—pain assessments, copies of prescriptions, prescription refill requests, and related communication.
- Don’t misinterpret behavior: inadequate pain control can cause anxiety and preoccupation with maintaining medication supply, which appears as “drug seeking.” This is known as “pseudoaddiction.”
- Prescribe generic opioids. They have less “street-value” than brands.

## *Further Considerations*

### **For the “Recovering” Patient**

- Openly discuss the history of addiction and their current recovery process.
- Recovering clients may resist or fear opiate prescriptions as a relapse trigger. Discuss relapse prevention planning, such as re-engaging with outpatient addiction treatment, 12-step meetings, or a 12-step sponsor.
- Don’t withhold pain medication for fear of relapse or to “keep the patient off drugs.” Assess pain management frequently and stop medication if ineffective or if the clinical problem is resolved.

### **For the “At Risk” Patient**

- Openly discuss any history of addiction and address signs of abuse and relapse. Be direct and concrete (e.g. “When have you used pot, heroin, alcohol”).
- Watch for signs and symptoms of opioid intoxication or withdrawal.

#### Opioid Intoxication

Lethargy  
Slurred speech  
Constricted pupils  
Slow respiratory rate

#### Opioid Withdrawal

General discomfort, agitation  
Sweats  
Shakes  
Nausea, diarrhea, vomiting  
Rhinorrhea  
Elevated blood pressure

- Consult with an addiction counselor or mental health professional if further help is needed. The patient’s health plan can assist you in this process.
- Prescribe generics—they have less “street-value” than brands.
- Write out the prescription quantity instead of using numerals, (e.g. qty: thirty, not qty: # 30).

- Consider asking the health plan to restrict or “lock” opioid and other related prescriptions as necessary to one provider and one pharmacy (see below).
- If necessary, designate a home health nurse or trusted family member to be in charge of opiates, i.e. conducting pill counts, pre-pouring one day at a time, adding a dated label to a fentanyl patch, etc.
- Be suspicious of specific requests for the following:
  - Brand name prescriptions which have a higher street value.
  - **Benzodiazepines**, especially clonazepam (Klonopin). Benzodiazepines are commonly abused in combination with opiates to potentiate the high and moderate the withdrawal effects.
  - **Promethazine (Phenergan)**. A common misconception among clinicians is that promethazine adds analgesic benefit to opioids. There is little evidence to support any effect other than potentiation of the opioid “high” and moderation of withdrawal.
  - **Carisoprodal (Soma)**. The skeletal muscle relaxant carisoprodal is metabolized to meprobamate, a barbiturate associated with the potential for dependence and addiction. Carisoprodol has limited efficacy for short term treatment of musculoskeletal conditions and is generally ineffective for chronic pain. No evidence exists for a clinically significant effect other than sedation.
- If doing urine drug screens, consider consulting an addiction expert for help in interpretation of positive results, which may be complicated, e.g. MDMA (“ecstasy”) will cause a (+) amphetamine result.

#### How to limit a patient to one pharmacy, one prescriber:

1. To limit prescriptions to one pharmacy, call the health plan. Limitation can be placed on only opioids or all medications. The health plan will then inform the plan’s pharmacy benefits manager only to authorize payment for the specified prescriptions presented to the designated pharmacy. The patient can also be limited to a single prescriber. Patients may still purchase prescriptions at other pharmacies by claiming they have no coverage and paying cash.
2. If the patient only uses one or two pharmacies and you wish to limit prescribers, call the pharmacists directly and instruct them only to honor prescriptions by the designated prescriber(s).

**For “Actively Using” Patients**

- Make addiction evaluation and treatment a requirement for pain treatment.
  - Provide a 7-day supply of opioids to allow time for an intake appointment and paperwork. If more time is needed to complete the addiction assessment, a second 7-day supply may be prescribed.
  - Use a written contract specifying that a copy of the addiction evaluation and any treatment recommendations will be sent to your office before refills will be written.
  - If addiction treatment is recommended, the written medication contract should specify adherence to the addiction treatment plan as a condition for continued pain treatment with the PCP. The medication contract should also specify monthly updates from the addiction treatment program to verify treatment plan adherence.
- If addiction treatment is not indicated, proceed as above for “at risk” patients.
- Once addiction treatment is initiated, there should be regular consultation between the PCP and the Medical Director or Clinical Supervisor of the addiction clinic. (Contact information is provided at the end of this section.)
- If the treatment plan is not followed, discontinue prescribing opioids, as specified in medication contract.
  1. Discuss the non-adherence with the patient and document the discussion or send a written letter explaining your actions and reasons, with a copy saved in patient’s record.
  2. Notify the addiction treatment program if a valid release of information is in place.
  3. Notify the patient’s health plan.

**Diversion of Opioids**

- If you suspect a patient is diverting prescribed opioids, confront them directly and concretely about your concerns.
  - Explain exactly why you are suspicious, e.g. “This is the second time this month you’ve ‘lost’ your prescription.”

- Remind the patient of the relevant portions of the medication contract.
- Consider a urine drug screen for evidence of opiates if you believe pills are being diverted. If negative, confront the patient with the evidence that they are not taking medications as prescribed.
- If you have evidence of fraud and/or abuse call the patient's health plan and report your suspicions.

EXAMPLE: An 83-year-old woman is admitted to the hospital with pneumonia. She has been receiving monthly prescriptions of oxycodone at her family's request because of complaints of continuing pain from a pelvic fracture last year. They report she has been using the oxycodone regularly up to admission. She appears uncomfortable on admission and a fentanyl patch is ordered for pain. The next day, she is noted to have respiratory depression, which is reversed with naloxone (Narcan). Urine obtained on presentation to the ED is sent for analysis and found to contain no opioids.

### For Patients on Methadone Maintenance Therapy (MMT)

- Patients on MMT receive only enough methadone to block opiate withdrawal and cravings. They will often require additional analgesia for pain, even at relatively high methadone doses.
- MMT clients may have lower pain tolerance and/or decreased sensitivity to opiates, requiring higher doses of analgesics.
- Patients in MMT programs may receive opioids for pain, including increased methadone. In some patients it may be useful to differentiate pain treatment from addiction treatment by using a different opioid than methadone. **In all cases, it is essential to coordinate prescribing with the MMT program.**
- Avoid mixed opioid agonist-antagonists (i.e. Talwin, Stadol, Nubain) which can cause acute withdrawal.
- When prescribing analgesics for MMT patients, coordinate with the MMT program. Contact the Medical Director or Program Director for consultation. (Contact information is provided below.)

- If a MMT patient is admitted to the hospital the attending should immediately contact the MMT Program Director to verify current treatment and dose.

### ***Coordination of Care with Addiction Treatment Programs***

Collaboration between addiction treatment and primary care providers allows both systems to work together in addressing the patient's needs.

- Addiction medicine providers need to understand the patient's medical status. They are required by national guidelines (The American Society of Addiction Medicine's Patient Placement Criteria - ASAM PPC-2) to assess the patient's biomedical status, as well as psychological, social, and environmental factors, to determine addiction treatment level-of-care decisions.
- Many addiction treatment patients become aware of their medical problems only after they have started their recovery program. Addiction counselors are often the first to know of these conditions and refer them to primary care.
- Coordination of care avoids "splitting," or playing one provider off another by selectively providing or withholding information from one provider.

### **Contacting Addiction Treatment Programs**

*Methadone Programs:* Contact the program Medical Director—or if not available, the Program Director or Clinical Supervisor.

- NTN Portland One/Allied Health Services: Dr. Walt Byrd, 503-226-2203
- Delta Clinics: Dr. Richard Orth, 503-630-4210 or 503-239-5738
- CODA: Dr. Jerry Larson, 503-239-8400
- RAM (Recovery And Methadone) Clinic: Dr. John Cleland, 503-408-9585
- Marion County A&D: Dr. Walt Byrd, 503-588-5358—ask for Kathleen Walker, RN
- Jackson County Human Services: 541-776-7355
- Integrated Health Services: Dr. Wendy Callander, 503-353-9415 or 541-842-3900

PART I: PRINCIPLES OF PRESCRIBING OPIOIDS

*Section 4: Chronic Pain and Substance Abuse*

*Non-Methadone Addiction Treatment Programs:* Contact the Program Director or the Clinical Supervisor. Program phone numbers can be found in the *Directory of CareOregon Network Providers* in the “Drug and Alcohol Dependency” section, online at [www.careoregon.org](http://www.careoregon.org) using the provider directory search feature in the *Clinicians* section of the website, or by calling a CareOregon Customer Advocate at 503-416-4100 or 1-800-224-4840 outside the Portland metro area.

SECTION 5:  
COORDINATION OF CHRONIC PAIN  
AND MENTAL HEALTH TREATMENT

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*Mind and Body*

- Living with chronic pain can cause or exacerbate symptoms of anxiety and depression, even in patients without a history of mental health problems. Mental health screening and support is crucial in dealing with chronic pain issues.
- Many mental illnesses, such as anxiety or bipolar disorders, are characterized by poor stress tolerance, and consequently poor pain tolerance. Some patients may perseverate on their pain. Encourage the patient to explore self-management strategies to improve functional outcomes and reinforce functional improvements as a sign of progress.
- Thought disorders (schizophrenia, schizoaffective disorder) may interfere with memory and communication of patterns/intensity of pain and of problems in functioning. Enlist the help of family, friends, case managers, caregivers, or others close to the patient to provide additional information on functioning, non-verbal communication of pain, and behavior.
- Screen for substance abuse. There is a high frequency of substance abuse co-occurring with mental health disorders.

*Care Coordination Between Treating Providers*

- Ask the patient to sign release of information (ROI) authorizations allowing you to share information with the mental health provider.
  - To comply with HIPAA requirements, it is recommended that two separate releases be used – one allowing you to send information to the mental health provider and a second release allowing the mental health provider to send information to you. Having the forms filled out and signed at the same time can emphasize the two-way communication needed to coordinate care. (See sample HIPAA compliant ROI form below.)

- Primary care providers should know all medications prescribed to the patient. Coordination of care with the mental health prescriber is particularly important when the patient is on combinations of minor and major tranquilizers or has a very complex medication regimen.
- Some mental health providers do urine drug screens. Informing them of opiate prescriptions will help them interpret any positive results.
- To coordinate care with the mental health provider, contact the Program Director or Clinical Supervisor of the Mental Health Organization (MHO) listed on the Oregon Health Plan Eligibility Card, or call CareOregon for assistance at 503-416-4100 or 1-800-224-4840 outside the Portland metro area.

## *Authorization for Use or Disclosure of Health Information*

Member name: \_\_\_\_\_ ID #: \_\_\_\_\_

I give permission for \_\_\_\_\_ to use the health information listed below or give a copy to: \_\_\_\_\_

The reason for using this information or giving it out is: \_\_\_\_\_

### **Information that I give permission to be used or given out:**

The entire record     Only those things initialed below:

Dates of service: \_\_\_\_\_

(Please initial the information that can be used or given out)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Drug/alcohol treatment  | <input type="checkbox"/> Psychiatric and mental illness treatment        | <input type="checkbox"/> Problem list           |
| <input type="checkbox"/> Medication list         | <input type="checkbox"/> List of allergies                               | <input type="checkbox"/> Immunization records   |
| <input type="checkbox"/> History and physical    | <input type="checkbox"/> Operative report                                | <input type="checkbox"/> Discharge summary      |
| <input type="checkbox"/> Pathology report        | <input type="checkbox"/> Visit/encounter notes                           | <input type="checkbox"/> Laboratory results     |
| <input type="checkbox"/> X-Ray report            | <input type="checkbox"/> Emergency room record                           | <input type="checkbox"/> EKG report             |
| <input type="checkbox"/> Billing records         | <input type="checkbox"/> Human Immunodeficiency Virus (HIV) test results | <input type="checkbox"/> Health plan records    |
| <input type="checkbox"/> Genetic testing records | <input type="checkbox"/> Dental records                                  | <input type="checkbox"/> Physical therapy notes |
| <input type="checkbox"/> Other: _____            |  |   |

I understand that I can ask someone to help me understand how this form will be used.

I understand that if the person or organization designated above is not a health care provider or health plan covered by federal privacy laws, the information listed above could be given out by them, and will no longer be protected by those regulations.

I understand that I may look at or ask for copies of any information that will be given out because of this authorization.

I understand that I may refuse to sign this form, and that I do not need to sign it to receive health-care, or to determine eligibility for benefits, or in order for payment for healthcare to be made.

*continued on back*

I understand that I may change my mind and decide to cancel my permission at any time. I understand that in order to cancel my permission, I must provide a written, signed, and dated statement indicating that to the person or organization shown above. I also understand that if I cancel this authorization, the information may have already been used or given out before I changed my mind. Unless I change my mind about giving my permission, this authorization will stop 365 days from the date that I signed this form, or on a different date that I choose.

- I ask for a different expiration date of: \_\_\_ / \_\_\_ / \_\_\_
- Other event that would signal the expiration of this authorization: \_\_\_\_\_  
\_\_\_\_\_

I understand that I may have a copy of this form for my records after it is signed.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed name of member  
or member's legal representative \_\_\_\_\_

Relationship to the member \_\_\_\_\_

Signature of witness \_\_\_\_\_ Date \_\_\_\_\_

Printed name of witness \_\_\_\_\_

PART II:  
GUIDE TO PRESCRIBING OPIOIDS  
FOR CHRONIC NON-MALIGNANT PAIN

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*Disclaimer*

*The information contained herein is provided in good faith to assist clinicians in managing patients with chronic pain. Recommendations are based on consensus guidelines, published medical literature, and expert opinion, and are not to be considered evidence-based or comprehensive in nature. Additionally, these recommendations are dynamic and will be revised as new information becomes available. This information is advisory only and is not intended to replace FDA-approved labeling information, or sound clinical knowledge, judgment, and expertise in the provision of healthcare. CareOregon assumes no responsibility for the actions of clinicians based upon their reliance on the information contained herein. Selection and management of drug therapy for individual patients is ultimately based on clinicians' assessment of clinical circumstances and patient needs.*



## SECTION I: GENERAL PRINCIPLES

### **Conduct a detailed analgesic history.**

- Include the use of over-the-counter (OTC) medications (acetaminophen, NSAIDs) and natural products in the analgesic history to assess analgesic use habits. When applicable, calculate the total daily acetaminophen dose and evaluate the risk of overdose.
- Patients often report, “I have taken everything” or “I’ve tried that and it didn’t work” or “I couldn’t handle the side effects.” It is essential to obtain all details regarding their analgesic history such as what analgesic or adjuvant was taken, at what dose, for how long, and a description of the adverse effects including prevention and treatment measures.
- Previously unfavorable experiences with analgesics or adjuvants are often a result of inadequate therapeutic trials, inappropriate dosage adjustments, inadequate management of adverse effects, and/or patient misconceptions.
- A history of large or “megadose” opioid requirements may indicate pain that is unresponsive to opioids, or noncompliance.

### **Maximize non-pharmacologic therapy.**

- Focusing on drug therapy without incorporating behavioral, psychosocial, and/or physical modalities can reinforce pain-related behaviors and undermine an effective treatment plan. It is important to reinforce continually all aspects of the patient’s treatment plan and the patient’s ongoing efforts to learn new ways to manage their pain.

### **Institute analgesics sequentially, not concomitantly.**

- Non-opioid analgesics (e.g. acetaminophen, NSAIDs, salicylates) are first-line for most non-malignant pain syndromes, although NSAIDs should be used with caution in the elderly.

*Section 1: General Principles*

- Adjuvant analgesics such as tricyclic antidepressants and anticonvulsants may be considered as initial therapy for obvious cases of continuous neuropathic pain. Adjuvant analgesics have a “ceiling effect” and should be maximized prior to diagnosing a treatment failure and changing or adding additional analgesics. (Refer to Appendix D.)
- Drug substitution within a class should be considered before determining an entire class is ineffective or intolerable. This is important for all therapeutic classes including NSAIDs, tricyclic antidepressants, anticonvulsants, and opioids.
- Opioids may be considered when first-line analgesics do not achieve the treatment goal.
- Opioids are generally not recommended as primary or sole therapy. Concomitant analgesics are often recommended for opioid-sparing effects and additive analgesia.
- Discontinue analgesics or adjuvants that do not provide pain relief or contribute to achievement of the treatment goal as determined by an adequate therapeutic trial.

**One size does not fit all.**

- Some patients respond to one regimen but not another. Drug therapies must be individualized.

**Select an analgesic by consideration of pain severity and frequency: Is the pain intermittent or continuous?**

- **Considerations for intermittent, chronic pain**
  - Most patients with intermittent, chronic pain—such as low back pain that is present only upon activity—do not require continuous, around-the-clock pain control.
  - Opioids are second-line therapy after failure of analgesics such as acetaminophen, salicylates, and NSAIDs.
  - Effective pain relief should anticipate and prevent pain. Short-acting opioids or opioid-analgesic combinations can be administered PRN prior to activities or conditions known to provoke pain.
  - Scheduling medications to facilitate activities that would be expected to increase pain reinforces increased function. Using opioids as “rescue” therapy can lead to avoidance of activity and overdosing.

EXAMPLE: A 47-year-old woman with a history of chronic neck pain after a motor vehicle accident is unable to work but has been doing well with antidepressants and PRN use of NSAIDs. She now complains that it is difficult for her to look after her grandchildren because the increased bending and lifting makes her neck pain so severe she is unable to sleep at night. You prescribe a short-acting opioid to use when she comes home from her grandchildren, but limit the number per month to cover only those visits.

### ■ Considerations for continuous, chronic pain

- Continuous, chronic pain refers to pain that is present around-the-clock or for more than 12 hours in a 24 hour period.
- Analgesics can be prescribed on a regular, around-the-clock schedule to keep serum levels from falling below a therapeutic concentration at which the patient experiences pain.
- The use of acetaminophen combinations with codeine, hydrocodone, oxycodone or other agents (e.g. Percocet, Vicodin) is limited by the ceiling on the maximum safe dose of the acetaminophen (4g/24 hrs). Frequent daily dosing of these agents for continuous or escalating pain risks acetaminophen toxicity.

EXAMPLE: A 34-year-old woman with a history of SLE and aseptic necrosis of the hip from chronic steroid use has been followed by her rheumatologist who prescribed Percocet one tablet qid. She is returning to her primary care provider for ongoing management. Her records indicate that she has been compliant with appointments and has not asked for early medication refills. Her chief complaint is that her pain is not always well-controlled throughout the day. After a thorough medication history, you discover she does not take her medications on a fixed schedule and is experiencing significant breakthrough pain. Rather than increase the short-acting Percocet, you prescribe a long-acting morphine 15 mg bid, which is equianalgesic to her current opioid dose, and schedule a follow-up for reassessment in 2 weeks.



## SECTION 2: CONDUCTING AN OPIOID TRIAL

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### *General Principles*

- Opioids may be considered if first-line treatment modalities including non-opioid analgesics (e.g. acetaminophen, NSAIDs), adjuvant analgesics, and physical or cognitive-behavioral therapy fail to achieve treatment goals or are contraindicated.
- **Not all chronic pain syndromes respond to opioid therapy. Providers should be cautious not to inadvertently dose-escalate in patients who may not respond, regardless of dose.**
- If the patient has taken opioids during an initial acute pain phase of the condition without improvement, it is unlikely that pain that has become chronic will respond to opioids.
- In opioid-naïve patients, an initial analgesic effect should begin at relatively low doses. Patients should experience increasing pain relief with increasing doses. If a graded response is not evident, the patient's pain may be unresponsive to opioids. Reassessment as to whether opioids should be discontinued rather than increased is recommended.

### *Initiating Opioid Therapy*

- The initiation of opioid therapy should be undertaken in the context of a therapeutic “trial.”
- The trial should be based on a well-documented assessment of the nature and severity of the pain as well as physical and psychosocial functioning.
- A trial period of four weeks with a minimum of weekly reviews to assess efficacy, adverse effects, and titrate dose is usually adequate to establish opioid responsiveness.

*Section 2: Conducting an Opioid Trial*

- The use of opioids on a trial basis should be explicitly discussed and agreed upon by the clinician and patient and be well-documented. It is important for the patient to understand from the start that opioids may not be helpful or may be only partially helpful. A written and signed contract may be useful.
- Patient education materials on the use of analgesics in the management of chronic pain may be helpful. See example handout in Part I, Section 1.

***Selecting an Opioid***

- Selection of an opioid should include consideration of pain severity, patient contraindications and concomitant medical conditions, previous history of response, and cost-effectiveness.
- In opioid-naïve patients, an initial trial using short-acting opioids allows patients and clinicians to determine more accurately the daily dose requirements.
- Individual responses to different opioids may vary. However, reports of previous lack of response should prompt a thorough evaluation of the previous dosing regimen and patient compliance.
- A common claim is that one opioid has fewer adverse effects than another, but this is often because the comparison did not evaluate equianalgesic doses. For most clinically important adverse effects, there are no comparative data at equianalgesic doses to allow recommendation of one agent over another.
- If a patient reports having previously experienced unmanageable adverse effects or lack of response with an opioid, attempts should be made to determine whether the adverse effects were truly unmanageable or simply unmanaged/mismanaged.

***Assessing Response***

- Some index of pain and function is necessary prior to initiating any type of therapy so that improvement or deterioration may be monitored.

- Pain scales can improve quality of care. The use of pain scales is more important than the type of scale used. A pain scale of 0-10 (from “none” to “worse you ever had”) is easily administered and understood, and provides adequate discrimination of pain intensity for clinical decision making. A variety of pain scales are available. (Examples can be found in Appendix E.).
- Use of a patient pain diary, which records all doses and response in terms of pain and functioning, is recommended.

EXAMPLE: A 75-year-old woman with osteoporosis has become progressively disabled because of chronic back pain. She reports continuous pain on a scale of 6-7 out of 10, and is only minimally responsive to acetaminophen. To evaluate the effectiveness of the opioid trial, you review the use of pain scales and ask her to keep a diary of her response to the medication. You explain that “pain” refers to any kind of discomfort, including aching, burning, stabbing, or other unpleasant sensations and ask her to find the words that best describe her pain. You practice using the pain scale by asking her to rate and describe her current pain, the pain at its worst, and her usual pain. To set goals for treatment, you then ask the patient what pain rating would allow an acceptable level of activity and quality of life. You reassure the patient that the goal can be changed over time, if for example the pain rating is too high to allow restful sleep or to permit desired activities. You document these goals in the patient’s record, provide her with a pain diary, and schedule a follow-up in 2 weeks.



SECTION 3:  
CONVERTING OPIOIDS AFTER A SUCCESSFUL TRIAL:  
EQUIANALGESIC DOSING

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Converting from one opioid to another in opioid-responsive patients is often necessary as dose limits of short-acting combination products are reached or the use of a long-acting agent is desired. To find the initial dose of the new opioid, it is necessary to calculate the “equianalgesic dose,” or the dose most likely to provide the same pain relief.

*Equianalgesic Dose Charts*

- “Equianalgesic Dose Charts” compare doses of different opioids required to produce the same pain relief as morphine 30 mg po, which is used as the standard for comparison.
- Equianalgesic doses should be used as an initial estimate because:
  - Ratios are primarily derived from studies not originally designed to evaluate equianalgesic dosing.
  - Most have wide confidence intervals.
  - There exists a large inter-patient variability—some patients need much lower or higher doses than expected.
  - There is incomplete cross-tolerance among opioids. Patients who have been on chronic, high-dose opioid therapy may be particularly sensitive to a new opioid. Some experts recommend decreasing the initial dose estimate by 1/3 to 1/2 in opioid-tolerant patients.
- The following table is adapted from the American Pain Society and considers the phenomenon of incomplete cross-tolerance.

*Section 3: Converting Opioids After a Successful Trial: Equianalgesic Dosing*

| OPIOID        | EQUIANALGESIC DOSE (ED) – PO (MG)* |
|---------------|------------------------------------|
| Morphine      | 30                                 |
| Fentanyl      | See Part II, Section 6             |
| Hydrocodone   | 30                                 |
| Hydromorphone | 7.5                                |
| Levorphanol   | 1 (for chronic opioid users)       |
| Meperidine    | 300                                |
| Methadone     | 2-4 (for chronic opioid users)     |
| Oxycodone     | 20                                 |
| Codeine       | 200                                |

\* All conversions must be adjusted for standard dosing intervals.

**Conversions**

Conversions of the commonly used short-acting opioids, hydrocodone or oxycodone, are relatively simple.

**Conversions Involving Hydrocodone and Morphine**

- Hydrocodone and morphine are equianalgesic. They can be converted on a one-to-one, milligram to milligram basis.
  - For example, 6 tablets of Vicodin 5/500 per day equals 30 mg/d of hydrocodone. This is approximately one-to-one equivalent to 30 mg of morphine, or long-acting morphine 15 mg bid.

**Converting from Oxycodone to Hydrocodone or Morphine**

- Oxycodone and morphine/hydrocodone are equianalgesic on a two-to-three basis. Increase the total oxycodone dose by 50% to get the total morphine or hydrocodone dose.
  - For example, a patient on OxyContin 20 mg bid receives 40 mg of oxycodone daily. A 50% increase to morphine is a total morphine dose of 60 mg/d that can be prescribed as long-acting morphine 30 mg bid.

**Formula:** Total oxycodone dose x 1.5 = total morphine or hydrocodone dose

*Section 3: Converting Opioids After a Successful Trial: Equianalgesic Dosing*

| CURRENT OXYCONTIN DOSE | MS EQUIVALENT DOSE PER DAY | APPROXIMATE DOSE*                                       |
|------------------------|----------------------------|---|
| 10 mg BID              | 30 mg                      | 15 mg BID   |
| 20 mg BID              | 60 mg                      | 30 mg BID   |
| 40 mg BID              | 120 mg                     | 60 mg BID   |
| 60 mg BID              | 180mg                      | 3 x 30 mg BID<br>or 1 x 60 mg BID<br>plus 1 x 30 mg BID |
| 80 mg BID              | 240 mg                     | 2 x 60 mg BID   |

*\*The dose is an approximate target dose and should be used as a guide only. Dosing must be individualized to the patient and clinical setting.*

**Converting from Hydrocodone or Morphine to Oxycodone**

- Decrease the total hydrocodone or morphine dose by one-third to get the total oxycodone dose.
  - For example, a patient on Vicodin 5/500 three times a day receives 15 mg of hydrocodone. A one-third decrease to oxycodone would be oxycodone 10 mg/d, prescribed as oxycodone 5 mg twice daily.

**Formula:** Total hydrocodone or morphine dose X 2/3 = total oxycodone dose

**Conversions Among Other Opioids**

Using the equianalgesic chart, opioids can be converted by calculating their “equianalgesic dose units.” This is a kind of analgesic “exchange rate” that allows inter-conversion of opioids—much as one would calculate the value of yen or rubles against the dollar as a standard exchange unit and then convert from dollars to euros.

- To convert one opioid into another:
  - ▶ Step 1: Calculate the average total daily dose of the opioid.
  - ▶ Step 2: Divide by the equianalgesic dose (ED) of the current opioid in the chart to get the “equianalgesic dose unit” (EDU).
  - ▶ Step 3: Multiply the EDU by the ED for the new drug to get the total dose of the new opioid.

$$\text{Formula: } \frac{\text{Total dose Drug A} \times \text{ED Drug B}}{\text{ED Drug A}} = \text{Total Dose Drug B}$$

- To convert patients on more than one opioid to a single new opioid of total equianalgesic potency:

- ▶ Step 1: Calculate the average total dose of each opioid (long-acting and short-acting) given over 24 hours.

$$\text{Total 24 hr Dose Drug A} \underline{\hspace{2cm}} \quad \text{Total 24 hr Dose Drug B} \underline{\hspace{2cm}}$$

- ▶ Step 2: Divide each average 24 hr dose by the equianalgesic dose (ED) in the chart for that opioid to get the “equianalgesic dose units (EDU).”

$$\frac{\text{Total Dose Drug A}}{\text{ED Drug A}} = \text{EDU drug A}$$

$$\frac{\text{Total Dose Drug B}}{\text{ED Drug B}} = \text{EDU drug B}$$

- ▶ Step 3: Add the equianalgesic dose units for all drugs.

$$\text{EDU Drug A} + \text{EDU Drug B} = \text{Total EDU}$$

- ▶ Step 4: Multiply the sum by the ED for the new drug to get the initial dose estimate of the new drug.

$$\text{Total EDU} \times \text{ED Drug C} = \text{Total Dose Drug C}$$

*Section 3: Converting Opioids After a Successful Trial: Equianalgesic Dosing*

EXAMPLE: A new chronic back pain patient has been on Oxycontin 10 mg po bid and one Dilaudid (hydromorphone) 2 mg before his exercise routine. He has improved with exercise and agrees to switch to short-acting medication that you can taper down. You want to provide the same pain control initially using Vicodin.

- ▶ Step 1: Total 24 hr dose of oxycodone = 20 mg  
Total 24 hr dose of hydromorphone = 2 mg
- ▶ Step 2:  $\frac{(\text{Total dose oxycodone}) 20 \text{ mg}}{(\text{ED oxycodone}) 20} = 1 \text{ EDU}$   
 $\frac{(\text{Total dose hydromorphone}) 2 \text{ mg}}{(\text{ED hydromorphone}) 7.5} = 0.25 \text{ EDU}$
- ▶ Step 3: Add the EDU for oxycodone and for hydromorphone:  
 $1 + 0.25 = 1.25 \text{ Total EDU}$
- ▶ Step 4: Multiply Total EDU by ED for hydrocodone:  
 $1.25 \times \text{Hydrocodone } 30 \text{ mg} = \text{Hydrocodone } 37.5 \text{ mg per } 24 \text{ hrs.}$
- ▶ Step 5: This would be about two Vicodin 5/500 mg four times a day, a safe dose given acetaminophen toxicity. You might tell the patient to start with qid dosing but then to cut back to one pill when he knows he is not going to be active for the next six hours with the goal of only using the medication before activity and perhaps at night.



SECTION 4:  
CONVERTING FROM SHORT-ACTING  
OPIOIDS TO LONG-ACTING MORPHINE

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***General Principles***

Long-acting opioids may be preferred because they provide less fluctuation in analgesic blood levels and require less frequent dosing. However, there is insufficient evidence to support a definitive difference in efficacy and improvement in functional outcomes in comparisons between long-acting opioids and short-acting opioids.

If the patient has responded to a trial of a short-acting opioid, but a long-acting agent is felt needed for improved analgesia or patient compliance, select the most cost-effective agent, considering patient age, coexisting disease, current drug regimen, contraindications and history of response.

- *The most cost-effective long-acting agents in the CareOregon formulary are morphine and methadone.*
- Once the maximal level of pain control is achieved with a short-acting opioid, continue long enough to learn the average daily dose requirement before converting the patient to a long-acting preparation.
- Give the selected analgesic an adequate trial by increasing the dose required for sustained analgesia up to the appearance of limiting adverse effects or lack of response. Using daily pain diaries, look for a graded analgesic response to incremental dosing.
- If sedation or other adverse effects occur, the dose can be reduced and/or the dosing interval increased. For strategies to reduce predictable adverse effects, see Part II, Section 8.

### ***Initiating Long-Acting Morphine***

- Steady-state with around-the-clock dosing of long-acting morphine is typically reached in 2 days. The patient should be cautioned not to expect full analgesic effect of the new medication for **at least** 48 hours.
- There is no need to administer a short-acting agent at the same time as the first long-acting agent.
- Long-acting morphine is available in 15 mg, 30 mg, 60 mg, 100 mg and 200 mg tablets.
- Long-acting formulations should not be cut in half.

### **Converting from Hydrocodone (e.g. Vicodin, Lortab, etc.) to Long-Acting Morphine**

- Morphine and hydrocodone have an equianalgesic dose ratio of 1:1 (i.e. they provide roughly the same degree of analgesia on a mg to mg basis). Therefore, the total daily dose of morphine is approximately the same as that for hydrocodone.
  1. Calculate the average total dose of hydrocodone in a 24 hour period.
  2. Divide the total by 2 for a q12h dosing interval.
  3. Round to the nearest tablet size.
  4. Prescribe this dose as long-acting morphine q12 hours with instruction to begin with the morphine at the time the next hydrocodone is due.
  5. **Note:** Since the combined acetaminophen limits the daily dose of hydrocodone products to 40 mg/day, **patients on usual doses will start on long-acting morphine 15 mg bid. Available tablet strengths preclude an exact conversion. This estimate may be low and need to be adjusted.**

**Converting from Oxycodone (e.g. Percocet, Roxicodone, etc.) to Long-Acting Morphine**

- The equianalgesic dose ratio of oxycodone to morphine is 2:3. Increase the total daily dose of oxycodone by 50% to get the total daily morphine dose.
  1. Calculate the total daily dose of oxycodone.
  2. Increase by 50% to get the total daily morphine dose.
  3. Divide the total morphine dose by 2 for an initial estimate of the q12h dosing.
  4. Round to the nearest tablet size.
  5. Prescribe this dose as long-acting morphine q12hours with instruction to begin with the long-acting morphine at the time the next oxycodone dose is due.
  6. **Note:** For patients receiving usual doses of oxycodone of no more than 30 mg per day (5 mg q4-6hr), start long-acting morphine 15 mg bid with follow up to assess response.

**Converting From Short-Acting Morphine to Long-Acting Morphine**

1. Calculate the average daily amount of morphine per 24 hours.
2. Divide the total by 2 for an initial estimate of the q12h dosing.
3. Round to the nearest tablet size.
4. Prescribe this dose as long-acting morphine q12hours with instruction to begin at the time the next short-acting dose is due.



SECTION 5:  
CONVERTING FROM  
SHORT-ACTING OPIOIDS TO METHADONE

---

***General Principles***

**Methadone requires slow, careful dose titration.**

- ***“Start low and go slow.”***
- Because methadone typically takes 5-7 days to reach steady state:
  - Do not adjust doses more frequently than every 5-7 days.
  - Caution the patient not to expect full analgesic effect until the end of one week at a given dose.
  - The frequency and/or severity of adverse effects is also likely to increase during that time period.
  - A graded analgesic response to dose increments should be observed.
- Methadone is available in 5 mg, 10 mg and 40 mg tablets. Tablets are scored to facilitate the use of half-doses when desired.

***Converting Short-Acting Opioids to Methadone***

1. Calculate the total daily dose requirement of the short-acting opioid (including PRN doses).
2. If the previous total daily opioid dose is less than 200 mg, convert to methadone 2.5-5 mg q8hr as dictated by the clinical situation.
3. Increase by 2.5-5 mg q8h every 5-7 days as needed.
4. If the patient develops intolerable sedation, hold or decrease the next methadone dose and adjust the regimen by lowering the dose or increasing the dosing interval.
5. If the previous total daily opioid dose is greater than 200 mg, see “Converting Long-Acting Opioids to Methadone” in Part II, Section 6.

*Section 5: Converting from Short-Acting Opioids to Methadone*

EXAMPLE: A 54-year-old male with a history of chronic pain has partially responded to the maximum daily dose of Vicodin. He has a new job and desires a long-acting medication so he won't be "always taking pills." Because of his new income, he may lose his Medicaid eligibility and will have to pay out-of-pocket. You decide to start him on methadone 5 mg q8 and warn him that it may take up to 5 days before he feels the full benefit. You continue him on the Vicodin for rescue therapy, suggesting he will need to take it less often as the methadone reaches steady state drug levels. You caution that he may notice increasing sedation as the methadone takes effect and that he can cut the methadone dose or increase to a q 12 hour interval as he develops tolerance. You start the new regimen on Tuesday so potential peak side effects would occur on the weekend and not interfere with work, and schedule a follow-up in one week.

SECTION 6:  
CONVERTING FROM  
ONE LONG-ACTING OPIOID TO ANOTHER

---

*Issues to Consider*

Consider converting between long-acting opioids when:

- Dose-limiting or severe adverse effects develop, and reducing the dose has no effect or leads to significantly increased pain.
- Tolerance develops (rapid escalation of dose without expected analgesia) in patients with chronic pain that has been otherwise opioid-responsive.
- Required by health plan formulary.

Before converting:

- Rule out patient-related pharmacokinetic changes (e.g. absorption, metabolism, drug-drug interactions) and disease progression.
- Consider the possibility of unrealistic patient perceptions and expectations, non-compliance or drug diversion.
- Maximize the use of non-opioid analgesics where appropriate.

***Remember:* There is insufficient evidence to demonstrate any difference between opioids in their ability to relieve pain. Analgesia is more dependent on dose than drug. Therefore, unrelieved pain alone may not be sufficient reason to switch from one opioid to another.**

### ***Converting Among High Doses of Opioid***

In a patient taking chronic, high doses some recommend tapering the original opioid while initiating the new to avoid over-dosing or under-dosing, as described below:

1. Decrease the original opioid by 50% and begin the new opioid at 50% of the calculated, projected dose.
2. Gradually increase or decrease the dose over several days based on patient tolerability, e.g. 25% increments per week.
3. Once an adequate level of analgesia is attained, discontinue the old opioid and adjust the new as needed.

### ***Converting Long-Acting Opioids to Morphine***

- Calculate daily morphine dose equivalent to the current opioid prescribed, following the steps in the box below.
- Long-acting morphine is available in 15 mg, 30 mg, 60 mg, 100 mg, and 200 mg tablets and is dosed bid.
- Long-acting formulations should not be cut in half.

### ***Converting Long-Acting Opioids to Methadone***

Methadone requires slow, careful dose titration. ***“Start low and go slow.”***

- Patients who have previously been on high doses of opioids, are 65 years of age or older, or who have renal dysfunction, liver disease, or pulmonary disease, are best converted using lower equianalgesic doses to yield smaller methadone doses. Overestimation of the methadone dose may otherwise result.
- The following dosing suggestions represent a conservative approach that was developed by the Veterans Health Administration for gradual methadone conversion.

**Calculating the Initial Dose for Methadone Titration**

Because methadone's potency increases with increasing prior opioid exposure, patients who have been on higher opioid doses are converted differently than those who have been on lower doses. You must therefore first:

- ▶ Step 1. Total the patient's current daily opioid dose and calculate its "morphine equivalent dose" to determine the conversion ratio. (See box below.)
- ▶ Step 2a. **If converting from less than 200 mg per day of morphine or its equivalent (e.g. Morphine 200 mg/ day, Oxycodone 130 mg/day, Hydromorphone 50 mg/day, or Hydrocodone/APAP 5/500 8 tabs/ day):**
  - Start methadone at 5 mg po q8hours.
  - To titrate, increase by 5mg q8hours every 5-7 days as needed.
- ▶ Step 2b. **If converting from between 200 mg to 500 mg per day of morphine or its equivalent:**
  - Start with 7% of the morphine equivalent dose divided q8hours.
  - To titrate, increase by 5 mg q8hours every 5-7 days as needed.
- ▶ Step 2c. **If converting from greater than 500 mg per day of morphine or its equivalent:**
  - Consider consultation.
  - Initially, taper the current opioid by reducing it 1/3 at the same time methadone is initiated.
  - Start methadone at 2.3% of the morphine equivalent dose divided q8hours.
  - Reduce the dose of the previous opioid by 1/3 again every 5 days, while adding the same 2.3% of the morphine equivalent dose divided q8hours every 5-7 days.
  - The total conversion should take approximately 15 days.

If the patient develops intolerable sedation, hold or decrease the following methadone dose and adjust the dosing regimen as necessary.

*Section 6: Converting from One Long-Acting Opioid to Another***Calculating the daily morphine equivalent dose:**

1. If the patient is only on morphine, simply total the daily dose. If on other opioids, calculate the daily morphine equivalent dose as follows.
2. Calculate the average total dose of each long-acting and short-acting opioid given over 24 hours.

Total Dose Drug A \_\_\_\_

Total Dose Drug B \_\_\_\_

3. Divide each average 24 hr dose by the equianalgesic dose (ED) in the chart for that opioid to get the “equianalgesic dose units (EDU).”

$$\frac{\text{Total Dose Drug A}}{\text{ED Drug A}} = \text{EDU Drug A}$$

$$\frac{\text{Total Dose Drug B}}{\text{ED Drug B}} = \text{EDU Drug B}$$

4. Add the equianalgesic dose units for all drugs.

$$\text{EDU Drug A} + \text{EDU Drug B} = \text{Total EDU}$$

5. Multiply the total EDU by morphine 30 mg to find the morphine equivalent dose.

$$\text{Total EDU} \times \text{morphine 30 mg} = \text{morphine equivalent dose}$$

| OPIOID        | EQUIANALGESIC DOSE (ED) – PO (MG)* |
|---------------|------------------------------------|
| Morphine      | 30                                 |
| Fentanyl      | See Part II, Section 6             |
| Hydrocodone   | 30                                 |
| Hydromorphone | 7.5                                |
| Levorphanol   | 1 (for chronic opioid users)       |
| Meperidine    | 300                                |
| Methadone     | 2-4 (for chronic opioid users)     |
| Oxycodone     | 20                                 |
| Codeine       | 200                                |

\* All conversions must be adjusted for standard dosing intervals.

*Section 6: Converting from One Long-Acting Opioid to Another*

EXAMPLE: Your patient is on OxyContin 80 mg po bid for chronic severe degenerative back pain. She is losing her insurance next month and wants to switch to something less expensive. She would like to try methadone. You calculate:

- Total daily dose of OxyContin is 160 mg.
- To calculate the EDU for this you find the equianalgesic dose conversion for oxycodone on the chart to be 20 mg and divide:  $\frac{160}{20} = 8$  EDU.
- To find the morphine equivalent dose, you multiply 8 EDU  $\times$  morphine 30 mg = morphine 240 mg.
- 7% of the morphine equivalent dose is  $.07 \times 240$  mg = 16.8.
- "Starting low," you decide to begin methadone at 15 mg a day, dosed 5 mg po q8hours.
- You warn the patient that the full effect of the methadone will not occur for 5-7 days and schedule a follow-up appointment for that time. You ask the patient to call if she feels overly sedated or has other concerning side effects.
- You counsel the patient that individuals vary in their sensitivity to methadone and she may need significantly more (e.g. 15 mg q6) or less (e.g. 2.5 mg bid) depending on her response.

*Section 6: Converting from One Long-Acting Opioid to Another****Converting from OxyContin to Long-Acting Morphine or Methadone***

The following table summarizes conversions from commonly used doses of OxyContin:

| CURRENT OXYCONTIN DOSE | MS EQUIVALENT DOSE PER DAY | ALTERNATIVE DRUG                  | APPROXIMATE DOSE*  |
|------------------------|----------------------------|-----------------------------------|--|
| 10 mg BID              | 30 mg                      | Ext release morphine<br>Methadone | 15 mg BID<br>5 mg TID†   |
| 20 mg BID              | 60 mg                      | Ext release morphine<br>Methadone | 30 mg BID<br>5 mg TID†   |
| 40 mg BID              | 120 mg                     | Ext release morphine<br>Methadone | 60 mg BID<br>5 mg TID†   |
| 60 mg BID              | 180mg                      | Ext release morphine<br>Methadone | 3 x 30 mg BID<br>or 1 x 60 mg BID<br>plus 1 x 30 mg BID<br>5 mg q8h† |
| 80 mg BID              | 240 mg                     | Ext release morphine<br>Methadone | 2 x 60 mg BID<br>See example<br>above                                |

\*The dose is an approximate target dose and should be used as a guide only. Dosing must be individualized to the patient and clinical setting.

Increase by 5 mg q8h every 5-7 days as needed.

† See text above for methadone prescribing.

***Conversions Involving Transdermal Fentanyl (TDF)***

There is limited data on conversion of transdermal fentanyl to other opioids.

- The following algorithm is the manufacturer's recommendation and is based on clinical trials with oral morphine. The conversion ratios have not been extensively tested with other opioids.
- The manufacturer also states that the algorithm results in under-dosing of up to 50% of patients. A conservative approach using PRN doses of short-acting opioids for breakthrough pain is appropriate.
- Further, because steady state serum levels of fentanyl are not attained for about 3-6 days after application of the patch, a low dose of the previously used opioid (at least 25% of the dose used during the previous 24 hours) should be prescribed to avoid withdrawal.

**Converting From Other Opioids to Transdermal Fentanyl**

- ▶ Step 1. Calculate the total daily morphine equivalent dose in order to use the morphine to TDF conversion chart.

**Calculating the daily morphine equivalent dose:**

1. If the patient is only on morphine, simply total the daily dose. If on other opioids, calculate the daily morphine equivalent dose as follows.
2. Calculate the average total dose of each long-acting and short-acting opioid given over 24 hours.

Total Dose Drug A \_\_\_

Total Dose Drug B \_\_\_

3. Divide each average 24 hr dose by the equianalgesic dose (ED) in the chart for that opioid to get the “equianalgesic dose units (EDU).”

$$\frac{\text{Total Dose Drug A}}{\text{ED Drug A}} = \text{EDU Drug A}$$

$$\frac{\text{Total Dose Drug B}}{\text{ED Drug B}} = \text{EDU Drug B}$$

4. Add the equianalgesic dose units for all drugs.

$$\text{EDU Drug A} + \text{EDU Drug B} = \text{Total EDU}$$

5. Multiply the total EDU by morphine 30 mg to find the morphine equivalent dose.

$$\text{Total EDU} \times \text{morphine 30 mg} = \text{morphine equivalent dose}$$

| OPIOID        | EQUIANALGESIC DOSE (ED) – PO (MG)* |
|---------------|------------------------------------|
| Morphine      | 30                                 |
| Fentanyl      | See Part II, Section 6             |
| Hydrocodone   | 30                                 |
| Hydromorphone | 7.5                                |
| Levorphanol   | 1 (for chronic opioid users)       |
| Meperidine    | 300                                |
| Methadone     | 2-4 (for chronic opioid users)     |
| Oxycodone     | 20                                 |
| Codeine       | 200                                |

\* All conversions must be adjusted for standard dosing intervals.

*Section 6: Converting from One Long-Acting Opioid to Another*

- ▶ Step 2. Locate the estimated morphine-equivalent dose in the chart below.

| ORAL MORPHINE DOSE (MG/DAY) | TD FENTANYL DOSE (MCG/HR) |
|-----------------------------|---------------------------|
| 45-134                      | 25                        |
| 135-224                     | 50                        |
| 225-314                     | 75                        |
| 315-404                     | 100                       |
| 405-494                     | 125                       |
| 495-584                     | 150                       |
| 585-674                     | 175                       |
| 675-764                     | 200                       |
| 765-854                     | 225                       |
| 855-944                     | 250                       |
| 945-1034                    | 275                       |
| 1035-1124                   | 300                       |

- ▶ Step 3. Initiate at the recommended dose and continue at least 25% of the original opioid until the patient approaches steady state (about 6 days after first application).
- ▶ Step 4. Titrate upwards no more often than every 3 days after the first dose or every 6 days thereafter until effective analgesia is achieved, based on daily requirements of short-acting breakthrough opioids.
- ▶ Step 5. The following total daily PRN doses suggest the need to add 25 mcg/h to the dose of fentanyl calculated above.
  - MSIR = 90 mg/24 h
  - Oxycodone = 45 mg/24 h
  - Hydromorphone = 12 mg/24 h
  - Codeine = 300 mg/24 h

## SECTION 7: PRN DOSING FOR BREAKTHROUGH PAIN

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When the patient achieves analgesic goals on a stable opioid dose, there should be little use of PRN, breakthrough analgesics. However, prescribing PRN doses for occasional intermittent increases in pain and for situations such as acute, anticipated increases in physical activity may be reasonable.

- PRN dosing may not be appropriate for every patient. In some cases it promotes patient autonomy while allowing the lowest dose of opioids. In others, such as patients with poor impulse control or “at risk” substance abuse patients, it may lead to inappropriate dose escalation and undermine attempts to stabilize the medication regimen.
- The occurrence of breakthrough pain may be attributed to end-of-dose failure (i.e., pain that returns toward the end of the dosing interval) or inadequate total daily dosing. Therefore, the repeated occurrence of breakthrough pain and need for PRN dose indicates a need to reevaluate the patient’s dose and dose interval.
- It is recommended to limit the quantity of PRN doses prescribed per month so that the clinician is alerted if dose changes are needed. Several approaches have been suggested and depend on the clinical situation and the type of opioid used:
  - Prescription of a few (e.g., 4-6) “rescue doses” to be used as needed per month.
  - Explicit allowance for dosing flexibility so that on days with more pain one or two more doses can be taken as long as this is balanced by reduced dosings on other days.
- If breakthrough pain can be predicted, instruct patients to take a PRN dose 30 minutes prior to anticipated pain or pain-provoking activity; or if not, as soon as pain begins and before it becomes severe.
- Use of PRN doses can be outlined in the patient contract.



## SECTION 8: ANTICIPATING AND MANAGING COMMON OPIOID ADVERSE EFFECTS

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Prior to prescribing opioids, patients should be educated about possible side effects as part of the informed consent process. Monitoring for adverse side effects should also be a regular component of every encounter with patients on opioids. The following chart summarizes prevention and management of common adverse effects. A more detailed discussion follows.

| Adverse Effect   | Tolerance | Management  |
|--|-----------|---|
| Constipation   | No        | <ul style="list-style-type: none"> <li>· Patient education is essential.</li> <li>· Prescribe a stool softener such as psyllium or docusate and a laxative (e.g. senna, MOM, bisacodyl, magnesium citrate, lactulose or sorbitol) to be taken as needed.</li> </ul>   |
| Nausea, Vomiting   | Yes       | <ul style="list-style-type: none"> <li>· Titrate slowly.</li> <li>· Add or increase non-opioid or adjuvant analgesic so that the opioid dose can be reduced.</li> <li>· Prochlorperazine and metoclopramide are helpful.</li> </ul>   |
| Histamine Reactions (urticaria, sneezing, exacerbation of asthma) and Pruritis | Yes       | <ul style="list-style-type: none"> <li>· Add or increase non-opioid or adjuvant analgesic so that the opioid dose can be reduced.</li> <li>· Premedication with diphenhydramine 25-50 mg po is helpful.</li> </ul>  |
| Mental Confusion, Sedation   | Yes       | <ul style="list-style-type: none"> <li>· Add or increase non-opioid or adjuvant analgesic so that the opioid dose can be reduced.</li> <li>· Withhold 1-2 doses and/or reduce opioid dose by 10-25%.</li> <li>· Administer a lower dose more frequently to reduce peak concentrations.</li> <li>· Eliminate concomitant, nonessential CNS depressants.</li> </ul> |

**Allergy**

True allergic and anaphylactic reactions are rare and ill-defined.

- Urticaria, pruritus, sneezing, and exacerbation of asthma are common and are not considered an allergic reaction.
- Virtually all opioids, and particularly the naturally-occurring and semi-synthetic compounds, cause histamine release as a pharmacologic effect. This release of endogenous histamine is responsible for most cases of urticaria, pruritus, sneezing, and exacerbation of asthma in predisposed patients. Histamine reactions can be avoided by premedication with diphenhydramine.
- There are three different chemical classes of opioids (see chart below). A patient who is allergic to an opioid from one class (e.g. morphine, a phenanthrene), may often be changed to an agent from another class (e.g. methadone, a phenylheptane) without cross-sensitivity.
- Even though the risk of cross-sensitivity is extremely low, patients who exhibit a true allergic reaction to one of the opioid analgesics should be monitored carefully if an agent from another class is substituted.

**Opioid Classification**

| <u>Phenanthrenes</u> | <u>Phenylpiperidines</u> | <u>Phenylheptanes</u> |
|----------------------|--------------------------|-----------------------|
| Codeine              | Meperidine               | Methadone             |
| Hydromorphone        | Fentanyl                 | Propoxyphene          |
| Levorphanol          |                          |                       |
| Morphine             |                          |                       |
| Oxycodone            |                          |                       |
| Hydrocodone          |                          |                       |
| Pentazocine          |                          |                       |

### ***Constipation***

The majority of patients taking opioids on a chronic basis will develop constipation.

- Constipation is a side effect of all opioids, and is opioid-receptor mediated with both central and peripheral mechanisms (decreased gastrointestinal motility).
- Unlike other adverse effects, little or NO tolerance develops.
- The best course of action is to prescribe a stool softener (psyllium or docusate) and instruct the patient in use of a stimulant or enema as needed at the time of the original opioid prescription.
- Some patients may require daily, regularly scheduled laxatives or bowel-therapy.

### ***Dry Mouth***

- Dry mouth is common.
- Regular sips of water, artificial saliva, or sorbitol-sweetened hard candy (which also helps constipation) may help to relieve dry mouth.

### ***Nausea and Vomiting***

In clinical practice, 30-60% of opioid-naïve patients will develop nausea and/or vomiting with initiation of opioid therapy. Tolerance develops within 5-10 days for the majority of patients.

- It is important to remember that the pain and anxiety associated with pain can cause nausea.
- The extent to which nausea and vomiting are mediated by opioid receptors is debated. Some of the effect may come from stimulation of opioid receptors at the chemoreceptor trigger zone in the medulla. If the effect is receptor-related, equianalgesic doses of different opioids are expected to produce the same amount of nausea.
- Patients beginning long-term opioid therapy and especially those with a history of nausea and/or vomiting with opioids should have access to prophylactic antiemetics.

*Section 8: Anticipating and Managing Common Opioid Adverse Effects*

- Metoclopramide 10 mg or prochlorperazine 10 mg q4-6h PRN are the preferred antiemetics. When possible, avoid promethazine, a known drug of abuse, as first-line therapy.
- If nausea is not adequately controlled with pre-dose antiemetics, and the patient does not develop tolerance, an alternative route of administration or analgesic may be necessary.

### ***Opioid Toxicity***

Opioid toxicity may present as confusion, agitation, visual defects, vivid dreams or nightmares, visual and auditory hallucinations, and myoclonic jerks.

- There is a wide inter-individual variation in the dose of opioids that may cause toxicity and is dependent on pain response, rate of dose titration, concomitant medications, and renal and hepatic function.
- Opioid toxicity is managed by ensuring adequate hydration, acutely treating agitation, reducing the dose or changing to a different opioid.

### ***Pharmacological Tolerance***

Pharmacological tolerance is defined as a decline in pain relief with increasing opioid dose.

- Clinically relevant pharmacological tolerance rarely develops in patients with chronic pain and is an area of controversy. Reports of loss of analgesia are usually confounded by disease progression.
- Rule out disease progression, noncompliance, inappropriate dosing, and abuse or diversion first.
- Switching to another opioid may provide improved analgesia, although there is no evidence that one opioid is more effective than another.

### ***Respiratory Depression***

As doses are increased, the respiratory center may become less sensitive to carbon dioxide, resulting in respiratory depression. A decrease in respiratory rate is often preceded by severe sedation.

- Excessive doses (i.e. doses greater than needed to relieve pain) or doses given when there is no pain, increase the risk of respiratory depression.
- Respiratory depression is kept to a minimum when appropriate regular doses of opioid are given to patients with chronic pain. Opioids must be titrated against pain.
- Pure narcotic antagonists (e.g. naloxone, naltrexone) reverse respiratory depression.
- Sudden, severe sedation often precedes respiratory depression and is a warning sign to decrease the dose or increase the dosing interval.

### ***Sedation***

Sedation is common during the first few days of opioid administration and upon subsequent dose increases.

- Sedation often resolves quickly.
- Sedation is augmented by concomitant use of other medications with CNS depressant effects, e.g. antidepressants, anticonvulsants, and skeletal muscle relaxants.

### ***Withdrawal***

All chronic users of opioids will experience some degree of withdrawal after abrupt discontinuation or significant decrease in dosing.

- Opiate withdrawal has been described as subjectively severe but objectively mild. Common symptoms include: restlessness, lacrimation, rhinorrhea, yawning, perspiration, chills, myalgia, gooseflesh, and mydriasis.
- Other symptoms which may develop include: irritability, anxiety, backache, joint pain, weakness, abdominal cramps, insomnia, nausea, anorexia, vomiting, diarrhea, or increased blood pressure, respiratory rate, or heart rate.
- Withdrawal is painful both physically and emotionally, but not life-threatening.
- Adequate hydration and nutritional support help make the patient comfortable and decrease morbidity due to vomiting and dehydration.

### ***Prescribing in the Elderly***

Many NSAIDs, opioids, and adjuvant analgesics require dosage adjustment in the elderly in whom renal or hepatic function may be compromised. Consult with individual drug monographs or product labeling for age-specific dosage recommendations.

- In general, the following should be avoided when possible:
  - Darvocet (propoxyphene)
  - Demerol (meperidine)
  - Talwin (pentazocine)
  - Elavil (amitriptyline)
  - Indocin (indomethacin)
  - Feldene (piroxicam)
  - Skeletal muscle relaxants, e.g. Soma (carisoprodal), Flexeril (cyclobenzaprine)

## APPENDICES



APPENDIX A: OPIOIDS ON THE  
CAREOREGON FORMULARY— DOSING AND COST GUIDE

| <b>OPIOID COMBINATIONS</b>  |                          |  |                   |                        |
|-----------------------------|--------------------------|--|-------------------|------------------------|
| <b>GENERIC</b>              | <b>BRAND*</b>            | <b>STRENGTH</b>  | <b>USUAL DOSE</b> | <b>AVE \$ COST/30D</b> |
| Codeine/APAP                | Tylenol #2, #3, #4       | 15/300, 30/300, 60/300                                 | 1-2 tab q4h       | 5                      |
| Codeine/aspirin             | Empirin #2, #3, #4       | 15/325, 30/325, 60/325                                 | 1-2 tab q4h       | 4                      |
| Hydrocodone/APAP            | Vicodin                  | 5/500, 7.5/500, 7.5/750, 10/650                        | 1-2 tab q4-6h     | 4                      |
| Oxycodone/APAP              | Percocet, Roxicet, Tylox | 2.5/325, 5/325, 5/500, 7.5/500, 10/650                 | 1 tab q6h         | 8                      |
| Oxycodone/aspirin           | Percodan                 | 2.44/325, 4.88/325                                     | 1 tab q6h         | 7                      |
| <b>RAPID ACTING OPIOIDS</b> |                          |  |                   |                        |
| <b>GENERIC</b>              | <b>BRAND*</b>            | <b>STRENGTH</b>  | <b>USUAL DOSE</b> | <b>AVE \$ COST/30D</b> |
| Codeine                     | Codeine                  | 30, 60   | 15-60 mg q4-6h    | 27                     |
| Morphine                    | MSIR                     | 10, 15, 30<br>10/5ml, 20/5ml, 20/ml<br>5 supp, 30 supp | 15-30 mg q4h      | 20                     |
| Oxycodone                   | Roxicodone               | 5, 5/5ml, 20/ml  | 5 mg q6h          | 21                     |
| Hydromorphone               | Dilaudid                 | 1, 2, 3, 4, 8, 3 supp                                  | 2 mg q4-6h        | 43                     |
| <b>LONG-ACTING OPIOIDS</b>  |                          |  |                   |                        |
| <b>GENERIC</b>              | <b>BRAND*</b>            | <b>STRENGTH</b>  | <b>USUAL DOSE</b> | <b>AVE \$ COST/30D</b> |
| Methadone                   | Methadone                | 5, 10, 40 tab, 5/5ml, 10/5ml, 10/ml                    | 2.5-5 mg tid      | 3-5                    |
|                             |                          |  | 5-7.5 mg tid      | 5-8                    |
|                             |                          |  | 15-25 mg tid      | 16-27                  |
|                             |                          |  | 30-60 mg tid      | 27-54                  |
| Sustained release morphine  | MS Contin, Oramorph SR   | 15, 30, 60, 100, 200                                   | 15 mg bid         | 39                     |
|                             |                          |  | 30 mg bid         | 75                     |
|                             |                          |  | 60 mg bid         | 137                    |
|                             |                          |  | 100 mg bid        | 214                    |
|                             |                          |  | 200 mg bid        | 392                    |
| Fentanyl, transdermal       | Duragesic                | 25, 50, 75, 100 mcg/hr                                 | 25 mcg q3d        | 122                    |
|                             |                          |  | 50 mcg q3d        | 203                    |
|                             |                          |  | 75 mcg q3d        | 322                    |
|                             |                          |  | 100 mcg q3d       | 405                    |
| Oxycodone XR**              | OxyContin                | 10, 20, 40, 80   | 10 mg bid         | 67                     |
|                             |                          |  | 20 mg bid         | 129                    |
|                             |                          |  | 40 mg bid         | 229                    |
|                             |                          |  | 80 mg bid         | 431                    |

*Cost based on CareOregon claims data, June 2002*

*\* Brand not covered when generic is available. Brand name provided for reference only.*

*\*\* Prior Authorization Required*



### *Morphine*

- Considered the gold standard in treating pain.
- Beliefs that other drugs act faster, last longer, or have a better balance between effect and adverse effect for a particular patient are not supported by evidence from clinical trials.
- Advantages include its long history of use and commercial availability in a variety of dosing forms.
- Oral bioavailability may vary widely among individuals. Patients not responding to usual doses may benefit from rectal administration.
- Generic controlled-release morphine, MS Contin, and Oramorph are the preferred agents. Kadian is significantly more expensive and does not provide significant advantages over other products.
- Steady state with around-the-clock dosing of long-acting formulations is typically reached in 1-2 days.
- **Requires dosage adjustment in renal dysfunction.** Morphine has an active metabolite, morphine-6-glucuronide (M6G), that is more potent than morphine and has decreased clearance in patients with severe renal dysfunction. Drug doses should be decreased if creatinine clearance is less than 30 mL/min. In cases of less severe renal dysfunction, careful titration is needed. Smaller doses and longer dosing intervals may be necessary.

### *Transdermal Fentanyl*

- Transdermal fentanyl is an alternative for patients who are unable to take oral medications. This includes patients who have severe nausea or vomiting with oral morphine and/or methadone despite prophylactic antiemetics, or patients with hypersensitivity to morphine and/or morphine derivatives.
- Transdermal fentanyl has a lag time of 6-12 hours to onset of action and after initiation.
- Steady state drug levels typically occur within 3-6 days following initial application or a dose change.

## APPENDIX B: DRUG MONOGRAPHS

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- Because titration is slow, transdermal fentanyl is not appropriate for unstable pain states.
- For opioid-naïve patients, begin with 25 mcg/hr and prescribe immediate release morphine for breakthrough pain if indicated. Wait at least 72 hours before assessing response. At that time, if needed, the fentanyl dose may be increased according to the amount of PRN immediate-release morphine needed using the ratio of 90 mg/24 hr of morphine to a 25 mcg/hr increase in fentanyl. Subsequent dose increases should occur no sooner than 6 days after the previous increase.
- Use caution when converting from other long-acting opioids to fentanyl because its relative potency to other opioids has not been definitively established.
- When the patch is removed, a subcutaneous drug depot remains and drug clearance may take up to 24 hours.
- Administration:
  - The patch should be applied to non-irritated and non-irradiated skin on a flat surface of the upper torso.
  - Hair at the application site should be clipped, not shaved.
  - If necessary, the area should be cleansed with water (do not use soaps, alcohol, oils, lotions) and allowed to dry completely before application.
  - Patients should be instructed to avoid applying heat to the application site—via heating pads, hot showers, prolonged direct sunlight, etc.—which can significantly increase drug absorption and toxicity.
  - Patches have been abused via ingestion of contents, application of multiple patches cutaneously, attempts to inject the solution, and volatilization and inhalation of fentanyl from the patch. Used patches should be folded with adhesive sides together and flushed down the toilet or disposed of carefully immediately after removal.
  - Do not cut patches in half. No studies have been conducted to address the pharmacokinetics of administration of non-intact systems.
- Discontinuation
  - Remove the patch and titrate the dose of the new analgesic to provide the appropriate level of pain control.
  - When the transdermal fentanyl patch is removed, a subcutaneous depot remains. Serum fentanyl concentrations decline gradually, falling by 50% in 17 hours (range 13-22 hours) (Prod Info Duragesic(R), 2001).

**Content of TDF Patch**

| SIZE (CM) | DOSE (MCG/HR) | FENTANYL CONTENT (MG) |
|-----------|---------------|-----------------------|
| 10        | 25            | 2.5                   |
| 20        | 50            | 5.0                   |
| 30        | 75            | 7.5                   |
| 40        | 100           | 10.0                  |

***Methadone***

- Over three decades of research has established the safety of methadone.
- Methadone can be used safely for pain when initial doses are small, conversion ratios are adjusted to the previous opioid dose, and dosage is slowly titrated to patient response.
- Methadone can be used for analgesia by any licensed practitioner with C-II prescribing authority.
- Advantages:
  - May have unique properties that make it beneficial in severe neuropathic and opioid-resistant pain states.
  - Excellent oral bioavailability.
  - An inherently long duration of action of at least 8 hours with repeat dosing.
  - Can be delivered down an NG tube.
  - Does not accumulate significantly with renal impairment.
  - May be used in patients with hypersensitivity to morphine and derivatives.
  - May cause less constipation than morphine.
  - Low rates of drug escalation and drug seeking.
  - Inexpensive.
- Pharmacokinetic and pharmacodynamic properties of methadone are complex and incompletely documented. However, the general principles of dosing are similar to other opioids.
- Recent experience suggests that toxicity such as sedation can be avoided with low starting doses and slow titration.

## APPENDIX B: DRUG MONOGRAPHS

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- Methadone redistributes extensively into muscle and fat after administration. Drug accumulation occurs with repeat dosing, and close monitoring is required.
- Methadone typically takes 5-7 days to reach steady state at a particular dose.
- To minimize the risk of drug accumulation, begin with a PRN dosing regimen, allowing the patient to determine the interval needed between doses. Provide a short-acting agent such as immediate-release morphine for rescue doses. As the patient nears steady state, the amount of rescue doses needed will decrease.
- Duration of action typically ranges between 4 and 8 hours.
- Dose ratios for conversion among opioids have not been systematically studied and large interindividual variability exists. Equianalgesic dose ratios vary according to extent of prior opioid exposure. Methadone's potency increases with increasing prior exposure.
- The best dosing strategy has not been established and each should therefore be individualized. A conservative approach is recommended. Careful monitoring for delayed adverse effects, particularly sedation and cognition, should be performed frequently during conversion.
- Methadone is susceptible to several significant drug interactions. Phenytoin, carbamazepine, rifampin, barbiturates, and a few anti-retrovirals induce methadone metabolism necessitating methadone dose increases or doses larger than anticipated. The azole antifungals and the SSRI and tricyclic antidepressants may increase methadone levels and a dose reduction may be necessary.

### *Oxycodone*

- Reserve for patients who have a documented history of intolerance or failure with long-acting morphine and/or methadone and fentanyl.
- No clinical evidence exists to support claims that OxyContin provides superior analgesia or is better tolerated over other long-acting opioids.
- OxyContin may have a less favorable safety profile and cost:benefit ratio when compared to equianalgesic doses of other agents.
- Some patients report decreased analgesia during the last few hours of the dosing interval. These patients may benefit by decreasing the dosing interval. Prior to doing so, conduct a thorough evaluation of dosing, compliance and pain diary.

## APPENDIX C: EQUIANALGESIC DOSE RATIOS (EDRS)

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- EDRs should only be used as an approximate guide.
- In general, EDRs are derived from single-dose studies comparing IM and PO opioids in patients with postoperative and cancer pain. They may not apply to repeated dosing in chronic non-cancer pain.
- A large inter-patient variability exists within the ratios and confidence intervals are wide. A single ratio may not be applicable to all patients. Some patients may need lower or higher doses than expected.
- The EDR may change according to the direction of the conversion. This is unlikely to have a major impact at low opioid doses, but may be clinically significant at high doses.
- Use caution in patients with renal and hepatic impairment and be conservative.
- Discrepancies exist most commonly with methadone, fentanyl, and oxycodone. Refer to the previous sections for additional information.
- A number of methods for converting among opioids using EDRs are available. Titration should not be based solely on EDRs.
- Consider analgesic efficacy and adverse effects of previous regimen. If the previous regimen provided good analgesia but intolerable adverse effects, decrease the initial estimate. If the previous regimen provided poor analgesia, but was tolerated, increase the estimate.
- An alternative is to convert only part of the previous dose at a time.
- Monitor the patient daily as needed to prevent underdosing or overdosing.
- There is incomplete cross-tolerance among opioids. Patients who have been on chronic, high dose opioid therapy may be particularly sensitive to a new opioid. Some experts recommend decreasing the initial dose estimate by  $1/3$  to  $1/2$  in opioid-tolerant patients.

## APPENDIX C: EQUIANALGESIC DOSE RATIOS (EDRS)

- The following table is adapted from the American Pain Society and is based on data available from clinical studies, clinical experience, and several assumptions. It factors in the consideration of incomplete cross-tolerance to avoid the need for further adjustment.

### Equianalgesic Dose Chart

| OPIOID        | EQUIANALGESIC DOSE (ED) – PO (MG)* |
|---------------|------------------------------------|
| Morphine      | 30                                 |
| Fentanyl      | See Part II, Section 6             |
| Hydrocodone   | 30                                 |
| Hydromorphone | 7.5                                |
| Levorphanol   | 1 (for chronic opioid users)       |
| Meperidine    | 300                                |
| Methadone     | 2-4 (for chronic opioid users)     |
| Oxycodone     | 20                                 |
| Codeine       | 200                                |

*\* All conversions must be adjusted for standard dosing intervals.*

***Antidepressants and Anticonvulsants***

- Adjuvant analgesics are medications with a primary indication other than pain that may provide analgesia in some painful conditions.
- Effective adjuvants typically include anticonvulsants and tricyclic antidepressants.
- Initiate first-line nonopioid analgesics and adjuvant analgesics prior to opioids.
- When instituting polypharmacotherapy, be aware of drug interactions and institute pain medications sequentially.
- Adjuvant analgesics have a “ceiling effect” and should be maximized according to efficacy and tolerance prior to adding additional analgesics or labeling the trial as a treatment failure. Administer each drug for an adequate period of time at appropriate doses and speed of dose escalation and monitor response. Dose escalation, should occur slowly and, in most cases, at weekly intervals.
- Tricyclics and anticonvulsants tend to produce graded analgesia similar to opioids.
- Gabapentin may work abruptly in a narrow therapeutic window.
- Discontinue adjuvants that do not provide pain relief or contribute to achievement of the treatment goal, as determined by a therapeutic trial.

## APPENDIX D: ADJUVANT ANALGESICS

### Class: Tricyclic Antidepressants

| DRUG  | INITIAL DOSE | THERAPEUTIC DOSE RANGE | COST/YR |
|---|--------------|------------------------|---------|
| Amitriptyline (Elavil)<br>Nortriptyline (Aventyl) | 10-25 mg qhs | 25-200 mg qhs          | \$11-58 |

*COMMENTS: Tolerance to sedation is common and occurs upon slow dose titration. Nortriptyline produces less sedation and may be better tolerated. Contraindications include severe cardiac, kidney, liver, prostate and thyroid disease, untreated glaucoma, hypotension, seizure disorder and use of a monoamine oxidase inhibitor. Titrate every 3-5 days.*

### Class: Anticonvulsants

| DRUG                        | INITIAL DOSE   | THERAPEUTIC DOSE RANGE      | COST/YR  |
|-----------------------------|----------------|-----------------------------|----------|
| Carbamazepine<br>(Tegretol) | 100-200 mg bid | 600-1200 mg div.<br>BID-QID | \$99-197 |

*COMMENTS: Inducer of hepatic enzymes (methadone & other drug interactions). Sedation and hematologic adverse effects may occur.*

|                                 |            |                              |             |
|---------------------------------|------------|------------------------------|-------------|
| Divalproex sodium<br>(Depakote) | 250 mg bid | 1500-3000 mg div.<br>TID-QID | \$1686-3372 |
|---------------------------------|------------|------------------------------|-------------|

*COMMENTS: Use caution in patients on ASA or warfarin and in hepatic dysfunction. Drowsiness, nausea, alopecia, tremor, thrombocytopenia, and weight gain may occur.*

|                        |            |                      |            |
|------------------------|------------|----------------------|------------|
| Gabapentin (Neurontin) | 300 mg qhs | 300-3600 mg div. TID | \$505-4173 |
|------------------------|------------|----------------------|------------|

*COMMENTS: Increase dose by 300 mg/d each wk (e.g. 300 mg bid x wk 2, 300 mg tid x wk 3). Sedation, dizziness and ataxia are common. No known drug interactions. Monitor for efficacy after 3 months and discontinue if inadequate response. Reduce dose in renal failure.*

### ***Skeletal “Muscle Relaxants”***

- No evidence exists that skeletal “muscle relaxants” actually relax muscle in patients with muscle spasm or tension.
- While commonly prescribed, there is limited data supporting their efficacy beyond their sedative effects, especially with long-term use.
- For short-term use (2 weeks) only.
- NSAIDs and other adjuvant analgesics are better alternatives.
- Carisoprodol is metabolized to meprobamate, a barbiturate type drug known to have significant addiction potential.

## APPENDIX D: ADJUVANT ANALGESICS

- Carisoprodol (Soma) and baclofen (Lioresal) can cause dependence and should be tapered, not stopped abruptly.
- Baclofen, dantrolene (Dantrium) and tizanidine (Zanaflex) are primarily indicated for spasticity associated with MS, spinal cord injuries, cerebral palsy or stroke and are not recommended for treatment of musculoskeletal injury.

### Soma Taper

#### Short Taper

Age < 65 and dose < 1400 mg/d  
Discontinue over 4 days  
Day 1: 350 mg tid  
Days 2 & 3: 350 mg bid  
Day 4: 350 mg qd  
Day 5: 0

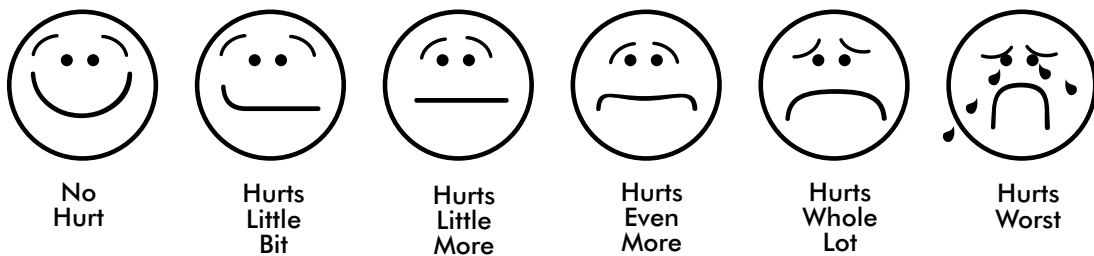
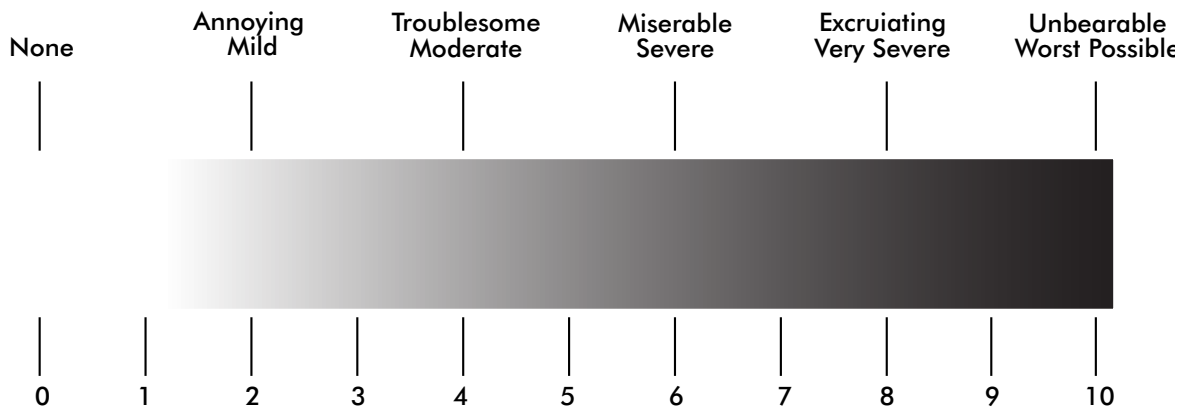
#### Long Taper

Age > 65 or dose > 1400 mg/d  
Discontinue over 9 days  
Days 1-3: 350 mg tid  
Days 4-6: 350 mg bid  
Days 7-9: 350 mg qd  
Day 10: 0



APPENDIX E: SAMPLE PAIN  
SCALES AND BRIEF PAIN INVENTORY

Please tell us if you are having pain or if your pain medications  
are not working for you.





STUDY ID# \_\_\_\_\_

HOSPITAL # \_\_\_\_\_

DO NOT WRITE ABOVE THIS LINE

### Brief Pain Inventory (Short Form)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time: \_\_\_\_\_

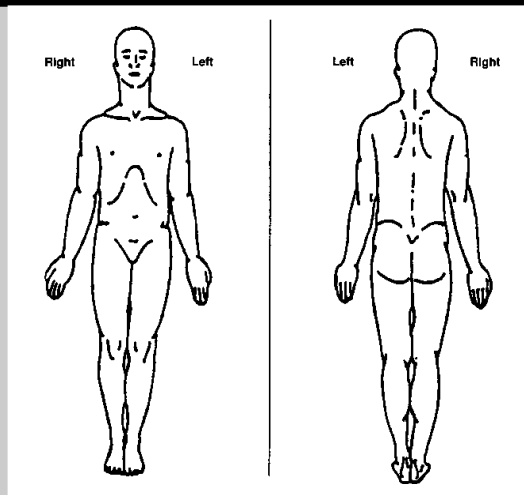
Name: \_\_\_\_\_  
Last First Middle Initial

1. Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain today?

1. Yes

2. No

2. On the diagram, shade in the areas where you feel pain. Put an X on the area that hurts the most.



3. Please rate your pain by circling the one number that best describes your pain at its **worst** in the last 24 hours.

|         |   |   |   |   |   |   |   |   |   |                                |
|---------|---|---|---|---|---|---|---|---|---|--------------------------------|
| 0       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10                             |
| No Pain |   |   |   |   |   |   |   |   |   | Pain as bad as you can imagine |

4. Please rate your pain by circling the one number that best describes your pain at its **least** in the last 24 hours.

|         |   |   |   |   |   |   |   |   |   |                                |
|---------|---|---|---|---|---|---|---|---|---|--------------------------------|
| 0       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10                             |
| No Pain |   |   |   |   |   |   |   |   |   | Pain as bad as you can imagine |

5. Please rate your pain by circling the one number that best describes your pain on the **average**.

|         |   |   |   |   |   |   |   |   |   |                                |
|---------|---|---|---|---|---|---|---|---|---|--------------------------------|
| 0       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10                             |
| No Pain |   |   |   |   |   |   |   |   |   | Pain as bad as you can imagine |

6. Please rate your pain by circling the one number that tells how much pain you have **right now**.

|         |   |   |   |   |   |   |   |   |   |                                |
|---------|---|---|---|---|---|---|---|---|---|--------------------------------|
| 0       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10                             |
| No Pain |   |   |   |   |   |   |   |   |   | Pain as bad as you can imagine |



## APPENDIX F: ADDITIONAL RESOURCES

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### Oregon Law

Oregon Board of Medical Examiners: [www.bme.state.or.us](http://www.bme.state.or.us)

Oregon Board of Pharmacy: [www.pharmacy.state.or.us](http://www.pharmacy.state.or.us)

Oregon Dept of Health and Human Services Pain Management Program: [oregoncares.org/healthcare/pain.html](http://oregoncares.org/healthcare/pain.html)

Oregon Medical Association, Medical-Legal Handbook: [www.ormedassoc.org/tk/mlh2000/index.htm](http://www.ormedassoc.org/tk/mlh2000/index.htm)

Oregon Medical Association, Pain Management Guidelines: [www.ormedassoc.org/oma/guides/index.htm](http://www.ormedassoc.org/oma/guides/index.htm)

### Guidelines and Reviews

American Academy of Pain Medicine and American Pain Society. The use of opioids for the treatment of chronic pain. Chicago, 1994. [www.painmed.org](http://www.painmed.org)

American Academy of Physical Medicine and Rehabilitation. Clinical practice guidelines for chronic non-malignant pain syndrome patients II: an evidence-based approach. *J Back Musculoskeletal Rehabil* 1999; Jan 1:1347-58.

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## APPENDIX F: ADDITIONAL RESOURCES

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### **Pain Organizations and Related Websites**

American Academy of Pain Medicine: [www.painmed.org](http://www.painmed.org)

American Pain Society: [www.ampainsoc.org](http://www.ampainsoc.org)

College of Physicians and Surgeons of Ontario: [www.cpso.on.ca](http://www.cpso.on.ca)

American Chronic Pain Association: [www.theacpa.org](http://www.theacpa.org)

American Pain Foundation: [www.painfoundation.org](http://www.painfoundation.org)

American Society of Pain Management Nurses: [www.aspmn.org](http://www.aspmn.org)

American Society of Regional Anesthesia and Pain Medicine: [www.asra.com](http://www.asra.com)

Oregon Caregiving Resource Center: [oregoncares.org/healthcare/pain.html](http://oregoncares.org/healthcare/pain.html)

University of Iowa Nursing: [adultpain.nursing.uiowa.edu](http://adultpain.nursing.uiowa.edu)

Dept of Pain and Palliative Care, Beth Israel Medical Center: [www.stoppain.org](http://www.stoppain.org)

Dannemiller Memorial Educational Foundation: [www.pain.com](http://www.pain.com)

University of WI Pain and Policies Study Group: [www.medsch.wisc.edu/painpolicy](http://www.medsch.wisc.edu/painpolicy)

Partners Against Pain: [www.partnersagainstpain.com](http://www.partnersagainstpain.com)

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