# *PAIN MANAGEMENT OF INMATES*

**Federal Bureau of Prisons**

**Clinical Guidance**

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# 1. PURPOSE OF THIS GUIDANCE

The Federal Bureau of Prisons (BOP) Clinical Guidance for *Pain Management of Inmates* provides recommendations for the assessment, management, and treatment of pain in Federal inmates. There are a variety of pharmacologic and non-pharmacologic approaches to treating pain. However, there are also many barriers that can prevent effective pain management such as lack of expertise about pain perception and pain management, potential for serious side effects, and fear of addiction and abuse.

**This guidance is designed primarily to assist medical staff in managing chronic pain, although certain aspects of the guidance may be applicable to managing acute pain, as well.**

# 2. INTRODUCTION TO PAIN MANAGEMENT IN THE BOP

## THE PREVALENCE OF CHRONIC PAIN

Pain management is a significant and complicated public health issue. Pain is a major symptom in many medical conditions—the most common reason for physician consultation in the United States—and can significantly interfere with a patient's quality of life. To add to the complexity of addressing pain, many of the medications used in pain management can be abused and are a leading cause of death and emergency department visits.

**Although data is lacking in the Federal offender population, it is estimated that up to 43% of the U.S. population is affected by chronic pain.**[1] Since the origin of pain may occur before or during incarceration, it can be presumed that the inmate population is affected by chronic pain at a rate similar to that of the general population. Epidemiologic research within state prison systems supports this presumption.

- In one study involving 170,215 inmates, 60% had at least one medical condition.[2] Fifteen percent of these patients were categorized as having "diseases of the musculoskeletal system and connective tissue," which are generally indicative of pain. Lower back pain was the fourth-leading health problem identified in the study.
- A cohort study of 862,979 inmates found the prevalence of "arthritis" to be 15.6%.[3]
- Another study found "bone/joints" and "back/neck" were frequently reported health concerns in a group of 1,198 adult inmates.[4]

**Collectively, these studies suggest that health problems generally associated with chronic pain are highly prevalent among prison inmates.**

[1] Institute of Medicine. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. Washington, DC: The National Academies Press; 2011.
[2] Baillargeon J, Black SA, Pulvino J, Dunn K. The disease profile of Texas prison inmates. *Ann Epidemiol* 2000;10**:**74-80.
[3] Rosen DL, Hammond WP, Wohl DA, Golin CE. Disease prevalence and use of health care among a national sample of black and white male state prisoners. *J Health Care Poor Underserved.* 2012;23**:**254-272.
[4] Conklin TJ, Lincoln T, Tuthill RW. Self-reported health and prior health behaviors of newly admitted correctional inmates. *Am J Public Health.* 2000;90**:**1939-1941.

## GENERAL PRINCIPLES OF PAIN MANAGEMENT IN THE BOP

### MULTIPLE DIMENSIONS OF PAIN MANAGEMENT

The BOP recognizes that the best approach to pain management is to incorporate multiple dimensions of treatment (many of which are outlined in this guidance), including biological, psychological, behavioral, familial, vocational, social, and medico-legal. This approach should be utilized regardless of whether a small team—such as a core **MEDICAL TREATMENT TEAM** (**MTT**)—or a larger **PAIN MANAGEMENT TEAM (PMT)** is evaluating and/or monitoring treatment of the patient. The approach should include both medications and non-medications. Current studies often refer to this multi-dimensional approach as the **BIOPSYCHOSOCIAL** model of pain management, which is discussed further below.

### INTERDISCIPLINARY PAIN REHABILITATION (IPR)

**IPR** is an effective and widely recognized approach to chronic pain management, incorporating a variety of strategies and interventions for the management of chronic pain. Randomized clinical trials have shown that rehabilitation for chronic pain promotes significant, long-term improvement in pain-related behavior. Rehabilitative treatment uses the **BIOPSYCHOSOCIAL** approach mentioned above—combining physical reconditioning with relaxation training, mental health education, activity modification, and elimination of aberrant pain behaviors.

➔ *See Section 6, Team Approach for Pain Management in the BOP, for details on how the BOP incorporates IPR principles into three fundamental tiers of pain management.*

### ROLES OF THE MTT AND THE PMT

The **MTT** is considered the inmate's primary or core treatment team, consisting of a small group of clinicians such as a physician, advanced practice practitioners (**APPs**), a pharmacist, and a nurse. Multidisciplinary **PMT** groups consist of the core MMT**,** as well as other relevant staff as available, including physicians, APPs, pharmacists, nurses, physical and recreational therapists, chaplains, recreation specialists, and psychologists. Sometimes known as the **MULTIDISCIPLINARY, MULTIMODAL TREATMENT TEAM**, the PMT works collaboratively to manage the patient's pain.

**Patient interaction with these teams is critical to the treatment process.** The teams should regularly receive input and feedback from the patient in order to maximize patient adherence.

➔ *See Section 6, Team Approach for Pain Management in the BOP for more about the role of the PMT, including Table 3, Composition of the Pain Management Team (PMT).*

# 3. THE BODY'S PAIN-RESPONSE MECHANISMS

Pain medications and non-pharmaceutical treatment modalities allow the prescribing clinician to treat pain at the peripheral, spinal, and central levels by modifying the various neurotransmitters described below.

➔ *See Appendix 5, Receptor Locations of Antineuralgic Agents, for a diagram of this process and the sites of action for specific medications.*

## MECHANISMS OF ACUTE PAIN

**The mechanism of acute pain response is typically described as follows:**

- An injury causes release of neurotransmitters (bradykinin, leukotriene, prostaglandin, etc.) that sensitize injury-site neuroreceptors to send impulses to the dorsal root ganglia of the dorsal horn of the spinal cord.
- This is followed by the release of other neurotransmitters (substance P, aspartate, neurotensin, glutamate) that cause additional neuroreceptors to transmit impulses up the dorsal horn via the spinothalamic tract to the thalamic nuclei of the brain, where they are interpreted by the brain and consciously perceived as "pain."[5]

## MECHANISMS OF CHRONIC PAIN

### PERIPHERAL SENSITIZATION

**PERIPHERAL NEURORECEPTOR SENSITIZATION** caused by injury-site neurotransmitters, as described above, increase sodium channel openings of the peripheral nerve. These ion channels allow for sodium/calcium flux across the nerve membrane. With repetitive tissue injury, additional nerve terminals can be formed in a peripheral nerve. These terminals have more sodium channels than typical nerve terminals and are hyperexcitable. The result is a lowered pain threshold at the peripheral level, a condition known as **PRIMARY OR PERIPHERAL HYPERALGESIA.** If this condition is combined with recurrent, reflex neuronal discharge from a hyperexcitable neuron, a **PERIPHERAL CHRONIC PAIN SYNDROME** may develop.

### CENTRAL NEURORECEPTOR SENSITIZATION

**CENTRAL NEURORECEPTOR SENSITIZATION** at the level of the dorsal root ganglia is caused primarily by glutamate, principally NMDA (n-methyl-D-aspartate). Central neuroreceptor sensitization utilizes the same mechanism described above for peripheral sensitization of increased sodium channeling, resulting in a lowered pain threshold and secondary hyperalgesia. **ALLODYNIA**, the misinterpretation of a non-painful stimulus as painful, occurs when glutamate acts synergistically with substance P at the level of the dorsal horn, resulting in enhanced pain perception compared to the level of injury present.

**There are two other significant central sensitization mechanisms present in the dorsal horn:**

- A recurrent positive feedback loop of calcium nerve influx is responsible for generating a **"WIND-UP" PHENOMENON.** This phenomenon can lead to chronic pain due to recurrent self–triggered sodium/calcium ion flux across the nerve membrane.
- Increased levels of nitric oxide (NO) can induce tissue and neuronal inflammation, precipitating **CENTRAL OR SECONDARY HYPERALGESIA.**

Any single or multiple combinations of these mechanisms can lead to a **CENTRAL CHRONIC PAIN SYNDROME.**

[5] Basbaum AI, Bautista DM, Scherrer G, Julius D. Cellular and molecular mechanisms of pain. *Cell*. 2009;139(2): 267–284.

# 4. TYPES OF PAIN

Below is a discussion of different types of pain, the major distinction being between **ACUTE PAIN** and **CHRONIC PAIN** (each described below).

➔ ***TABLE 1** below summarizes the major differences in managing **ACUTE** vs. **CHRONIC** pain.*

**The additional classifications described in this section include:** *nociceptive pain* (acute), *neuropathic pain* (acute or chronic), *psychogenic pain* or psychalgia (acute or chronic), *idiopathic pain* (acute or chronic), *hyperalgesia* (chronic), and *opioid-induced hyperalgesia* (chronic).

## ACUTE PAIN

**ACUTE PAIN** usually begins suddenly, is usually sharp in quality, and serves as a warning of disease or a threat to the body such as tissue injury. Injuries can include **INTENDED TRAUMA** such as surgery or dental work, or **UNINTENDED TRAUMA** such as broken bones, burns, or cuts. Acute pain may be mild and short-lived, or it might be severe and last up to three months. Acute pain resolves when the precipitating event, disease, or injury resolves or heals.

➔ *If acute pain lingers beyond three months, it is eventually reclassified as chronic pain (see below).*

## CHRONIC PAIN

**CHRONIC PAIN** is an intrusive, uncomfortable, persistent sensation lasting greater than 90 days, and which may or may not have originated from a particular trauma or disease. It is pain without biological value that has persisted even if the original condition has healed or resolved. For example, pain from a surgical wound that has healed or continuing low back pain after disk surgery would be classified as chronic if it persists beyond three months after the surgery. Whether continuous or intermittent, the pain is of sufficient duration and intensity to adversely affect a patient's well-being, level of function, and quality of life.

**TABLE 1. PAIN MANAGEMENT: ACUTE VS. CHRONIC**

| | ACUTE PAIN | CHRONIC PAIN |
|---|---|---|
| **Relationship Between Pain and Healing** | Decreases or increases in pain can indicate improvement or deterioration of condition. | Level of pain does not indicate a change in condition. |
| **Outcome of Pain Management** | Usually resolves with time. | Patient may never be pain-free. |
| **Treatment Focus** | Focus is on treating underlying cause through physical therapy, rest, and administration of analgesics. | Focus is on treating underlying cause of pain, improving functional ability of the patient, and managing pain levels. |
| **Treatment Approach** | Both unimodal and multimodal approaches are used. | Multimodal treatment is the norm; unimodal is rare. |
| **Patient Participation** | Patient may be passive, resting to allow healing, or active in pain-reduction treatment (i.e., participating in physical therapy). | Patient plays a key role in reducing subjective experience of pain. |
| **Key Treatment Principle** | Treatment focuses on cure of underlying disease or condition (e.g., post-op healing, etc.). | Treatment focuses on rehabilitation and reduction of pain in order to improve function and quality of life. |
| **Duration** | Moments up to three months. | Greater than three months. |

## NOCICEPTIVE PAIN

**NOCICEPTIVE PAIN** is a type of **ACUTE** pain caused by stimulation of peripheral nerve fibers (nociceptors) that respond to stimuli, approaching or exceeding a harmful intensity.

As shown below in ***TABLE 2***, there are two common ways to classify nociceptive pain—first by **MODE OF STIMULATION** and then by **VISCERAL VS. SOMATIC.**

**TABLE 2. CLASSIFICATION OF NOCICEPTIVE PAIN**

| **CLASSIFICATION BY MODE OF STIMULATION** | |
|---|---|
| **THERMAL** | Heat or cold |
| **MECHANICAL** | Crushing, tearing, etc. |
| **CHEMICAL** | Chemical burn |
| **CLASSIFICATION AS VISCERAL VS. SOMATIC** | |
| **VISCERAL PAIN** | Carried by autonomic (sympathetic) fibers from deep organs. The pain originates within the internal organs due to injury and/or disease, and is poorly localized.<br>***Example:*** *Stomach pain* |
| **SOMATIC PAIN (DEEP AND SUPERFICIAL)** | Generally well-localized pain resulting from the activation of peripheral nociceptors, without secondary injury to the peripheral or central nervous system. Somatic pain includes injuries to the body or soma that exclude the viscera.<br>**DEEP SOMATIC PAIN:**<br>Initiated by stimulation of nociceptors in ligaments, tendons, bones, blood vessels, fasciae, and muscles. It is usually dull, aching, and poorly localized pain.<br>***Examples:*** *Sprains and broken bones*<br>**SUPERFICIAL SOMATIC PAIN:**<br>Initiated by activation of nociceptors in the skin or superficial tissues. It is sharp, well-defined, and clearly localized.<br>***Examples:*** *Minor wounds and first-degree burns* |

## NEUROPATHIC PAIN

**NEUROPATHIC PAIN** can be **ACUTE** or **CHRONIC** in nature. It is caused by damage to or disease of the peripheral or central nervous system responsible for bodily sensation (i.e., the somatosensory system). **PERIPHERAL NEUROPATHIC PAIN** is often described as "burning," "tingling," "electrical," "stabbing," or "pins and needles." An example would be chronic diabetic foot pain.

## PSYCHOGENIC PAIN

**PSYCHOGENIC PAIN,** also called **PSYCHALGIA,** can be **ACUTE** or **CHRONIC** pain that is caused, increased, or prolonged by mental, emotional, or behavioral factors. Headache, back pain, and stomach pain are sometimes diagnosed as psychogenic. Sufferers are often stigmatized because many medical professionals and some of the general public think that pain from a psychological source is not "real." However, studies confirm it is no less actual or hurtful to the patient than pain from a traumatic injury or disease state.[6]

[6] Harris AM, Orav EJ, Bates DW, Barsky AJ. Somatization increases disability independent of comorbidity. *J Gen Intern Med.* 2009;24:155–161.

### IDIOPATHIC PAIN

**IDIOPATHIC PAIN** is an **ACUTE** or **CHRONIC** pain caused by an unidentifiable organic or psychological process.

### HYPERALGESIA

**HYPERALGESIA** is typically a form of **CHRONIC** pain. It is an increased or exaggerated sensitivity to pain, which may be caused by damage to nociceptors or peripheral nerves, or by changes in the central nervous system.

➔ *See discussion of Mechanisms of Chronic Pain under Section 5.*

### OPIOID-INDUCED HYPERALGESIA

**OPIOID-INDUCED HYPERALGESIA** is clinically complex in that it presents as increased pain or nociceptive sensitivity as a result of exposure to opioids—without a change in the underlying medical condition that would cause increased pain.[7] **In this situation, the patient receiving opioids for pain relief actually becomes more sensitive to stimuli and may experience a reduction in pain when opioids are decreased or discontinued.**

Clinicians should suspect opioid-induced hyperalgesia when the effectiveness of opioid treatment seems to decrease in the absence of disease progression—particularly in the context of unexplained pain reports or diffuse allodynia unassociated with the original pain—and increased levels of pain with increasing dosages. The treatment involves reducing the opioid dosage by tapering off, or supplementing with NMDA receptor modulators. Findings of the clinical prevalence of opioid-induced hyperalgesia are not available.

## 5. TOLERANCE, PHYSICAL DEPENDENCE, AND ADDICTION

### TOLERANCE

After repeated administration, patients develop tolerance to opioids. **TOLERANCE is a form of neuroadaptation to the effects of chronically administered medications such as opioids or benzodiazepines.** It is manifested by the need for increased or more frequent doses to achieve the same level of initial symptom relief.

- The patient may develop tolerance to the analgesic effects of opioids faster than to the side effects of respiratory depression, sedation, and nausea. A fast titration to control pain could cause respiratory depression. Unfortunately, patients do not become tolerant to the side effects of constipation and impaired night vision.
- The timing of when tolerance occurs is not consistent from patient to patient and therefore requires vigilance on the part of the provider.
- **Tolerance does not imply ADDICTION** (see discussion of *ADDICTION* below).
- Tolerance is problematic for the patient with chronic or terminal pain because extreme doses may be required for continued pain management. Similar doses, if administered to patients who have not developed tolerance to opioids, could be lethal.

[7] Lee M, Silverman SM, Hansen H, Patel VB, Manchikanti L. A comprehensive review of opioid-induced hyperalgesia. *Pain Physician*. 2011;14(2):145–161.

## PHYSICAL DEPENDENCE

**PHYSICAL DEPENDENCE is present when a withdrawal syndrome results from an abrupt cessation or rapid tapering of a pain medication** (e.g., when a patient forgets to take the medication) or from administration of an opioid antagonist such as naloxone.

- Symptoms of withdrawal may include restlessness, abdominal cramping and diarrhea, mood disorders, or other aberrant psychosocial behaviors. Opioid withdrawal is uncomfortable, but not life-threatening in an otherwise healthy individual.
- Physical dependency is an expected occurrence in all individuals on long-term use of opioids, whether for therapeutic or non-therapeutic purposes. Opioids can produce dependence in as little as 5–7 days, requiring the patient's doses to be tapered at the end of therapy.
  - ➔ *Refer to the BOP Clinical Guidance on Detoxification of Chemically Dependent Inmates.*
- **Physical dependence does not, in and of itself, imply ADDICTION (see below).**

## ADDICTION

**ADDICTION, in the context of pain treatment with opioids, is characterized by a persistent pattern of dysfunctional opioid use that may involve any or all of the following:**

- The individual cannot control himself or herself from overusing a drug, regardless of the ramifications.
- The individual has a preoccupation with obtaining opioids, beyond the need for pain management.
- The individual continues use despite adverse physical, psychological, or social consequences.

**While addictive behavior can be reinforced by a particular drug, addiction is not caused by opioids and only a small percentage of patients prescribed opioids will develop addiction.**[8] If a patient has a legitimate medical need, providers should not withhold opioids for fear that prescribing them will cause the patient to become "addicted." Patients with no signs of addiction can be easily weaned from opioid dosages without fear of precipitating addictive behavior. In contrast, an addicted patient will seek the drug despite having no remaining medical need for it.

## PSEUDOADDICTION

**PSEUDOADDICTION is a term that at times is disputed in the literature and describes patient behaviors that may occur when pain is undertreated.**[9] Patients with unrelieved pain may become focused on obtaining medications; they may "clock-watch" and otherwise seem to be inappropriately "drug-seeking." More extreme behaviors such as illicit drug use and deception can occur in the patient's efforts to obtain pain relief.

➔ *In contrast to true ADDICTION, the behaviors in PSEUDOADDICTION resolve when the pain is treated effectively.*

**Distinguishing pseudoaddiction from addiction can be difficult and often requires spending more time with the patient, more often.** Misunderstanding this phenomenon may lead the clinician to

[8] Volkow MD, McLellan AT. Opioid abuse in chronic pain — misconceptions and mitigation strategies. *N Engl J Med.* 2016; 374:1253-63.
[9] Greene MS, Chambers,RA. Pseudoaddiction: fact or fiction? an investigation of the medical literature. *Curr Addict Rep.* 2015);2:310–317.

inappropriately stigmatize the patient as an "addict." In the setting of unrelieved pain, the request for increases in drug dose requires careful assessment, renewed efforts to manage pain, and avoidance of stigmatizing labels.

### SUBSTANCE ABUSE

**SUBSTANCE ABUSE is the use of any substance for non-therapeutic purposes** or the use of medication for purposes other than those for which it is prescribed.

## 6. TEAM APPROACH TO CHRONIC PAIN MANAGEMENT IN THE BOP

➔ *Several of the terms used below were discussed earlier under General Principles of Pain Management in the BOP in Section 2.*

**THE GOALS OF EFFECTIVE PAIN MANAGEMENT THERAPY ARE TWO-FOLD:**

1. The **PRIMARY GOAL** of treatment is to improve function.
2. The **SECOND GOAL** is to ensure appropriate use of pain medications.

#### TWO TIERS OF PAIN MANAGEMENT RESOURCES

While pain management in individual cases remains the responsibility of the primary care provider and other clinicians involved in the inmate's day-to-day medical care, the BOP incorporates the principle of **INTERDISCIPLINARY PAIN REHABILITATION (IPR)** throughout two tiers of resources:

- **TIER 1: LOCAL PAIN MANAGEMENT**
  Monitoring and review of individual cases is carried out by the institution's multidisciplinary **PMT**. The local PMT also facilitates communication among staff from different departments and is available as a resource for the patient's **MTT**. The vast majority of patient cases are managed in this tier.
- **TIER 2: OUTSIDE PAIN SPECIALIST**
  Pain management specialists outside of the BOP are requested to consult in the care of an inmate. This occurs only in rare cases.

➔ *The two tiers are described below. See also Appendix 8, Controlled Substances Pain Management Algorithm, for the roles of the different teams in determining the use of pain management options.*

## TIER 1: LOCAL PAIN MANAGEMENT

### MEDICAL TREATMENT TEAM (MTT)

- Within the MTT, a physician will provide oversight for the inmate's pain care.
  - Day-to-day care may be provided by another clinician—such as an advanced practice provider (APP), or a pharmacist working under a collaborative practice agreement.
  - Challenging or complex cases can be co-managed by the APP or the pharmacist, in consultation with the physician, as specified in the *Patient Care Program Statement.*
- Dentists should NOT be the lead individual for a patient's pain management unless there is an underlying dental condition.
- The MTT should develop the original plan for management of pain. Since pain can be present as a result of untreated or incompletely treated disease states, the MTT is expected to adequately assess and appropriately manage co-morbid disease states.
- To assist the MTT in providing pain care, institutions are encouraged to develop a multidisciplinary PMT (see below).

### MULTIDISCIPLINARY PAIN MANAGEMENT TEAM (PMT)

- **The PMT offers a comprehensive approach to pain management.**
  - For inmates receiving narcotics for pain management, the PMT is part of the ongoing monitoring process and serves to facilitate communication among the staff.
  - It is recommended that the PMT meet at least quarterly to review inmates' compliance with medication, review behavioral management aspects of pain management, and assess outcome goals.
- **The PMT performs case reviews in the following situations:**
  - *When reviewing cases, recommendations may include a variety of options including increasing the care level of the inmate, continuing the current pain management plan, requesting additional exams, addition or discontinuation of treatments, etc.*
  - Annual case reviews of all inmates on controlled substances.
  - Pain management cases, as requested by the Clinical Director.
  - Patients receiving greater than 90 oral morphine equivalents per day.
    - *See Appendix 11, Opioid Equianalgesic Dose Chart.*
  - Immediate-release opioid medications scheduled (not prescribed "as needed") for greater than 30 consecutive days.
  - Patients with a diagnosis of chronic pain syndrome, or a diagnosis of malingering.
  - Patients taking opioids for a condition not routinely treated with controlled substances (e.g., osteoarthritis being treated with a controlled substance without being a surgery candidate).
    - *See Appendix 7, Medications for Common Causes of Chronic Pain.*
  - Patients whose controlled substance dosing has been increased twice within 120 days, and there is no change in clinical condition that would justify the increase.
  - Post-op greater than 60 days and patient still being maintained on scheduled opioids for post-op pain.

- Patients who have received a new opioid prescription within 14 days of admission to the BOP that is not a continuation of a prescription prescribed in the community, nor a result of an acute injury.
- Patients who have diverted a scheduled medication, although the MTT recommends continued treatment with a controlled substance.
  - *When an inmate's pain or behavioral management becomes uncontrolled or aberrant, the inmate's case should be reviewed more often by the MTT and, if necessary, the PMT. (See Appendix 16, Recommendations for Handling Aberrant Behavior).*

- **The PMT's consultation and communications** with correctional officers, case managers, unit managers, and Disciplinary Hearing Officers who are familiar with the activities of the inmates being reviewed by the PMT is optional, but is encouraged as a way to enhance outcomes.
  - *Medical staff should follow BOP policy related to confidential medical information when discussing health care related information with non-health services staff.*

- **The composition of the PMT will vary**, based on staffing at the individual institution, but the disciplines represented may include those shown below in ***TABLE 3***.

**TABLE 3. COMPOSITION OF THE PMT**

| DISCIPLINES TO INCLUDE ON THE PMT | |
|---|---|
| ◆ **Dental (as appropriate)** | ◆ **Psychology** |
| ◆ **Nursing** | ◆ **Psychiatry** |
| ◆ **Pharmacist** | ◆ **MTT members (i.e., physician, APP, nurse)** |
| ◆ **Physical and/or recreational therapy staff *** | ◆ **Social worker (as appropriate) **** |
| * ***Recreational therapy staff*** *can serve as an integral component of the PMT by working to enhance the patient's overall aerobic conditioning and flexibility. In addition, recreation staff can serve to provide low-impact exercise alternatives such as yoga, Pilates, or relaxation techniques.* | |
| ** ***Social workers*** *can provide supportive therapy for inmates receiving treatment for pain management as well as assist with referrals for inmates who are within a few months of release or residential re-entry center eligibility.* | |
| **POSSIBLY INCLUDE ON THE PMT FOR ADMINISTRATIVE SUPPORT** | |
| ◆ Health Services Administrators (HSA) or Assistant Health Services Administrators (AHSA) | |
| ◆ Health Systems Specialists (HSS) | |

## TIER 2: OUTSIDE PAIN SPECIALIST

- *Tier 2 pain management should take place when it is based on a referral from the PMT, initiated by the MTT, and approved through the utilization review process.*

- In rare cases, if the PMT reviews a case and determines that the services of an outside expert may be needed, the inmate may be referred to a pain consultant.
- Before the outside specialist is consulted, BOP care should be utilized to the fullest extent, for a reasonable period of time consistent with the disease state being treated. In these cases, non-BOP consultants may provide consultation.
- Outside pain consultants should be familiar with the unique issues involved with correctional medicine. All treatment plans written or advocated by a specialist are only recommendations and must be approved by a BOP prescriber or the patient's MTT.

## 7. FOCUS OF CLINICAL VISITS

**Because pain can be a symptom of disease, or a disease itself, clinical visits may vary as follows:**

- **When pain is a symptom of an underlying condition:** The MTT's focus should be on managing the primary disease. In this case, it is reasonable for pain management visits to be part of the clinical visits in which the primary disease is managed—at the Chronic Care Clinic (CCC) or other clinical encounters.
- **When pain is the underlying condition:** Just as with other common disease states (e.g., diabetes or hypertension), the provider treating a diagnosis of chronic pain (i.e., Chronic Pain Syndrome), should provide a thorough clinical assessment and document as appropriate in the electronic medical record.
- **Encounters for both types of patient visits should include:** Functional assessments, proper pain assessment, complete management plans, assessment of adherence to and results of treatment interventions, and documentation of care.

➔ *See Section 8, Initial Pain Evaluation and Documentation.*

# 8. INITIAL PAIN EVALUATION AND DOCUMENTATION

**To gain a clear understanding of the patient's medical condition and associated pain, the clinician conducts a detailed, problem-focused history and physical examination. This includes:**

- Identifying and documenting the quality of pain, pain location(s), intensity of pain, and onset and duration of pain.
- Identifying, evaluating, and documenting functional abilities and psychosocial factors.
- Identifying and documenting how co-morbid conditions affect the patient's pain. When clinically indicated, diagnostic testing should be performed and documented.

**STEPS 1–5 below are all part of the initial pain evaluation.**

➔ *Development of Pain Management Care Plans is described in Section 9*).

## 1. EVALUATE AND DOCUMENT SUBJECTIVE PAIN.

All patients who are in obvious pain, express concerns about pain, or have a medical condition predisposing them to pain are to be assessed for pain in the initial clinical visit and all subsequent visits.

**SUBJECTIVE DOCUMENTATION OF PAIN:**

The patient's pain should be documented in the *subjective pain evaluation* section of the medical record, in a format such as **PQRSTU** (other formats may also be used):

- **P**rovokes pain – what incites the pain as well as palliates the pain?
- **Q**uality of pain
- **R**adiation of pain – what is the region or location of the pain?
- **S**everity of subjective pain, using a **visualized assessment scale (VAS)** of 1–10
- **T**ype of pain
- F**U**nctional status (*see discussion immediately below*)

**EVALUATION OF FUNCTIONAL STATUS:**

➔ *It is important to evaluate and monitor the functional status of patients with chronic pain because improvement in function is a primary goal of treatment.*

Functional abilities are commonly described in terms of **ACTIVITIES OF DAILY LIVING (ADLS).** Basic ADLs involve the care of the body and management of basic bodily functions and needs such as bathing, dressing, eating, toileting, and personal hygiene. **INSTRUMENTAL ADLS (IADLS)** refer to abilities/skills that are necessary for a person to be able to live independently. IADLs involve management of, or interaction with, a person's environment and surroundings. Examples of IADLs include activities such as shopping, food preparation, house cleaning and laundry, medication and money management, telephone calls, and transportation. **ADVANCED ADLS** require a higher level of functioning in society and include occupational and recreational activities.

Measures of physical function are useful in determining the level of functionality, as well as improvement or deterioration of the inmate's overall condition. There are a variety of functional assessments available to providers including the **PATIENT-SPECIFIC FUNCTIONAL SCALE (PSFS)** or the modified **SPAASMS SCORE.** In order to track progress, providers should be consistent with each patient, using the same tool at follow-up appointments as was used at the initial assessment. The PSFS and SPAASMS are described below.

***The PSFS is a short, reliable, and valid outcome-assessment tool requiring less than four minutes to complete:***[10]

- Patients are asked to list up to three important activities that are difficult for them to do because of their pain.
- At each clinical visit, they are asked to rate their ability to perform the activity on a scale from 0 to 10 (0 = unable to perform activity due to pain, 10 = able to perform activity without pain or limitations).
- A final PSFS score is calculated as the mean score for the rated activities. The minimal clinically important difference is two points.

➔ *See Appendix 2a, Patient-Specific Functional Scale (PSFS) .*

***The SPAASMS score is another short, reliable tool that allows the patient to assess chronic pain symptoms, as well as other factors:***[11]

**S** – Score for pain, **P** – Physical activity levels, **A** – Additional pain medication,
**A** – Additional physician/ER visits, **S** – Sleep, **M** – Mood, **S** – Side effects

- At each clinical visit, patients are asked to rate their pain on a VAS scale from 1 to 10 (1 = no pain, 10 = most pain).
- They are also asked to rate their physical activity, sleep quality, mood, and medication side effects, as well as indicate their use of additional pain medication and sick call visits for pain.
- A final summative SPAASMS score is tallied and compared to baseline and previous scores for the patient.

➔ *See Appendix 2b, SPAASMS Score Card.*

## 2. EVALUATE AND DOCUMENT OBSERVABLE PAIN LEVELS.

During the clinical visit, the provider should document objective observations of the patient's pain and any inconsistencies in presentation. These observations should include any observations made before and immediately after the visit (i.e. walking to or from the clinic).

## 3. REVIEW AVAILABLE RADIOLOGIC STUDIES, LABORATORY RESULTS, AND CURRENT DIAGNOSES.

➔ *For acute low back pain, providers should avoid imaging studies (magnetic resonance imaging, computed tomography, or radiographs) during the first six weeks after pain begins unless specific clinical indications exist (e.g., cancer, "red flags").*[12]

## 4. IDENTIFY PAIN AS ACUTE OR CHRONIC.

Determine whether the patient's pain is **ACUTE** or **CHRONIC** (see Section 3, Types of Pain) and follow the guidance provided in Section 9 for developing pain management care plans.

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[10] Stratford, P., Gill, C., Westaway, M., Binkley, J. Assessing disability and change on individual patients: a report of a patient specific measure. *Physiother Can*. 1995;47(4), 258–263.

[11] Mitra F, Chowdhury S, Shelley M, Buettner P. Measuring clinical outcomes of chronic pain patients. Practical Pain Management Web site. http://www.practicalpainmanagement.com/resources/diagnostic-tests/measuring-clinical-outcomes-chronic-pain-patients. Published January 1, 2011.

[12] American Society of Anesthesiologists. *Five Things Physicians and Patients Should Question.* Choosing Wisely Web site. http://www.choosingwisely.org/doctor-patient-lists/american-society-of-anesthesiologists-pain-medicine/. Accessed February 21, 2014.

**5. IDENTIFY DEPRESSIVE SYMPTOMS.**

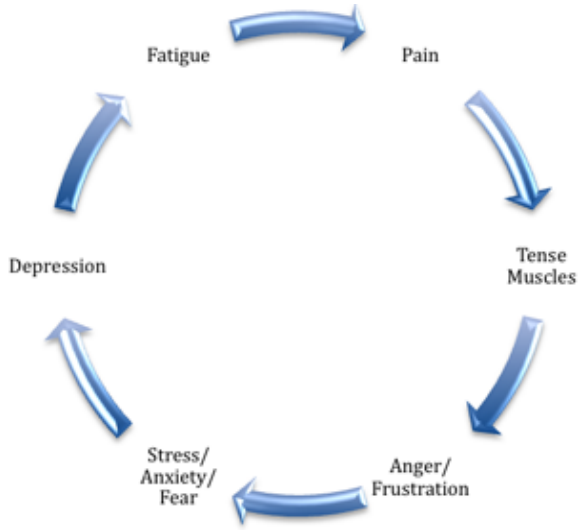
Chronic pain and depression are intricately related. Patients with depression frequently report physical symptoms, and vice versa. In the multimodal approach to treating chronic pain, evaluating and addressing depressive symptoms is paramount.

Patients with signs of clinical depression should to be referred to Psychology Services in accordance with the *Psychology Services Program Statement*. For additional information on screening for depression, please consult the BOP Clinical Guidance for *Management of Major Depressive Disorder* or contact a member of Psychology Services.

## 9. PAIN MANAGEMENT CARE PLANS

When developing a **PAIN MANAGEMENT CARE PLAN** for chronic pain, the provider should address the pain problem as its own distinct concern—while also managing the underlying cause of the pain, as well as other medical concerns the patient may have. Successful pain management requires a thorough understanding of the cycle of chronic pain, as shown in **FIGURE 1** below. In this approach, the patient's treatment is focused on using a multimodal strategy to disrupt the cyclic nature of pain-related issues, provide education on contributing factors in chronic pain, and enhance self-management principles.

**FIGURE 1. THE PAIN CYCLE**




***SOURCE*:** LaChappelle D. Psychological therapies. Association Québécoise de la Douleur Chronique Web site. Available at: http://www.douleurchronique.org/content_new.asp?node=161&lang=en

The MTT should determine whether the patient's pain symptoms are due to recurrent tissue injury, or whether the involved tissue has healed to the extent possible and is not the current source of the pain. Most tissues heal within a matter of weeks to months. In chronic pain, the issue is oftentimes not a "tissue" problem, but a distinct "pain" problem.

**Essentially, chronic pain is its own "disease."** Separate from the original tissue injury, peripheral and central sensitization—in combination with other neurophysiologic changes—leads to perpetuation of the patient's pain experience. The biopsychosocial model of pain management is essential to successfully decreasing the patient's pain and improving function.

## DEVELOPING AND ADMINISTERING THE PLAN

If the initial pain evaluation (described in *Section 8*) indicates that pain is present, the appropriate members of the MTT should develop, document, and oversee a **PAIN MANAGEMENT CARE PLAN** for the inmate.

The plan should always begin with non-pharmacologic modalities (see *Appendix 3* and *Appendix 4*) and may include medications to effectively treat the pain and/or its etiology. When medications are utilized, non-opioids should be considered first line and often are effective treatments. Opioids should be reserved for traumatic events (e.g., post-surgery), or other extreme conditions (e.g., cancer). While the plan could occasionally be managed solely by the MTT, it is more usual that the broader PMT should manage the plan.

➔ *Information on non-pharmacotherapeutic modalities is in Appendices 3–4.*
*Information on specific medications, including dosing and other concerns, is in Appendices 9–12.*
*Appendices 6–7 show the recommended medications for common causes of acute and chronic pain.*

➔ *Clinical follow-up for reassessment is described in Section 10, Ongoing Monitoring and Management.*

## MEDICATION CONSIDERATIONS

### NONOPIOID PAIN MEDS

- **The analgesic efficacy of nonopioid agents is typically underestimated.** They generally are equivalent or superior to opioids for managing musculoskeletal pain and should not be considered solely as adjunctive therapies.
- Nonopioid agents produce a lower incidence of side effects than opioids, although potentially serious side effects are still possible.
- Nonopioid agents have minimal potential for abuse.

➔ *See Appendix 9, Common Nonopioid Analgesics–Specific Concerns, for additional dosing information.*

### CONSIDERATIONS IN USING OPIOID PAIN MEDS FOR CHRONIC PAIN

- **Preferred treatment:** The CDC states that the preferred methods for treating chronic pain are nonpharmacologic therapy and nonopioid pharmacologic therapy.
- **Variable response:** Providers considering prescribing opioids also should be aware that patient response is variable. In some cases, patients have reported considerably greater analgesia from one medication or dose over another, even after administration of identical doses.

  The basis for this variability is unclear, but it is thought to involve a range of factors—**ENVIRONMENTAL** (e.g., psychosocial status, secondary gain), **PATHOPHYSIOLOGICAL** (e.g., liver function, enzyme/receptor expression), and **GENETIC** (variant *mu* receptors).
- Inmates who are prescribed opioids should be considered for co-prescribing of naloxone due to the risk of overdose (see *Opioid Overdose* below).

➔ *Prior to prescribing opioids, BOP providers must document justification in the inmate's medical record. See the box on the following page for the* five SELECTION CRITERIA *that must be documented.*

**SELECTION CRITERIA FOR PRESCRIBING OPIOIDS IN THE BOP**

**The following principles should be considered and documented in the medical record prior to prescribing opioids in the BOP:**

1. Use of non-opioid medications has not met goals of therapy. Dosage increases needed to achieve acceptable pain control would (**a**) result in significant side effects or medication toxicity, (**b**) be contraindicated because of comorbidities, ***or*** (**c**) exceed manufacturer recommendations.
2. The MTT has determined and documented that use of non-opioid medication has resulted in significant lack of pain control, with breakthrough pain or recurrent episodes of fluctuating pain control during a 24-hour period.
3. Non-pharmacotherapeutic interventions have been maximally applied, and functional status has not reached an acceptable level or has regressed.
4. The potential benefit of opioid therapy is likely to outweigh the risks, including the *contraindications* outlined below.
5. The MTT has determined that clear, measurable, and team/patient-agreeable treatment goals have been established and require opioid medications. In addition, providers should consider how therapy will be discontinued if benefits do not outweigh risks.

- *Opioids should not be used for some types of pain such as low back pain, fibromyalgia, and headaches.*
- *Patients who are chronically prescribed opioids should be placed on a bowel regimen. See Appendix 7, Medications for Common Causes of Chronic Pain.*

### ISSUES RELATED TO METHADONE

There are several complicating issues surrounding the use of methadone in the BOP.

- **Current regulations do not require a special license or registration for physicians who prescribe methadone for pain management purposes.** However, the indication for pain needs to be clearly documented within the medical record to thwart any misinterpretations by Program Review or other regulatory bodies such as the Drug Enforcement Administration.
  - *Refer to the BOP National Formulary for current restrictions on prescribing methadone: http://www.bop.gov/resources/health_care_mngmt.jsp*
- **The use of methadone for detoxification does require special licensing.** For further guidance, institutions are referred to the BOP Clinical Guidance on *Detoxification of Chemically Dependent Inmates*, as well as to their Regional Chief Pharmacist.
- **The pharmacokinetics of methadone are complex, and saturation of metabolic pathways is expected**—leading to over-medication over time, numerous interactions with the cytochrome P450 system, delayed increases in blood levels, and side effects not presenting themselves until 3–8 hours or longer post-dosing.
  - *Due to complexity of prescribing methadone, only those prescribers with extensive experience in methadone prescribing should initiate this therapy.*
- **Dose conversion from and to other opioids is not linear.** Therefore, opioid conversion tables should not be utilized for methadone. Providers are advised to consult methadone dosing

guidelines from sources such as the Veterans Administration,[13] the Compassion and Support organization,[14] and other experienced practitioners for dose conversions.

### CONTRAINDICATIONS TO USING OPIOIDS

➔ *See **TABLE 4** below for both absolute and relative contraindications to opioid therapy.*

- **Contraindications to opioids, both absolute and relative, should be reviewed** prior to prescribing opioid therapy.
- **Documentation of the review should be part of the inmate's medical record**, along with the initial prescription and subsequent clinical visits, as appropriate.
- **In the case of relative contraindications**, the clinician should consider specialty consultation to address the concern before prescribing the opioid; the consultation should be documented in the medical record.
- **Although not a contraindication**, providers should be cautious when prescribing opioids to inmates who demonstrate addictive personality, due to the potential for addiction.[12]

### TABLE 4. CONTRAINDICATIONS TO OPIOID THERAPY[15]

| ABSOLUTE CONTRAINDICATIONS |
|---|
| **Opioid therapy should NOT be prescribed in these instances:**<br>◆ Severe respiratory instability<br>◆ Acute psychiatric instability such as current serious suicidality, severe depression, or unstable bipolar disorder<br>◆ Uncontrolled suicide risk<br>◆ True allergy to the planned opioid therapy or any of its metabolites. True allergies occur far less often than intolerances, and the two should not be confused. Patients, and sometimes providers, report "allergies" that are not true allergies; providers should follow up with additional questions prior to ruling out a medication due to an "allergy" (see *Management of Opioid Allergy* below).<br>➔ *An allergy to an individual opioid is not a class effect.*<br>◆ Co-administration of drug(s) capable of inducing life limiting drug-to-drug interaction<br>◆ QTc interval >500 milliseconds if considering methadone.<br>➔ *Methadone should not be routinely considered as a substitute for another opioid.*<br>◆ Prior adequate trials of specific opioids that were discontinued due to intolerance, serious adverse effects that cannot be treated, or lack of efficacy<br>◆ Instances in the past year of active diversion, or a past medical history of serious maladaptive patient behaviors related to controlled substances |
| *(**TABLE 4** continues on next page)* |

[13] Goodman F, Jones W, Glassman P. Methadone Dosing Recommendations for Treatment of Chronic Pain, *http://www.pbm.va.gov/clinicalguidance/clinicalrecommendations/MethadoneDosingRecommendations.pdf*, Accessed December 15, 2014.

[14] Methadone Dose Conversion Guidelines. Compassion and Support Web site. *http://www.compassionandsupport.org/pdfs/professionals/pain/Methadone_Dose_Conversion_Guidelines.051810_.pdf*. Accessed December 15, 2014.

[15] VA/DOD *Clinical Practice Guideline for Management of Opioid Therapy for Chronic Pain*. Washington (DC): Department of Veterans Affairs, Department of Defense; 2010:1–159. *http://www.guideline.gov/content.aspx?id=16313#Section430*

*(**TABLE 4**, CONTRAINDICATIONS TO OPIOID THERAPY, continued from previous page)*

**RELATIVE CONTRAINDICATIONS**

**Opioid therapy should be prescribed WITH CAUTION in these instances:**

- History of diversion of controlled substances
- Diagnosed non-nicotine substance disorder
- Diagnosed and documented medical condition in which prescribing opioid therapy may cause harm:
  - Diagnosed sleep apnea and not on CPAP therapy
  - COPD
  - Cardiac conditions, if considering methadone
  - Known or suspected paralytic ileus
  - Respiratory depression of unknown etiology
- Risk for suicide or unstable psychiatric condition
- Complicated (actual or alleged) pain without clear etiology
- Neuropathic or visceral pain (Opioids are not usually effective against these types of pain; methadone may be effective in treating neuropathic pain.)
- Conditions that may impact medication compliance:
  - Cognitive and other medical or psychiatric impairment
  - Unwillingness to comply with prescribed therapy
  - Unwillingness to adjust at-risk activities that could lead to self-harm
  - Social instability

***Note:*** *Although it is not a contraindication, the risks of opioid use in chronic conditions such as headache, fibromyalgia, and chronic low back pain likely outweigh the benefits.*[16] *Prescribers should also avoid prescribing opioids with benzodiazepines, due to their additive central nervous system effects.*

## DOCUMENTING THE DECISION TO PRESCRIBE OPIOID THERAPY

If the clinician—after careful review of potential absolute and relative contraindications—has decided to prescribe narcotics for chronic pain, including opioids, the following items should be completed and documented in the medical record:

### 1. Assessing Risk of Opioid Use:

Before starting—and periodically during continuation of opioid therapy—clinicians should evaluate risk factors for opioid-related harms.[17] Risk factors should include:

- Patients with sleep-disordered breathing, including sleep apnea
- Pregnant women
- Patients with renal or hepatic insufficiency
- Patients aged 65 or older
- Patients with mental health conditions
- Patients with substance use disorder
- Patients with prior non-fatal overdose

[16] Franklin G. Opioids for chronic noncancer pain: A position paper of the American Academy of Neurology. *Neurology.* 2014;83(14);1277-1284.
[17] Dowell D, Haegerich TM, Chou R. CDC Guideline for prescribing opioids for chronic pain — United States, 2016. *MMWR.* 2016;65(1);1–49.

**2. Opioid Pain Management Agreement:**

The ***Opioid Pain Management Agreement*** outlines the patient's role in opioid management, as well as possible outcomes of opioid use. Institutions should periodically review and renew pain agreements with patients in order to re-familiarize the patients with their responsibilities regarding pain management.

➔ *See Appendix 18 for a printable copy of the BOP Opioid Pain Management Agreement.*

**3. Initiation with titration and ongoing monitoring of opioid therapy:**

The clinician should develop an individualized, ongoing monitoring plan for each inmate on opioid therapy (see Section 10 below). This typically involves:

- Follow-up clinical encounters with the MTT
- Follow-up visits with members of the PMT such as physical therapy, psychology, psychiatry, etc.
- Medication renewals
- Urine testing both before and after opioid initiation

**4. Maintain patient safety and accountability, as indicated in the opioid agreement:**

When the prescribing clinician determines that an adverse issue of safety or accountability is present, the clinician should counsel the inmate and document the counseling in the medical record. At each adverse occurrence, the MTT should consider options such as discontinuation of opioid medications, and/or use of psychosocial therapies, non-opioids, and non-pharmacotherapeutic treatments.

## MANAGEMENT OF OPIOID "ALLERGY"[18]

Patients commonly report an "allergy" to opioid medications, but fortunately true allergies are rare. Often, a description of the patient's symptoms will reveal that the "allergy" is actually intolerance to known side effects of opioids such as nausea or vomiting.

**A report of allergic symptoms—such as itching, hives, rash, or swelling**—does require a thorough description of the reaction by the patient, as well as information regarding previous opioid exposures. This information is crucial to:

- Determining whether the patient has a **TRUE OPIOID ALLERGY** or an intolerance to its side effects (**PSEUDOALLERGY**).
- Determining the nature of the allergy.
- Assessing the risk of cross-sensitivity with other opioids, thereby guiding future pain management.

**STEP 1:** Obtain a detailed description of the allergic symptoms from the patient.

**STEP 2:** Based on the reported symptoms, manage the reported symptoms as either an opioid pseudoallergy or a true opioid allergy (see ***TABLES 5–7*** below).

[18] Correctional Service Canada, CSC National Formulary, July 2014.

**The following tables (5–7) contain suggested guidance to help healthcare staff when dealing with reported opioid allergies.** This guidance is for informational purposes only. Proper medical practice necessitates that all cases be evaluated on an individual basis and that a provider's treatment decisions be patient-specific and based on the availability of drugs on the BOP National Formulary.

### TABLE 5. OPIOID "ALLERGY" SYMPTOMS TO CONSIDER

| SYMPTOMS | LIKELY CONDITION |
|---|---|
| ◆ Itching, hives, flushing, sweating, and/or mild hypotension only<br>◆ Itching, hives, or flushing at injection or application site only | **PSEUDOALLERGY**<br>(see *TABLE 6*) |
| ◆ Skin reaction other than itching, flushing, or hives (e.g., generalized rash)<br>◆ Severe hypotension<br>◆ Difficulty breathing, speaking, or swallowing<br>◆ Swelling of face, lips, mouth, tongue, pharynx, or larynx | **TRUE OPIOID ALLERGY**<br>(see *TABLE 7*) |

### TABLE 6. MANAGEMENT OPTIONS FOR OPIOID PSEUDOALLERGY

| MANAGING OPIOID PSEUDOALLERGY |
|---|
| ***Pseudoallergic reactions*** *are usually a result of endogenous histamine release from cutaneous mast cells, a non-immunologic effect of some opioids. The degree of reaction depends on opioid potency, dose, and route of administration. Lower potencies, higher dosages, and parenteral administration of opioids more commonly produce symptoms of pseudoallergy.* |
| ★ Use a nonopioid analgesic, if appropriate (i.e., acetaminophen or an NSAID).<br>★ Avoid most common opioids resulting in pseudoallergy (i.e., codeine, morphine, and meperidine)<br>★ Use a higher potency opioid, avoid parenteral administration, or reduce the administration rate.<br>*Opioid potency from lowest to highest:*<br>*meperidine < codeine < morphine < hydrocodone < hydromorphone < fentanyl*<br>★ Consider concurrent or pre-opioid administration of H1 and/or H2 antihistamines (e.g., diphenhydramine and ranitidine).<br>★ Consider a dosage reduction of the current opioid, if tolerated. |

### TABLE 7. MANAGEMENT OPTIONS FOR TRUE OPIOID ALLERGY

| MANAGING TRUE OPIOID ALLERGY |
|---|
| ***True opioid allergy*** *is considered to be IgE-mediated and, unlike pseudoallergy, usually requires prior exposure to the opioid or a related opioid. When choosing an analgesic for a patient reporting symptoms of a true opioid allergy, the benefits of using an opioid should be considered against the possible risk of a serious reaction.* |
| ★ Use a nonopioid analgesic, if appropriate (i.e., acetaminophen or an NSAID).<br>★ Consider the use of an opioid in a different structural class from the suspected agent(s)*, under close medical supervision*. There are three main opioid structural classes:<br>◆ *Phenanthrenes*: codeine, hydrocodone, hydromorphone, morphine, pentazocine.<br>◆ *Phenylpiperidines*: fentanyl, meperidine<br>◆ *Diphenylheptanes*: methadone.<br>***Note:*** Due to the rare occurrence of true opioid allergy, the incidence of cross-reactivity between opioid classes is unknown. *Patients may be allergic to opioids from more than one structural class.* |

## OPIOID EXIT STRATEGY[19]

**Discontinuation of chronic opioid therapy may be appropriate for a variety of reasons, including:**

- Failed trial with repeated dose escalation
- Failed trial with repeated opioid rotation
- Repeated noncompliance
- Repeated aberrant drug behaviors
- Repeated hostile behavior

**A clear opioid exit strategy should be discussed before initiating a course of treatment, and on an ongoing basis during therapy.** It should be incorporated into the treatment plan and reviewed with the patient in discussions of the ***Opioid Pain Management Agreement*** (available in *Appendix 18*). The decision to end opioid therapy should not mark the conclusion of treatment or end of care. Other treatment modalities should be continued or started, as appropriate.

- *Patients should be reassured that discontinuing opioids will not interfere with their medical needs being addressed.*
- *Patients who have an opioid discontinued should be assessed for the need to be tapered off to minimize withdraw symptoms. Refer to the BOP Clinical Guidance for Detoxification of Chemically Dependent Inmates for additional information.*

## OPIOID OVERDOSE

Opioid overdose is a major public health problem, accounting for over 32,000 deaths in 2016 in the United States.[20] However, many of these deaths can be prevented. In the same time that it takes for an overdose to become fatal, it is possible to reverse the respiratory depression and other effects of opioids through respiratory support and administration of the opioid antagonist naloxone. Naloxone is a mu-receptor antagonist. It also antagonizes the kappa-receptor, and weakly antagonizes the delta-receptor. The mu- and kappa-receptors are responsible for analgesia, sedation, respiratory depression, euphoria, and dependence.

**SIGNS OF OVERDOSE REQUIRE IMMEDIATE MEDICAL ATTENTION:**

- *See Appendix 14, Signs of Opioid Overmedication and Overdose.*
- *See Appendix 15, Treatment of Opioid Overdose.*

[19] Ahadian FM. Top 10 Strategies for Success with Chronic Opioid Therapy. In: *American Academy of Pain Management 30th Annual Meeting, Symposium Spotlight*. March 2014. http://www.pri-med.com/PMO/DigitalAssets//Clinical%20&%20Online/Images/SymposiumSpotlightAAPM30thAnnualMeeting.pdf. Accessed March 9, 2015.

[20] Centers for Disease Control and Prevention, Opioid Overdose: Opioid Data Analysis. https://www.cdc.gov/drugoverdose/data/analysis.html. Accessed April 17, 2018.

# 10. ONGOING MONITORING AND MANAGEMENT

## MANAGING ACUTE PAIN

Acute pain typically resolves with time. The MTT should schedule and document clinical visits with the patient to ensure that the changing condition of the patient is adequately addressed. Visits should include reassessment, prescribing therapy modalities, and providing refills of opioid and non-opioid pain medication. The patient is reassessed until the pain is resolved or develops chronic features (see *Managing Chronic Pain* below).

➔ ***CAUTION:*** *When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.*

Non-medical team members of the PMT will provide reassessment according to their established treatment plan schedules.

## MANAGING CHRONIC PAIN

### PAIN REASSESSMENT VISITS

Pain reassessment and documentation can be a separate, stand-alone visit or part of a chronic care clinic visit, whichever is most appropriate:

- **For stand-alone chronic pain reassessment visits, documentation should include, at minimum:**
  - Inmate-provided subjective pain level by VAS.
  - Problem-focused history and physical examination.
  - Objective assessment of pain by the MTT.
  - Primary care pain treatment plan with goal(s).
- **When pain is reassessed as part of a chronic care visit, providers are recommended to include the following documentation, at minimum:**
  - Inmate-provided subjective pain level by VAS.
  - Ensure that the patient has had a comprehensive history and physical examination that includes issues relating to the patient's pain management. If a comprehensive history and physical have been completed in the past, the provider should update the record with any new information.
  - Objective assessment of pain by the MTT.
  - Comprehensive treatment plan with goal(s).

### OTHER RECOMMENDATIONS REGARDING REASSESSMENT AND MONITORING

- **Frequency of visits:** It is recommended that the MTT see the patient at least every 30 days or more frequently, as long as treatment goals remain unmet or if the patient becomes unstable. Once the patient stabilizes and is at goal, the MTT may see the patient at longer intervals consistent with the individual treatment plan and BOP policy.

*(This topic continues on the next page.)*

- **Prescribing controlled substances:** While the MTT should be involved in the treatment decision process, for patient safety reasons, only one provider should be prescribing controlled substances for each inmate.
- **Average daily morphine equivalent dose:** Due to patient safety concerns, the CDC recommends that prescribers take additional precautions when prescribing greater than 50 morphine equivalents per day.[21] In addition, not more than an average daily morphine equivalent dose of 90 mg should be prescribed without first obtaining a consultation from a pain management specialist.
- **Non-BOP specialists:** Non-BOP specialty staff will provide reassessment only when recommended by the MTT/PMT and approved through the utilization review process.
- **Drug-testing:** For chronic opioid pain management, urine drug-testing for the specific prescribed opioid is recommended randomly at least once every six months for medication compliance. Providers should consider testing for abuse of prescribed medications, as well as for those that are not prescribed.
  - Urine testing is very specific. When ordering urine testing, providers should indicate the medications to be included in the test (the standard urine test order in the electronic medical record may not include all medications providers wish to test). Providers should also ensure, prior to ordering the test, that confirmatory testing will be completed (as opposed to just a screening test).
  - Due to the various changes that medications undergo during metabolism, positive tests should be reviewed by those familiar with test interpretation—such as pharmacists, lab personnel, or physicians accustomed to reviewing drug test results.

## MANAGING CANCER PAIN

**Cancer pain may increase or decrease throughout the course of the disease.** Assessment and re-assessment of pain in cancer patients should be accomplished at each outpatient contact and at least daily for inpatients.[22]

➔ *Please refer to the National Comprehensive Cancer Network's Clinical Practice Guidelines in Oncology: Adult Cancer Pain, which is available at: http://www.nccn.org/professionals/physician_gls/pdf/pain.pdf, or consult with providers at a BOP MRC that routinely treats oncology patients.*

[21]CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. *Morbidity and Mortality Weekly Report MMWR Morb. Mortal. Wkly. Rep.* Mar 2016;65(Early Release). Accessed at: http://www.cdc.gov/media/modules/dpk/2016/dpk-pod/rr6501e1er-ebook.pdf

[22] NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) – Adult Cancer Pain, Version 2.2016. Available at http://www.nccn.org/professionals/physician_gls/pdf/pain.pdf.

# 11. DENTAL PAIN MANAGEMENT

➔ *Please consult with an institution dentist or Regional Chief Dentists should any questions arise related to the appropriate treatment of dental pain.*

➔ *See Appendix 13, Dental Pain Management, for recommended medications and dosing.*

## TYPES OF DENTAL AND OROFACIAL PAIN

Dental and orofacial pain may be the result of many diseases or conditions directly affecting the teeth (**ODONTOGENIC PAIN**) or the tissues within the oral cavity or nearby structures (**NONODONTOGENIC PAIN**). Pain can also occur after treatment by the dentist or an oral surgeon. Given this range of possibilities, diagnosing the source and treating the underlying condition is essential when treating dental related pain.

- **ACUTE PAIN**, as a result of trauma or surgical intervention, subsides as healing takes place.
- **CHRONIC OROFACIAL PAIN (COP)** conditions are characterized by ongoing pain in the head and face region and are divided into several categories:
  - **MUSCULOSKELETAL** (temporomandibular joint and masticatory muscular disorders)
  - **NEUROPATHIC** (pain resulting from damage or alteration to peripheral or central pain pathways)
  - **VASCULAR** (headaches and migraines)

**Orofacial pain frequently has significant effects on psychological health.** Depression and anxiety are very common, and psychological therapies are as important, and often more important, than pharmacologic measurements. True COP conditions often require a multidisciplinary team approach for pain management.

## NONOPIOID ANALGESICS FOR DENTAL PAIN

Nonopioid analgesics for dental pain include the nonsteroidal anti-inflammatory drugs (NSAIDs) and acetaminophen (APAP).

➔ *NSAIDs have been shown to be the most effective of all analgesic medications commonly used in dentistry, including the opioid analgesics.*

### USE OF NSAIDS IN MOST CASES

NSAIDs are effective for the management of mild, moderate, or severe dental pain; studies have shown that NSAIDs may be all that is required to manage any level of postoperative pain.

- All NSAIDs have similar analgesic, antipyretic, and anti-inflammatory efficacy, and there is no convincing evidence to indicate that a particular NSAID is more effective than other members of this drug class.
- Most cases of acute dental pain include an inflammatory component. For this reason, NSAIDs are the most rational first-line agents. Ibuprofen is regarded as the prototype of this large group as a result of its unsurpassed efficacy, low side-effect profile, and low cost.
- Acetaminophen has analgesic and antipyretic properties and is devoid of the side effects that accompany the NSAIDs; therefore, it is the analgesic of choice if there is a contraindication to an NSAID.

### REGIMENS OF COMBINED NONOPIOIDS

When no contraindications exist, a combined regimen of an NSAID and acetaminophen provides greater analgesic efficacy than does either agent alone, and this strategy may obviate the need to add opioid medications.

- The combination may be used for short-term treatment of acute and postoperative severe dental pain levels, and for exacerbation periods of COP levels.
- Regimens of these nonopioids, every 6 or 8 hours, provide therapeutic benefit and minimize the potential for side effects.
- To manage dental pain beyond the acute phase, these medications are most effective when given regularly at the lowest effective dose and frequency.

**Importance of Compliance:** Since most dental and postoperative pain is acute, and the inflammatory process peaks quickly and is sustained until healing occurs, compliance to a consistent regimen schedule is key to the success of analgesic efficacy (particularly during the initial 24–72 hours).

If a patient fails to respond adequately after maintaining an optimal dosing schedule for 24–72 hours, an alternative agent may be considered.

## OPIOID ANALGESICS AS ADJUNCTS IN TREATING DENTAL PAIN

Patients who can tolerate NSAIDs such as ibuprofen (or in combination with acetaminophen) should be first given maximally effective doses based on the patient's pain report.

- Regardless of pain severity, opioids should NOT be considered as the analgesic of first choice for dental pain. The provider should seek to optimize dosages of nonopioid agents and then, if necessary, add an opioid to the regimen as needed for breakthrough pain. Opioids should *only* be considered for dental pain in combination with acetaminophen and/or an NSAID.
  - ➔ *In other words, for dental pain, opioids should only be used as adjuncts to nonopioids that are given initially for 24–72 hours and maintained at maximally effective doses.*
- For COP, opioids are not advocated, and should be avoided.

### USE OF CODEINE FOR DENTAL PAIN

If an opioid is necessary for dental pain, codeine should be the first one to consider. Patients who cannot tolerate NSAIDs should be given acetaminophen combinations with codeine.

- Although commonly available, formulations combining acetaminophen with opioids are disadvantageous as the relative doses of nonopioid to opioid are often inappropriate.
- When using opioids in combination, the principle of maximizing the nonopioid before adding the opioid must be maintained.

  ***For example:*** Two tablets of Tylenol® with Codeine Tablets #2 (equivalent to 600 mg APAP/30mg codeine) is preferable over one tablet of Tylenol® with Codeine Tablets #3 (300 mg APAP/30mg codeine).
- The combination of 600–650 mg of acetaminophen with 60 mg of codeine produces very effective analgesia in post-operative dental pain patients.
- If codeine (or hydrocodone) is insufficient or contraindicated, oxycodone should be the alternative for acute dental postoperative pain.

# 12. COMMUNICATION STRATEGIES

In order to effectively manage pain, providers must skillfully employ a variety of communication strategies to improve patient outcomes and reduce conflict. Unlike other areas of medicine, pain management must disproportionately rely on subjective means of assessment. As a result, providers should employ two separate categories of communication strategies: ***Patient-Directed*** and ***Provider-Directed***. It is also important to set ground rules with the patient and to know how to deal with problematic communication, should it arise.

## PATIENT-DIRECTED COMMUNICATION

Patient-directed communication occurs when the patient supplies information to the provider. In this situation, the patient decides on the quantity, quality, and depth of information to share.

**Providers should attempt to communicate by:**

- **Asking open-ended questions** (*Tell me about your pain. Tell me how you've been feeling*.) rather than closed-ended questions that can be answered by either "yes" or "no" (*Are you in pain today?*).
- **Using pointed questions** (*How many times during the past week have you made a decision to be more active?*) to re-direct the patient to provide concrete, detailed information, especially when the patient veers off target or gives information that is too general.
- **Avoiding leading questions** that express expectations in one direction or another (*What has been most difficult for you this week with regard to your pain? Are you feeling better this week?*). Such questions can also misdirect the conversation or be perceived as dismissive by the patient.
- **Allowing the patient to provide the majority of information.**

## PROVIDER-DIRECTED COMMUNICATION

Provider-directed communication, by contrast, is when information originates from the provider and is directed to the patient.

- **Good examples** of provider-directed communication include disease-state education, informed consent, and the Opioid Pain Management Agreement.
- **The key to quality provider-directed communication** is tailoring the technical complexity to the educational level of the patient, assessing content comprehension (e.g., having patients summarize in their own words), and asking how they might explain the information to someone else.

*(Section 12. COMMUNICATION STRATEGIES continues on the next page.)*

## SETTING GROUND RULES

Conversations regarding pain management have the potential to cause conflict, especially in the correctional setting. It is vital, therefore, to clearly set the ground rules early on.

- Clearly and explicitly explain local policies on pain management and/or pain agreements.
- Determine realistic expectations of pain therapy with the patient and explain that the complete resolution of chronic pain is unrealistic and that treatment goals are related to improved functionality, as opposed to pain alleviation.
- Set the expectation of abstinence from illicit drugs and alcohol.
- Be clear that threats or violence towards staff or self (either implied or explicitly stated) are not tolerated.
- State that honesty and straightforwardness are absolute requirements.
- Explain that pain management often requires a multidisciplinary approach to maximize results, and that a team of providers will be working with the patient.

## PROBLEMATIC COMMUNICATION

Instances of problematic communication can arise, such as:

- Conflicting and/or contradicting statements from patients.
- Lack of concrete and/or consistent signs/symptoms.
- Persistent use of "absolute" language from patients. ("*Only* these opioids work…nothing else does.")

If these trends arise, additional accountability and investigation should be explored. Despite the challenge, effective communication techniques lay the groundwork for a productive therapeutic relationship.

# DEFINITIONS

**ABERRANT DRUG-RELATED BEHAVIOR:** Behaviors broadly ranging from mildly problematic (such as hoarding medications) to felonious acts (such as selling medications). Simply, these are any medication-related behaviors that depart from strict adherence to the prescribed therapeutic plan of care.

**ADDICTION:** A primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use or compulsive use, continued use despite harm, and craving. (See more information under *Addiction* in *Section 5*.)

**ACUTE PAIN:** Acute pain usually develops suddenly and is usually sharp in quality. It serves as a warning of disease or a threat to the body. Acute pain can result from a range of events or circumstances, including the following. (See also *Mechanisms of Acute Pain* in *Section 3*.)

- Broken bones
- Burns or cuts
- Dental work
- Labor and childbirth
- Surgery

Acute pain might be mild or severe; it might last just a moment up to three months. Acute pain resolves when the underlying cause of pain has been treated or has healed. Unrelieved acute pain, however, might lead to **CHRONIC PAIN.**

**ALLODYNIA:** Pain caused by a stimulus that does not usually provoke pain such as simple touch or pressure from clothing (in contrast to **HYPERALGESIA**, which is increased pain from a stimulus that usually provokes pain). Allodynia is sometimes a symptom in patients with neuropathic pain.

**CHEEKING OR TONGUING:** An attempt by an inmate to hide a medication in his/her mouth, rather than swallowing it, to avoid detection by staff.

**CHRONIC PAIN:** Pain persists despite the fact that the injury has healed. Pain signals remain active in the nervous system for weeks, months, or years. Physical effects include tense muscles, limited mobility, a lack of energy, and changes in appetite. Emotional effects include depression, anger, anxiety, and fear of re-injury. Such a fear might hinder a person's ability to return to normal work or leisure activities. (See also *Mechanisms of Chronic Pain* in *Section 3*.)

**CHRONIC PAIN SYNDROME:** Chronic pain that consists of physical and psychological changes that include, but are not limited to, complaints of constant pain, subjective symptoms in excess of objective findings, self-limitations in activities of daily living, pain with no identifiable source, expressions of pain that are grossly disproportional to the underlying condition, substance abuse (prescription or non-prescription medications, alcohol), and a self-perception of occupational disability. Chronic pain syndrome is complex and involves multiple factors. It should be considered if an individual does not respond to appropriate medical care within a reasonable time frame. (*Source: http://www.mdguidelines.com/pain-chronic/definition*)

**CHRONIC OROFACIAL PAIN (COP):** Refers to conditions characterized by ongoing pain in the head and face region. (See more information in *Section 11, Dental Pain Management*.)

**CONTROLLED SUBSTANCE:** A drug, substance, or immediate precursor that is regulated by the federal Controlled Substances Act (CSA) because it has some potential for abuse or dependence. The CSA divides controlled substance drugs into five categories or "schedules" (I–V), according to the potential for abuse. More information is available at: *http://www.deadiversion.usdoj.gov/schedules/.*

**DIRECTLY-OBSERVED THERAPY:** When a health care worker or other designated individual watches the patient swallow every dose of the prescribed drugs, either at **PILL LINE** or individually. See **DIVERSION** below.

**DIVERSION:** Any act or attempt to use legal and medically authorized medications for uses that are illegal and/or typically not medically authorized or necessary. Examples include **CHEEKING** medications at **PILL LINE** and manipulation of a fentanyl patch.

**HYPERALGESIA:** Typically a form of **CHRONIC PAIN**, hyperalgesia is increased sensitivity to pain, which may be caused by damage to nociceptors or to peripheral nerves, or by changes in the central nervous system. See also **OPIOID-INDUCED HYPERALGESIA** below.

**IDIOPATHIC PAIN:** Pain that has no apparent underlying cause. This type of pain is not **NOCICEPTIVE**, **NEUROPATHIC**, or even **PSYCHOGENIC**. Although its origin is often a mystery, idiopathic pain is very real, and can be difficult to treat.

**INTERDISCIPLINARY PAIN REHABILITATION (IPR):** The standard of care for chronic pain management, IPR combines physical reconditioning with relaxation training, mental health education, activity modification, and elimination of aberrant pain behaviors.

**MULTIMODAL VS. UNIMODAL TREATMENT:** Ordering a combination of pain treatments such as physical therapy, medications, and psychotherapy vs. ordering just one type of treatment.

➔ *Multimodal treatment is the preferred method of treatment for **CHRONIC PAIN**.*

**NARCOTIC:** Derived from the Greek word *narlotikos* or *narkos*, meaning to numb, deaden, or induce narcosis; term is commonly used to include opiates, opioids, and substances such as cocaine and methamphetamines that are actually stimulants.

**NEUROPATHIC PAIN:** A pathological change in the peripheral nervous system; pain due to nerve damage or abnormal processing of signals in the peripheral and central nervous system. Neuropathic pain can be acute or chronic in nature. Examples include postherpetic neuralgia, diabetic neuropathy, radiculopathy, brachial plexopathy, phantom limb pain, and pain resulting from spinal cord injuries.

**NOCICEPTION:** The process of detection and signaling the presence of a noxious stimulus.

**NOCICEPTORS** are sensory nerve cells that respond to damaging or potentially damaging stimuli by sending signals to the spinal cord and brain.

**NOCICEPTIVE PAIN:** Pain that arises from actual or threatened damage to non-neural tissue and is due to the activation of nociceptors. Typical examples include osteoarthritis and chronic pancreatitis. (See more information under *Nociceptive Pain* in *Section 4*.)

**ODONTOGENIC PAIN:** Dental and orofacial pain resulting from diseases or conditions directly affecting the teeth. **NONODONTOGENIC PAIN** refers to pain from conditions affecting the tissues within the oral cavity or nearby structures. (See more information in *Section 11, Dental Pain Management*.)

**OPIATE:** A medication or substance containing or derived from opium—such as heroin, morphine, or codeine. This term is a broader term than opioid.

**OPIOID:** A medication or substance possessing properties or characteristics of an opiate, but not derived from opium—such as methadone, fentanyl, or oxycodone.

➔ *In this guidance, the term **"OPIOID"** is used to include both opiates and opioids.*

**OPIOID-INDUCED HYPERALGESIA:** Clinically presents with increased pain or increased pain sensitivity, without a change in the underlying medical condition. It is clinically confirmed by observing unremitting, or perhaps increased, pain in response to increases in the **OPIOID** dose. (See more information under *Opioid-Induced Hyperalgesia* in *Section 4*.)

**PHYSICAL DEPENDENCE:** State of adaptation, manifested by a drug class-specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist. Physical dependence does not, in and of itself, imply **ADDICTION**. (See more information under *Physical Dependence* in *Section 5.*)

**PILL LINE:** A place where medical staff administer medications to inmates, using **DIRECTLY-OBSERVED THERAPY** to ensure that inmates properly consume their medication.

**PSEUDOADDICTION:** Describes patient behaviors that may occur when pain is undertreated. Patients with unrelieved pain may become focused on obtaining medications, "clock watch," and otherwise seem to be inappropriately "drug seeking." Behaviors such as illicit drug use and deception can occur in the patient's efforts to obtain pain relief. In contrast to true **ADDICTION**, the behaviors in pseudoaddiction resolve when the pain is effectively treated. (See also *Pseudoaddiction* in *Section 5.*)

**PSYCHOGENIC PAIN (PSYCHALGIA):** Pain disorder associated with psychological factors. Some types of mental or emotional problems can cause, increase, or prolong pain. Headaches, muscle pains, back pain, and stomach pains are some of the most common types of psychogenic pain. (See also *Psychogenic Pain* in *Section 4.)*

**PQRSTU FORMAT:** A format that may be used to document the patient's pain in the *subjective pain evaluation* section of the medical record. (See *Evaluate and document subjective pain* in *Section 8*.). Other formats that include the same information may also be used.

- **P**rovokes pain – what incites the pain as well as palliates the pain?
- **Q**uality of pain
- **R**adiation of pain – what is the region or location of the pain?
- **S**everity of subjective pain using a **VISUALIZED ASSESSMENT SCALE (VAS)** of 1–10
- **T**ype of pain
- F**U**nctional status

**SUBSTANCE ABUSE:** The use of any substance for non-therapeutic purposes, or use of medication for purposes other than those for which it is prescribed.

**SOMATIC PAIN:** Generally, well-localized pain that results from the activation of peripheral nociceptors originating in the skin, ligaments, muscles, bones, or joints without injury to the peripheral nerve or central nervous system. (See more information in *TABLE 2, Classification of Nociceptive Pain,* in *Section 4*.)

**TEAMS INVOLVED IN PAIN MANAGEMENT IN THE BOP:**

➔ *See full details in Section 6, Team Approach to Pain Management in the BOP.*

- **MEDICAL TREATMENT TEAM (MTT):** The healthcare providers directly overseeing the inmate's medical care in the institution.
- **PAIN MANAGEMENT TEAM (PMT):** In Care Level 1, 2, and 3 institutions, the multidisciplinary team developed to assist the MTT by overseeing pain care in the institution.

**TOLERANCE:** Tolerance is a form of neuroadaptation where there is a decreased or loss of therapeutic effect of a pharmacological agent over a prolonged period of use, requiring the need to escalate the dose of the agent in order to maintain the same pharmacological effect. Tolerance does not, in and of itself, imply **ADDICTION**. (See more information under *Tolerance* in *Section 5*.)

**VISCERAL PAIN:** Pain resulting from the activation of **NOCICEPTORS** of the thoracic, pelvic, or abdominal organs (viscera). It is felt as a poorly localized aching or cramping sensation and is often referred to cutaneous sites. (See more information in *TABLE 2, Classification of Nociceptive Pain*, in *Section 4*.)

**VISUALIZED ASSESSMENT SCALE (VAS):** The most common pain documentation form currently in use. The VAS scale is 0–10, with zero = "no pain" and 10 = "worst pain ever experienced." Some forms of the VAS use a scale of 1–10.

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## APPENDIX 1: QUESTIONS FREQUENTLY ASKED BY CLINICIANS

| | |
|---|---|
| **ASSESSMENT** | |
| **Is pain assessment required at every visit?** | The presence or absence of pain should be assessed and documented by the clinician as clinically indicated.<br>➔ *See Section 7, Focus of Clinical Visits.* |
| **How does the clinician assess the presence or absence of pain?** | By means of skills such as observation, palpation, auscultation, diagnostic testing, functional status, and/or physical examination. |
| **When must the clinician make a "full pain assessment"?** | The clinician should do a comprehensive pain assessment in a standardized format, such as ***PQRSTU***, when the patient complains of pain or when the clinician has determined that pain is present.<br>➔ *See Section 8, Initial Pain Evaluation and Documentation for more about assessing subjective and objective pain.* |
| **What is "subjective pain assessment"?** | This is the pain level (***S***everity in the ***PQRSTU***), as described by the patient. The ***SPAASMS*** score is used to allow patients to assess their own pain by means of a ***visualized assessment scale (VAS).*** The VAS range is 1–10, with 1 = "no pain" and 10 = "most pain experienced."<br>➔ *See Section 8 for more discussion on the SPAASMS score and Appendix 2b for a sample score card.* |
| **What is the "objective pain level"?** | The pain level determined to be present by the clinician, based on clinical assessment skills and training. |
| **Why must an objective pain level be clinically assessed and documented?** | This is necessary when clinicians are evaluating a patient population that may use aberrant behaviors to obtain and divert medications for inappropriate use. |
| **DOCUMENTATION** | |
| **Should the clinician document a pain assessment at each visit?** | **Yes.** The presence or absence of pain must be documented at each visit. If pain is present, the clinician completes a "full pain assessment," as described above.<br>★ ***Pain assessment cannot be placed in an administrative note.*** |
| **TREATMENT** | |
| **Is pain treatment required at each visit?** | **No.** Treatment is required only when the clinician determines that pain is present, as described above under **ASSESSMENT**. |
| **When is pain treatment prescribed or changed?**<br>**How is pain medication filled or refilled?** | **Only** at the time of a patient visit and documented on a clinical encounter.<br>★ ***An administrative note should not be used to prescribe pain treatment or to fill, refill, or change pain medication*** *unless* extenuating circumstances prevent a provider from performing an in-person, 30-day assessment for prescribing an ongoing controlled substance; or the admin note is used as a follow-up note from a recent clinical encounter. |
| **What types of treatment are appropriate for *acute pain*?** | For acute pain, both unimodal and multimodal approaches are used. |
| **What types of treatment are appropriate for *chronic pain*?** | For chronic pain, multimodal treatment is the norm; unimodal is rare. |
| **What is "unimodal" treatment?** | When a single class or type of treatment is used, e.g., treating only with physical therapy, or only medications, or only surgery. |
| **What is "multimodal" treatment?** | A combination of pain treatments such as physical therapy, medications, and psychotherapy. |

## APPENDIX 2A: PATIENT-SPECIFIC FUNCTIONAL SCALE (PSFS)

The ***PSFS*** questionnaire can be used to quantify activity limitations and measure functional outcome for patients with a variety of pain conditions. At the initial assessment visit, patients are asked to list up to three important activities that are difficult for them to do because of their pain, and then to rate their ability to perform each activity. This information is updated at subsequent assessment visits. Additional activities may be added if offered by the patient. At each visit, this self-assessment is done at the end of the history and prior to the physical examination. **The completed questionnaire should be kept in the patient's medical record.**

***NOTE:*** The ***rating scale*** is on the next page of this Appendix so that it can be copied and used by the patient without seeing the scores on the PSFS form itself.

### DIRECTIONS FOR THE INITIAL VISIT

1. **Read to the patient:**

   *I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your pain problem. Today, are there any activities that you can't do or that you find difficult because of your pain problem?*

2. **Write down each activity on the form. Show the rating scale (next page) to the patient and fill in the patient's rating for the activity.**

### DIRECTIONS FOR FOLLOW-UP ASSESSMENTS

1. **For each listed activity, read to the patient:**

   *When I assessed you on (most recent assessment date), you told me that you had difficulty with (name activity). Do you still have difficulty with that activity? If so, how would you score it today?*

2. **For each listed activity, show the rating scale (next page) to the patient, and fill in the patient's rating for the activity.**

   ★ ***Avoid showing the patient their previous scores in order to minimize response bias.*** ★

| NAME: | | REGISTRATION #: | | | | | |
|---|---|---|---|---|---|---|---|
| ACTIVITY | INITIAL | DATE OF VISIT | | | | | |
| | | | | | | | |
| | | SCORES | | | | | |
| 1. | | | | | | | |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| AVERAGE SCORE FOR THIS VISIT* | | | | | | | |

*** AVERAGE SCORE for each visit = sum of the activity scores/number of activities**
Minimum detectable change (90% CI) for average score = 2 points
Minimum detectable change (90% CI) for single activity score = 3 points

***Adapted from:*** Stratford, P., Gill, C., Westaway, M., Binkley, J. Assessing disability and change on individual patients: a report of a patient specific measure. *Physiother Can*. 1995;47(4):258–263.

**Patient: Please point to the number (0 –10) that best rates your ability to perform this activity <u>at this time</u>.**

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **I am UNABLE to perform activity due to pain.** | ← | | | | | | | | | **I am ABLE to perform activity without pain or limitations.** → |

## APPENDIX 2B: SPAASMS SCORE CARD

The ***SPAASMS*** score is a short, reliable tool that allows the patient to assess chronic pain symptoms, as well as other factors, at any point in time:

**S** – Score for pain, **P** – Physical activity levels, **A** – Additional pain medication, **A**–Additional physician/ER visits, **S** – Sleep, **M** – Mood, **S** – Side effects

| **Name:** | | | **Registration #:** | | | | | | **Date:** | |
|---|---|---|---|---|---|---|---|---|---|---|
| **VAS Pain Score** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **PATIENT SCORE** |
| | ***No pain*** ◄——————————► ***Most pain*** | | | | | | | | | | |
| **OTHER SCORES** | **0** | | **1** | | | **2** | | | **3** | | |
| **Physical activity** | Very good | | Good | | | Fair | | | Nil | | |
| **Additional pain meds** | Nil | | < 4 times/ month | | | < 8 times/ week | | | > 8 times/ week or daily | | |
| **Additional sick calls/ clinic visits for pain** | Nil | | Once a month | | | Once a week | | | > 5/month | | |
| **Sleep quality** | Very good | | Good | | | Fair | | | Poor | | |
| **Mood** | Very good | | Good | | | Fair | | | Low | | |
| **Side effects** | Nil | | Mild | | | Moderate | | | Severe | | |
| | | | | | | | | | **TOTAL PATIENT SCORE:** | | |

***NOTE:*** The maximum score would be 25 for a patient who is not on pain medication at initiation of treatment (pain scored at 10, plus a score of 3 for each domain except side effects). The subsequent maximum score would be 28 (includes side effects of medication).

***EXAMPLE:***

| | |
|---|---|
| Base line score of initial assessment…..... | 22/25 (or 22/28 for patient already on pain medication) |
| First score after one month's treatment.... | 18/28 |
| Second score (next visit)……..… | 16/28 (indicates improvement) |
| Third score (next visit)…….…….... | 20/28 (change from previous score indicates deterioration) |
| Action taken…….…….. | Increase dose of medication or supportive therapy; change medication if higher score is due to side effects unable to be tolerated by patient. |
| Fourth score (next visit)…….…….. | 10/28 (indicates continued improvement) |

***Adapted from:*** Mitra F, Chowdhury S, Shelley M, Buettner P. Measuring clinical outcomes of chronic pain patients. Practical Pain Management Web site. *http://www.practicalpainmanagement.com/resources/diagnostic-tests/measuring-clinical-outcomes-chronic-pain-patients*. Published January 1, 2011.

## APPENDIX 3: NON-PHARMACOTHERAPEUTIC MODALITIES—USE AND EXPECTED OUTCOMES

| THERAPY/TREATMENT | REFERRAL DEPARTMENT | USE/EXPECTED OUTCOME |
|---|---|---|
| **Physical Mobility** | Physical Therapy | • Increased range of motion<br>• Improved functional status<br>• Improved strength and endurance |
| **Occupational Therapy** | Occupational Therapy | • Reconditioning for chronic disease-state affects |
| **Mind-Body Therapy** | Psychology | • Increased pain threshold<br>• Reduced pharmacological needs<br>• Relaxation skills training |
| **Cognitive Behavioral Therapy** | Psychology | • Increased and improved coping skills<br>• Promotion of self-management mind set<br>• Problem-solving skills training<br>• Habit-reversal training<br>• Communication skills training<br>• Goal-setting training<br>• Changed perception of pain<br>• Changed emotional response to pain |

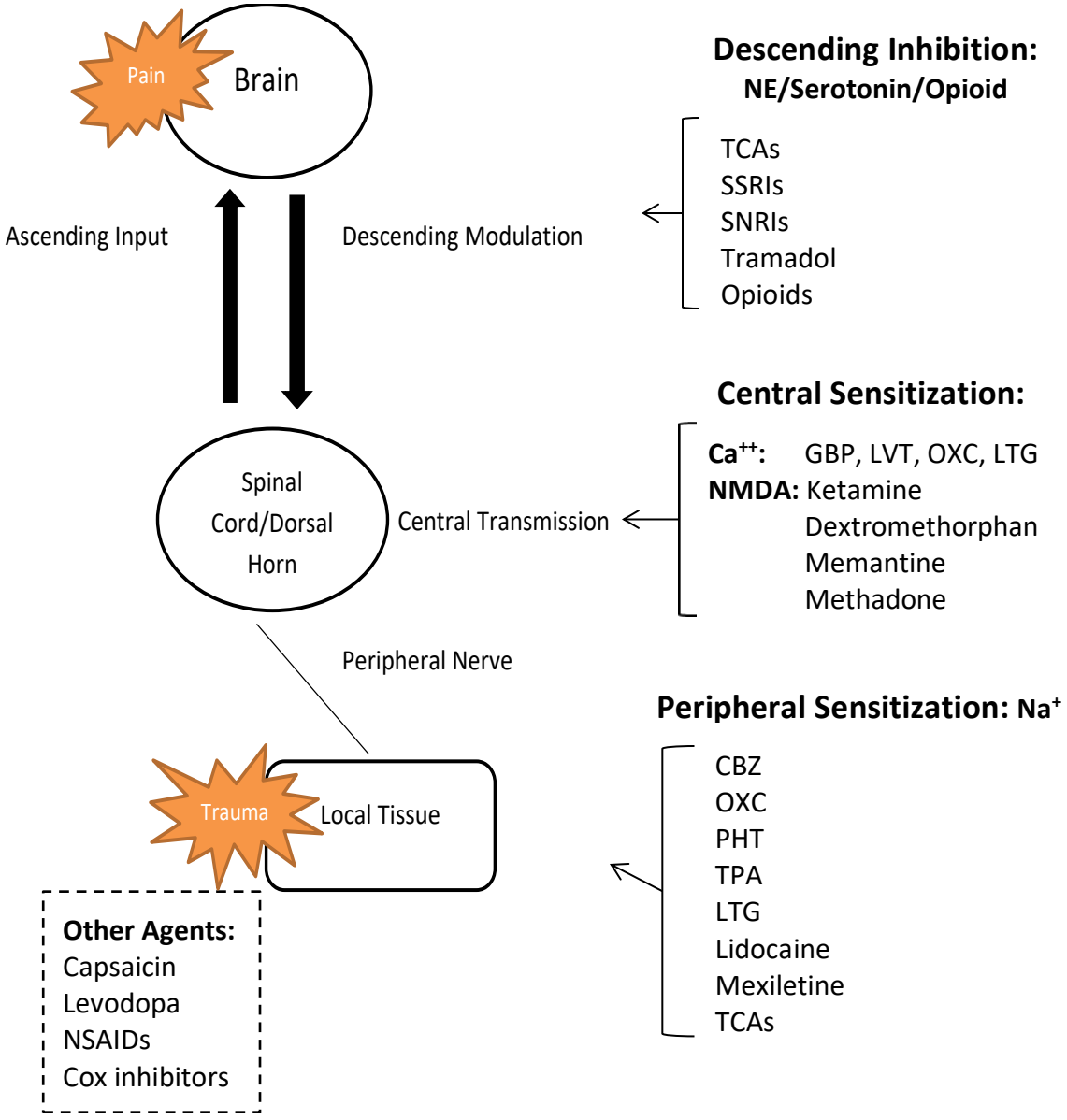
## APPENDIX 4: NON-PHARMACOTHERAPEUTIC MODALITIES—DESCRIPTIONS

| PHYSICAL/OCCUPATIONAL THERAPY | |
|---|---|
| **Manual Manipulation** | Manual manipulation or mobilization of the spine to enhance spinal mobility is most common. However, most other joints can be mobilized if indicated. The philosophy behind manual therapy is to enhance joint mobility and change peripheral afferent input—thus having an effect on painful conditions. Manual therapy is used for many joint conditions, but its benefits for acute, low back pain have the most evidence. |
| **Therapeutic Exercise** | Therapeutic exercise is most helpful in patients with chronic pain. Patients can strengthen muscles, while increasing flexibility and range of motion. The resulting weight loss that many patients experience may help alleviate pain in conditions such as osteoarthritis. There is also evidence of psychological benefits from decreased stress and anxiety. Therapeutic exercise can sometimes include tai chi, Pilates, or yoga. |
| **Heat Therapy** | Heat causes vasodilation, helping to bring oxygen to the injured site and take away metabolic wastes and pain mediators. It also relaxes muscles and decreases muscle spasms that can exacerbate pain. Heating devices range from heating wraps for superficial heat therapy to deep heating modalities such as ultrasound. Heat therapy can be used for almost any joint or muscular pain, but is typically not used for patients with acute injury or decreased sensation. |
| **Cold Therapy** | The opposite of heat therapy, cold therapy causes vasoconstriction of blood vessels, thereby reducing edema and inflammation at the site of injury. Cold therapy also slows down nerve conduction and hemorrhage, which can reduce pain. Methods of delivering cold therapy include ice packs, ice massage, cold water immersion, and vapo-coolant spray. Cold therapy can be used for almost any joint or muscular pain, but is especially effective during the initial inflammatory stage or as an analgesic. |
| **Stretching** | This method is used to lengthen muscle and increase flexibility, which helps in preventing injury. Stretching can also relieve muscle spasm and stiffness, and may stimulate local endorphin release. |
| **Transcutaneous Electrical Nerve Stimulation (TENS)** | This method utilizes the “gate control” theory of pain. Electrodes placed on the skin stimulate certain nerve fibers to block the transmission of pain to the brain. There is some evidence that TENS might stimulate endorphin release, as well. The use of TENS is considered an important nonpharmacological component of chronic neuropathic pain. |

*(Appendix 4, page 1 of 2)*

| **PSYCHOLOGICAL INTERVENTIONS** | |
|---|---|
| **Imagery and Distraction** | These techniques are used to divert a patient's attention away from pain. An example of *imagery* would be picturing one's self in a safe place or remembering a pleasant experience. *Distraction* techniques often include music, focusing on breathing, or sometimes virtual reality programs. Both sets of techniques are very useful in acute or procedural pain, but may also have a place in chronic pain management. |
| **Relaxation** | Similar to imagery and distraction, this technique is also used to help divert the patient's focus away from pain. It may actually be better at helping to reduce the anxiety related to pain. This technique could be used for a wide variety of pain conditions and can be individualized to each patient. Sample methods include pet therapy, music, and rhythmic breathing. |
| **Cognitive Behavioral Therapy** | This technique helps a patient to identify, monitor, and evaluate negative thoughts associated with pain. Once this is accomplished, patients have an increased sense of control, which they can use to modify their perception of the pain and decrease any maladaptive behaviors associated with it. This approach is most useful when chronic pain is combined with psychological comorbidities. |
| **Acceptance and Commitment Therapy (ACT)** | Acceptance and Commitment Therapy is a form of cognitive behavioral therapy that uses mindfulness and behavioral activation to increase patients' psychological flexibility. The therapy has been shown to increase effective action; reduce dysfunctional thoughts, feelings, and behaviors; and alleviate psychological distress for individuals with a broad range of mental health issues (including DSM-5 diagnoses, coping with chronic illness or pain, and workplace stress). |
| **Biofeedback** | This technique trains the patient to voluntarily control certain elements of their physical response to pain, such as heart rate, skin temperature, and muscle tension. Biofeedback can work well for headache, low back pain, and myofascial pain. |
| **Hypnotic Analgesia** | This technique involves the use of hypnosis to reduce and/or eliminate organically-based pain sensations. Practitioners using these techniques require specialized training. |
| *(Appendix 4, page 2 of 2)* | |

## APPENDIX 5: RECEPTOR LOCATIONS OF ANTINEURALGIC AGENTS




***This chart should be used as a guide to help select medications for pain management. Providers should try to avoid selecting medications that duplicate receptor antagonism.***

**CBZ** = carbamazepine; **GBP** = gabapentin; **LTG** = lamotrigine; **LVT** = levetiracetam; **NE** = norepinephrine; **NMDA** = N-methyl-D-asparate; **NSAID** = nonsteroidal anti-inflammatory drug ; **OXC** = oxcarbazepine; **PHT** = phenytoin; **SSRI** = selective serotonin re-uptake inhibitor; **TPA** = topiramate; **TCA** = tricyclic antidepressant.

***Adapted from:***
2011 ASHP Foundation Pain Management and Palliative Care *and*
Gottschalk A, Smith DS. New concepts in acute pain therapy: preemptive analgesia. *Am Fam Physician*. 2001;63(10):1979–1985.

## APPENDIX 6: MEDICATIONS FOR COMMON CAUSES OF ACUTE PAIN

### DENTAL PAIN

See *Appendix 13, Dental Pain Management*.

### DYSMENORRHEA

| Treatment Options | |
|---|---|
| **1st line** | • **Naproxen** 250–500mg BID<br>• **Ibuprofen** 400–800mg TID-QID |
| **2nd line** | • **Other NSAIDs:** diclofenac, meloxicam, indomethacin, sulindac<br>• **Acetaminophen** |

### LOWER BACK PAIN

| Non-Pharmacologic Treatment Options | |
|---|---|
| • Aerobic exercise<br>• Patient education/expectations<br>• Physical Therapy: stretching, strengthening, manual therapy | |
| **Pharmacologic Treatment Options*** | |
| **1st line** | • **Acetaminophen *and/or* NSAID** (Ibuprofen 400–600mg TID-QID or Naproxen 250–500mg BID) |
| **2nd line** | • **Ketorolac IM** (5 days maximum) |
| **3rd line** | • Opioids** |

* ***Consider muscle relaxant*** *if the patient has spinal cord impingement with the presence of spasms (see BOP National Formulary for current restrictions):*

**1st line** = baclofen (5-20mg TID-QID, max of 80mg/day)

**2nd line** = tizanidine (2-4mg TID-QID, max of 24mg/day)

** ***Opioid Use in Lower Back Pain:*** In the absence of definitive data, use of opioids for lower back pain is a matter of clinical judgment. NSAIDs, acetaminophen, and skeletal muscle relaxants may suffice for most patients. If opioids are used, it is advisable to limit to short-term use and to consider scheduled rather than as-needed dosing. One strategy is to limit opioids to bedtime use to facilitate sleep, while helping at-risk patients reduce the chances of developing dependence or tolerance. See *Bowel Regimen for Chronic Opioid Use in Appendix 7.*

### SPRAINS AND STRAINS

| Non-Pharmacologic | Pharmacologic |
|---|---|
| **R** = Rest<br>**I** = Ice<br>**C** = Compression<br>**E** = Elevation<br>***PLUS:*** Physical or occupational therapy, as appropriate. | **1st line** = **NSAIDS** (generally for 5 to 7 days, depending on extent of injury) |

## APPENDIX 7: MEDICATIONS FOR COMMON CAUSES OF CHRONIC PAIN

***NOTE ABOUT CHRONIC OPIOID USE:*** Although not a contraindication, the risks associated with long-term opioid use for chronic conditions—such as headache, fibromyalgia, and chronic low back pain—likely outweigh the benefits.

## BOWEL REGIMEN FOR CHRONIC OPIOID USE

| Treatment Options | |
|---|---|
| ★ ***Every patient given an opioid on a chronic basis should be on a bowel management regimen.*** ★ | |
| **1st line** | *Twice daily:* **Docusate** 50–500mg/day in divided doses ***AND*** **Senna** 15mg daily to 100mg in divided doses |
| **2nd line** | • **Bisacodyl** suppositories (10 mg daily ***OR*** every other day) |
| **3rd line** | • **Lactulose** 10–20 grams PO PRN<br>• **Magnesium citrate** PRN |

## NEUROPATHIC PAIN

Neuropathic pain is caused by damage to or disease of the peripheral or central nervous system responsible for bodily sensation (the somatosensory system).

| | Treatment |
|---|---|
| **1st line** | • **TCA** (i.e., nortriptyline, desipramine*****, or amitriptyline)<br>***OR***<br>• **SNRI** (duloxetine or venlafaxine)<br>➔ ***If TCA or SNRI insufficient****, consider changing drug, i.e., change from nortriptyline to desipramine OR change from TCA to SNRI. If a patient fails to respond to one TCA or SNRI, a different TCA or SNRI should be considered prior to moving to 2nd line agents.*<br>➔ ***If TCA or SNRI is somewhat effective****, consider add-on of oxcarbazepine.* |
| **Add-on to 1st line agent** | • **Oxcarbazepine** (10–20mg/kg divided TID and titrate to effectiveness)<br>➔ ***If TCA and oxcarbazepine insufficient****, add 2nd line agent.* |
| **2nd line** | • **Gabapentin** (titrated to 900–3200mg divided TID)<br>***OR***<br>• **Pregabalin**<br>➔ *Gabapentin or pregabalin can be used in combination with TCA.*<br>➔ ***Adjunctive:*** *Topical such as capsaicin or anesthetic (lidocaine)* |
| Reserved for extreme cases such as cancer cases with visceral pain or lack of improvement of neuropathic pain such as severe spinal stenosis or other spinal cord injuries:<br>• **Methadone**** up to 20mg/day, with *bowel regimen*.<br>• If methadone is unavailable, use low-dose **oxycodone,** with *bowel regimen*. | |
| ***** **Desipramine** tends to have less side effects than other TCAs.<br>****** **Methadone:** Refer to *BOP National Formulary* for current prescribing restrictions. Methadone is utilized in neuropathic pain for its activity at NMDA receptors, rather than the drug's short-lived effects on opioid mu-receptors. | |

## OSTEOARTHRITIS

| Non-Pharmacologic Treatment Options | |
|---|---|
| • Exercise<br>• Weight loss<br>• Patient education/discussion of expectations<br>• Shoe inserts | |
| **Pharmacologic Treatment Options** | |
| **1st line** | • Acetaminophen (up to 3g/day) +/– NSAIDs |
| **Adjunctive agents** | • Calcium/Vitamin D<br>• Topical agents |
| **Last line/refractory osteoarthritis*** | • Intra articular steroid injections<br>• Hyaluronic acid injections |
| ***Opioid use in osteoarthritis patients:*** Opioid analgesics may be beneficial for short-term use and should be utilized only as a last line agent. See also *bowel regimen*. | |

## SOMATIC PAIN

Somatic pain is well-localized pain that results from activation of peripheral nociceptors, without secondary injury to the peripheral or central nervous system.

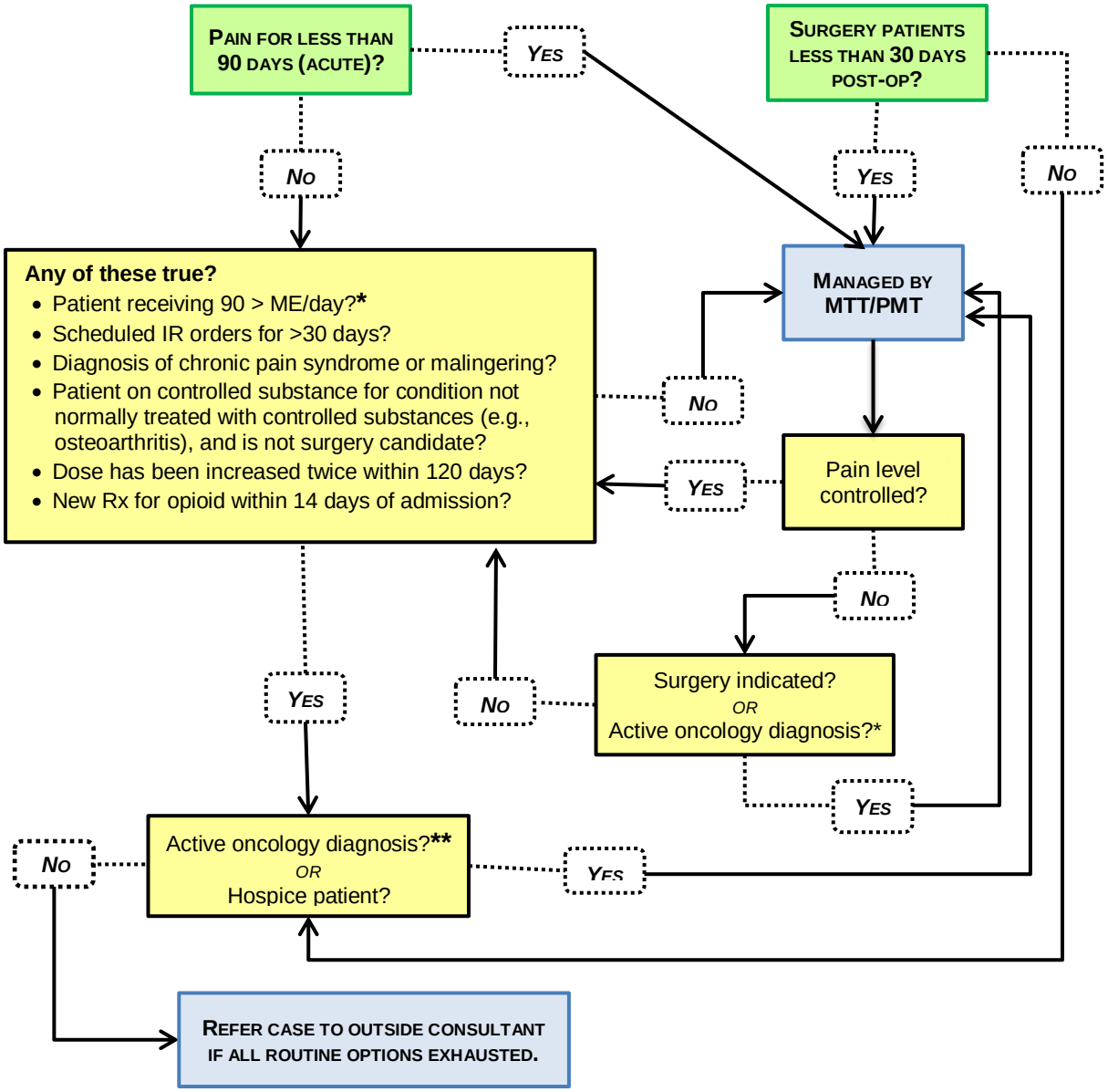
| VAS Pain Scale | Treatment Options |
|---|---|
| **1–4 (Mild)** | • Acetaminophen* *scheduled* ***AND/OR*** NSAID** *scheduled* |
| **5–7 (Moderate)** | • Acetaminophen* *scheduled* **+** NSAID** *scheduled*<br>• Acetaminophen* *scheduled* **+** NSAID** *scheduled* + low-dose sustained release opioid with *bowel regimen* |
| **8–10 (Severe)** | • Acetaminophen* *scheduled* **+** NSAID** *scheduled* + higher-dose sustained opioid with *bowel regimen* |
| **Adjunctive agents for all pain levels** | • Calcium/vitamin D<br>• Topical agents (OTC muscle rubs, capsaicin, lidocaine) |
| ***Acetaminophen use in hepatic patients:*** Acetaminophen is *not contraindicated* in hepatic patients and has an important place in pain management therapy. Acetaminophen is safe and effective ***up to 2 grams per day,*** as long as patients are not actively drinking alcohol. LFTs should be monitored routinely.<br>****For patients chronically taking NSAIDs:*** providers should consider adding a PPI. | |

## VISCERAL

Visceral pain originates in the organs and can be difficult to localize. Visceral pain is experienced by 40% of the population, and 28% of cancer patients suffer from pain arising from intra-abdominal metastasis or caused by treatment. Visceral pain is mediated by both peripheral and central pathways, involving numerous receptors, including, but not limited to, several ion channels (voltage-gated calcium and sodium channels, NMDA, GABA-B) and Kappa opioid receptor. It is suggested that combination therapy has greater pain reduction than single-agent use.

| Treatment Options | |
|---|---|
| **Gabapentin and Pregabalin** | • Titrate to effective dose, 900–3200mg/day divided TID<br>• Titrate to effective dose, 300–600mg/day divided TID |
| **Methadone** | • Up to 20mg/day QD or BID |
| **Oxycodone** | • Preferred opioid due to kappa activity. Low dose preferred. See *bowel regimen* above. |
| **Oxcarbazepine** | • Titrate to effective dose 10–20mg/kg/day divided TID |
| **TCA (Desipramine or Nortriptyline)** | • Titrate to effective dose, 25mg–100mg/ day QD |
| **SNRI (Venlafaxine or Duloxetine)** | • Titrate to effective dose, Venlafaxine: 150–225mg/day QD, Duloxetine: up to 60mg/day QD |
| **NOTE:** The use of opioids, while commonly indicated in other forms of pain, may result in adverse GI reactions and an overall worsening of symptoms if used in the treatment of visceral pain. | |

## APPENDIX 8: CONTROLLED SUBSTANCES PAIN MANAGEMENT ALGORITHM




* See *Appendix 11, Opioid Equianalgesic Dose Chart.*

** Currently receiving or being worked up to receive chemotherapy and or radiation therapy.

*** Once reviewed by CPMT or MRPT, will be referred back to PCPT with recommendations.
***Note:*** Regional Medical Director should be informed prior to review by CPMT.

**ME** = Morphine equivalents
**IR** = Immediate release medicines
**MTT** = Medical Treatment Team
**PMT** = Local Pain Management Team

## APPENDIX 9: COMMON NONOPIOID ANALGESICS – SPECIFIC CONCERNS

| NONOPIOID ANALGESICS | | | | | |
|---|---|---|---|---|---|
| **Medication** | **Avg. Dose*** | **Adverse Events** | **Comments*** | **Dose Adjustment Required** | |
| | | | | **Renal Impairment** | **Hepatic Impairment** |
| Acetaminophen | 500–1,000mg | Hepatic toxicity with overdose; high doses may increase INR. | Does not have the anti-inflammatory effect of NSAIDS. | Yes | Yes |
| **Salicylates** | | | | | |
| Aspirin | 500–1,000mg | NSAID class effect** | Anti-platelet effect | Yes | Avoid use |
| Choline Salicylate | 870mg | | Anti-platelet effect; less effective than aspirin | | Use with caution |
| Diflunisal | 250–500mg | | Less GI effects and fewer platelet effects than aspirin | | Use with caution |
| Magnesium Salicylate | 500mg | | Mild pain relief | None noted | None noted |
| Sodium Salicylate | 325–650mg | | Mild pain relief, prophylaxis | None noted | None noted |
| **Proprionic Acid Derivatives** | | | | | |
| Fenoprofen | 200mg | NSAID class effect** | | Avoid use | |
| Flurbiprofen | 50–100mg | | Not to exceed 100mg per dose | | Yes |
| Ibuprofen | 200–400mg | | Fewer GI effects than other NSAIDs | | Use with caution |
| Ketoprofen | 25–50mg | | High GI side effects | Yes | Yes |
| Ketorolac | 10mg (PO) 15-30mg (IM) | | 5 days or less, due to high risk of ulcer; potent–30mg is equivalent to 12mg of morphine. | Avoid use | Use with caution |
| Naproxen | 250mg | | RA | | |
| Oxaprozin | 600mg | | Half-life = 24–69 hours | Yes | |
| **Acetic Acid Derivatives** | | | | | |
| Diclofenac | 25–100mg | NSAID class effect** | Only potassium formulation provides pain relief; fewer GI effects than other NSAIDS; RA | Not recommended for advanced renal disease | Use with caution |
| Etodolac | 200–400mg | | OA, RA, & JIA | | No dose adjustment required |
| Indomethacin | 25mg | | Limited use due to side effects: ocular effects, exacerbation of Parkinson's, epilepsy, psychiatric disorders. High GI side effects. Specifically used for ankylosing spondylitis. | | Use with caution |
| Sulindac | 150 mg | | OA, RA, gout, & ankylosing spondylitis | | |
| Tolmetin | 200–600mg | | OA, RA, & JIA | | None noted |

*Appendix 9, page 1 of 2*

| NONOPIOID ANALGESICS | | | | | |
|---|---|---|---|---|---|
| **Medication** | **Avg. Dose*** | **Adverse Events** | **Comments*** | **Dose Adjustment Required** | |
| | | | | **Renal Impairment** | **Hepatic Impairment** |
| **Femanic Acid Derivatives** | | | | | |
| Meclofenamate | 50–100mg | NSAID class effect** | Max benefit not seen for 2–3 weeks | Use with caution | Use with caution |
| Mefenamic Acid | 250mg | | Max use of 1 week | Use not recommended | Use with caution |
| **Enolic Acid/Benzothiazine Derivatives** | | | | | |
| Meloxicam | 7.5–15mg | NSAID class effect** | Higher risk of withdrawal; GI effect similar to non-selective NSAIDS | Not recommended for advanced renal disease | None needed for mild to moderate disease |
| Piroxicam | 10–20mg | | Acute and chronic RA & OA | None noted | Unknown |
| **Selective NSAIDs** | | | | | |
| Celecoxib | 200–400mg | Risk of cardiovascular events similar to non-selective NSAIDS** | Cox-2 selective | Not recommended for advanced renal disease | Yes |

**INR** = International normalized ratio (measure of blood coagulation)
**JIA** = Juvenile idiopathic arthritis (also called juvenile rheumatoid arthritis)
**OA** = Osteoarthritis
**RA** = Rheumatoid arthritis

* ***Average Dose:*** *For frequency and maximum daily doses, please contact a pharmacist for further information.*

** ***NSAID Black Box Warning:*** *Nonsteroidal anti-inflammatory agents (NSAIDs) may cause an increased risk of serious cardiovascular thrombotic events, myocardial infarction, and stroke, which can be fatal. This risk may increase with duration of use. Patients with cardiovascular disease or risk factors for cardiovascular disease may be at greater risk.*

*Ibuprofen is contraindicated for treatment of perioperative pain in the setting of coronary artery bypass graft (CABG) surgery.*

## APPENDIX 10: RECOMMENDED DOSING FOR PAIN MEDICATIONS – SELECTED OPIOIDS

| OPIOIDS | | | | | |
|---|---|---|---|---|---|
| **Medication** | **Opioid Receptor[23]** | **Starting Dose** | **Dose Adjustment** | | **Comments** |
| | | | **Renal** | **Hepatic** | |
| **Severe pain – agonists (no ceiling effect)** | | | | | |
| Morphine | Mu | • PO..... 10–30mg q3–4hr<br>• IM..... 5–10mg q3–4hr<br>• IV ..... 1–2.5mg q5min PRN<br>• SR..... 15–30mg q12hr<br>• Rectal. 10–20mg q3–4hr | Yes | May be required | • Drug of choice in severe pain.<br>• Use immediate release product with SR formulation for breakthrough pain. |
| Hydromorphone | Mu (primary), delta | • PO..... 2–8mg q3–4hr<br>• IM..... 0.5–1mg q3–4hr<br>• IV ..... 0.1–0.5mg q3–4hr<br>• Rectal. 2–4mg q3–4hr | Yes | Yes | • Higher potency than morphine.<br>• Slightly shorter duration than morphine. |
| Oxymorphone | Mu | • IM..... 1–1.5mg q3–4hr<br>• IV ..... 0.5mg initially<br>• Rectal. 5mg q3–4hr | May be required | Yes | • Higher potency than morphine.<br>• Same duration as morphine. |
| Levorphanol | Mu, keppa, delta, NMDA | • PO..... 2–4mg q6–8hr<br>• IM..... 2mg q6–8hr<br>• IV ..... 2mg q6–8hr | Use with caution | Use with caution | • Higher potency than morphine.<br>• Somewhat longer duration as morphine. |
| Meperidine | Mu | • PO..... 50–150mg q3–4hr<br>• IM..... 75–100mg q3–4h r<br>• IV ..... 5–10mg q5min PRN | Avoid | Use with caution | • Oral dosing NOT recommended.<br>• Do not use in renal failure.<br>• Toxic active metabolite.<br>• Not used for chronic pain |
| Fentanyl | Mu | • IM..... 0.05–0.1mg q1–2hr<br>• Transdermal: 2.5– 25mcg/hr<br>• Transmucosal: 200mcg | Yes | Use with caution | • Do not use transdermal for acute pain.<br>• Not for use in opioid naïve patients. |
| Methadone | Mu, NMDA | • PO..... 2.5–10mg q8–12hr (slowly titrated)<br>• IM..... 5-10mg q6–8hr | Yes | Avoid in severe disease | • Sedation can be severe.<br>• Long plasma half-life. |



[23] Tresoct AM, Datta S, Lee M, Hansen H. Opioid pharmacology. *Pain Physician*. 2008;11(2 Suppl):S133-S153. Accessed at www.painphysicianjournal.com

| OPIOIDS | | | | | |
|---|---|---|---|---|---|
| **Medication** | **Opioid Receptor[23]** | **Starting Dose** | **Dose Adjustment** | | **Comments** |
| | | | **Renal** | **Hepatic** | |
| **Moderate/Severe pain – agonists (no ceiling effect)** | | | | | |
| Hydrocodone | Mu | • PO..... 5–10mg q3–4hr PRN | Initiate with low dose | Yes with severe impairment | • Formulated with NSAIDS, acetaminophen, or aspirin.<br>• Weak opioid. |
| Oxycodone | Mu (primary), kappa | • PO..... 5–30mg q3–4hr | Yes | Yes | • May be formulated with aspirin, NSAIDS, or acetaminophen. |
| **Moderate pain – agonists (no ceiling effect)** | | | | | |
| Codeine | Mu | • PO..... 15–60mg q4–6hr<br>• IM..... 15–60mg q4–6hr<br>• IV ..... 15–60mg | Yes | Initiate at lower dose | • May be formulated with NSAIDS, acetaminophen, or aspirin.<br>• Weak opioid, generally not used for chronic pain. |
| **Mixed agonist/antagonists (all have ceiling effect)** | | | | | |
| Pentazocine | | • PO..... 50–100mg q3–4hr<br>• IM..... 30mg q3–4hr | Yes | Use with caution | • Potency similar to morphine; short duration.<br>• May precipitate withdrawal in opioid-dependent patients. |
| Butorphanol | | • IM..... 1–4mg q3–4hr<br>• IV ..... 0.5–2mg q3–4hr<br>• Intranasal .... 1mg (1 spray) q3–4hr | Yes | Yes | • May precipitate withdrawal in opioid-dependent patients. |
| Nalbuphine | | • IM..... 10 mg q3–6hr<br>• IV ..... 10mg q3–6hr | Yes | Yes | |
| **Partial agonists (all have ceiling effect)** | | | | | |
| Buprenorphine | Mu agonist, *kappa antagonist* | • IM..... 0.3mg q6hr<br>• IV ..... 0.3mg q6hr | Use with caution | Use with caution | • May precipitate withdrawal in opioid-dependent patients. |
| **Antagonists** | | | | | |
| Naloxone | *Mu antagonist* | • IV ..... 0.4–1.2mg | None noted | None noted | • To reverse opioid effect: 0.1–0.2mg every 2–3 minutes |
| **Atypical Opioids** | | | | | |
| Tramadol | Mu | • PO..... 50–100mg q4–6hr | Yes | Yes | • Maximum dose 400mg/day.<br>• Weak SNRI. |

*(Appendix 10, page 2 of 2)*

## APPENDIX 11: OPIOID EQUIANALGESIC DOSE CHART

| EQUIANALGESIC OPIOID CONVERSION RATIOS FOR PATIENTS PREVIOUSLY RECEIVING OTHER OPIOIDS | | | | | |
|---|---|---|---|---|---|
| **Opioid Agent** | **Equianalgesic to Morphine 50 mg PO** | | **Equianalgesic to Morphine 90 mg PO** | | **Initial Conversion Dose (mg) -- Not Equivalency Dose** |
| | **Oral Dose (mg)** | **Parenteral Dose (mg)** | **Oral Dose (mg)** | **Parenteral Dose (mg)** | |
| **CODEINE** | 333 | 200 | 600 | 360 | 50–67% of estimated oral equianalgesic dose |
| **FENTANYL** | N/A | 12.5 | N/A | 25 | *ONLY for converting to fentanyl from another opioid:* Use about 25 mcg/h fentanyl transdermally for every 90 mg of oral morphine or equivalent. See table below: *Initial Fentanyl Transdermal Dosage*. |
| **HYDROCODONE** | 50 | N/A | 90 | N/A | 50–67% of estimated oral equianalgesic dose |
| **HYDROMORPHONE** | 12.5 | 2.5 | 22.5 | 4.5 | 50–67% of estimated oral equianalgesic dose |
| **LEVORPHANOL** | 1.67 | N/A | 3 | NA | 50–67% of estimated oral equianalgesic dose |
| **METHADONE** | Variable | Variable | Variable | Variable | The methadone-to-morphine dosage proportion (%) is dependent on the morphine-equivalent dose of the previous opioid. Prescribers who do not routinely prescribe methadone should consult with a prescriber who does, prior to any change in therapy. |
| **MORPHINE** | 50 | 16 | 90 | 30 | 50–67% of estimated oral equianalgesic dose |
| **OXYCODONE** | 33 | N/A | 60 | N/A | 50–67% of estimated oral equianalgesic dose |
| **OXYMORPHONE** | 16 | 1.6 | 30 | 3 | 50–67% of estimated oral equianalgesic dose |

**NOTES:**

- **These are Estimates Only:** Many other equianalgesic dosing tables are available that may provide equivalent doses different from those shown here. Published equianalgesic ratios are considered crude estimates at best, and it is therefore imperative that careful consideration is given to individualizing the dose of the selected opioid.
- **Individualization of Initial Doses:** Initial doses should be individualized. Factors that should be considered include the patient's age and presence of coexisting conditions. Use additional caution with elderly patients (65 years and older) and in patients with liver, renal, or pulmonary disease.
- **Initial Dose:** It is recommended that the initial dose of the new drug should be reduced by 33–50% of the calculated dose for all potent opioids (except fentanyl and methadone) to allow for incomplete cross-tolerance. Many of these doses are based on clinical experience, rather than well-controlled trials.
- **Methadone:** When converting from another opioid to methadone, the calculated equianalgesic dose ratio of methadone varies, depending on the oral morphine-equivalent daily dose (MEDD) of the previous opioid. However, its potency relative to morphine is not linear. Ideally, methadone conversions (especially in patients who were previously receiving high doses of an opioid) should only be attempted in cooperation with a pain specialist or a specialist in palliative medicine.

- **Meperidine:** Meperidine is not included on this chart because it should be used for acute dosing only, not for chronic pain management. Meperidine has a short half-life and a toxic metabolite, normeperidine, whose accumulation can lead to seizures, confusion, tremors, or mood alterations.
- **Tramadol:** Tramadol can also be considered an atypical opioid analgesic. However, due to its weak opioid properties, it should not be considered equianalgesic to more potent opioids. Therefore, conversion from tramadol to more potent opioids should be initiated at opioid naïve starting doses.
- **Parenteral Dosing:** Parenteral dosing includes IV and subcutaneous administration. Onset and duration may vary slightly between these routes; however, doses remain approximately equal. The intramuscular route is not recommended because of variability in uptake of the drug and painful injection.
- **Conversion to Fentanyl Transdermal Patches from Another Opioid**

| INITIAL FENTANYL TRANSDERMAL DOSAGE | | | |
|---|---|---|---|
| **Oral 24-Hour Morphine Equivalent (mg/d)** | **Fentanyl Transdermal (mcg/h)** | **Oral 24-Hour Morphine Equivalent (mg/d)** | **Fentanyl Transdermal (mcg/h)** |
| **60–134** | 25 | **585–674** | 175 |
| **135–224** | 50 | **675–764** | 200 |
| **225–314** | 75 | **765–854** | 225 |
| **315–404** | 100 | **855–944** | 250 |
| **405–494** | 125 | **945–1034** | 275 |
| **495–584** | 150 | **1035–1124** | 300 |

  - ***Transdermal fentanyl should not be used in opioid-naïve patients.***
  - ***This table should not be used to convert from Fentanyl to other therapies***, because this conversion to Fentanyl is conservative. Use of this table for conversion to other analgesic therapies can overestimate the dose of the new agent.
  - There are no FDA-approved dosing instructions for converting patients from fentanyl to other opioids.
  - After discontinuing the fentanyl patch, titrate the new opioid according to the patient's level of pain relief and tolerability. Take into consideration that serum fentanyl concentrations decline gradually after removal of the patch, decreasing about 50% in approximately 17 hours (range, 13–22 hours).

*(Appendix 11, page 2 of 3)*

## References

1.) National Cancer Institute Pain (PDQ). Pharmacologic management. *http://www.cancer.gov/cancertopics/pdq/supportivecare/pain/HealthProfessional/page3*. (Accessed February 19, 2014).

2.) Management of Opioid Therapy for Chronic Pain. Washington, DC: VA/DoD Evidence-Based Clinical Practice Guideline Working Group, Veterans Health Administration, Department of Veterans Affairs, and Health Affairs, Department of Defense, May 2010 Available at *http://www.va.gov/painmanagement/docs/cpg_opioidtherapy_fulltext.pdf*.

3.) Adult Cancer Pain. NCCN Clinical Practice Guidelines in Oncology. February 2013. Available at *http://www.nccn.org/professionals/physician_gls/pdf/pain.pdf.*

4.) Strategies for Switching Between Opioid Analgesics. *Pharmacist's Letter/Prescriber's Letter*. August 2012.

5.) Opioids – Equianalgesic Dosages. GlobalRPh. *http://www.globalrph.com/narcotic.htm* (Accessed February 19, 2014)

6.) Duragesic® Package Insert: *http://www.duragesic.com/prescribing-information.html* (Accessed February 19, 2014).

## APPENDIX 12: RECOMMENDED DOSING FOR PAIN MEDICATIONS – ANTIDEPRESSANTS, ANTICONVULSANTS, ANTIARRHYTHMICS, TOPICAL AGENTS, AND MISCELLANEOUS

| Medication★ | Dose Range | Notes, Receptors Involved |
|---|---|---|
| **ANTIDEPRESSANTS** | | |
| **TCAs** | | |
| Amitriptyline | 10–150 mg/day | Norepinephrine (primary), SE, sodium channel, N-methyl-D-aspartate (NMDA) |
| Nortryptyline | 10–150 mg/day | |
| Desipramine | 10–150 mg/day | |
| Imipramine | 10–150 mg/day | |
| **Atypicals** | | |
| Venlafaxine | 18.75–225mg/day | Adrenergic and opioid receptor binding |
| Duloxetine | 60mg/day | Serotonin–norepinephrine reuptake inhibitor (SNRI) |
| Bupropion | 150–300mg/day | Dopamine-reuptake inhibitor |
| Trazodone | 150–300mg/day | Serotonin-reuptake inhibitor |
| **ANTICONVULSANTS** | | |
| Carbamazepine | 300–1200mg/day | Sodium voltage gated channel binding |
| Valproic Acid | up to 1200mg/day | |
| Phenytoin | 200–300mg/day | |
| Oxcarbazepine | 900–2400mg/day | |
| Gabapentin | 900–3600mg/day | Calcium channel binding |
| Pregabalin | 150–450mg/day | |
| Clonazepam | 0.5–6mg/day | GABAergic mechanism |
| Tiagabine | 18–54mg/day | GABA uptake inhibitor |
| Topirimate | 200–400mg/day | Sodium voltage gated channel binding |
| Lamotrigine | *Not effective for pain management* | |
| Levitiracetum | | |
| **ANTIARRHYTHMICS** | | |
| Mexiletine | 150–900mg/day | Sodium channel blocking effect.<br>Must demonstrate benefit from topical lidocaine first. |
| **TOPICAL AGENTS** | | |
| Capsaicin | 0.25%, 0.75% cream | Vanilloid agonist and C-fiber neurotoxin |
| Dibucaine | 1% ointment; max 24-hour dose of 30g | Topical anesthetic |
| Isosorbide spray | — | Local vasodilation |
| Ketamine gel | — | NMDA receptor antagonist |
| Lidocaine patch | 5% | Topical anesthetic |
| Lidocaine jelly/ointment | Max dose 4.5mg/kg, ≤300mg | Topical anesthetic |
| Nitroglycerin spray | 400mcg/48mg metered spray | Topically to bottom of feet only—local vasodilation |

*(Appendix 12, page 1 of 2)*

| Medication★ | Dose Range | Notes, Receptors Involved |
|---|---|---|
| **MISCELLANEOUS** | | |
| Prednisone | 5–60 mg/day | Intermediate-acting.<br>Adrenal and immune suppression; taper regimen. |
| Dexamethasone | 0.75–9mg/day in divided doses Q6–12 hours | Long acting: 72 hours. |
| Baclofen | 5mg 3 times a day; may increase 5mg/dose every 3 days to a maximum of 80mg/day | GABA-B agonist.<br>For spasticity.<br>Can be used intrathecal.<br>Chemically related to tricyclic antidepressants |
| Tizanidine | 4mg 3 times daily, maximum 36mg/day | Alpha-2 adrenergic agonist.<br>For spasticity, low back pain, trigeminal neuralgia. |
| Cyclobenzaprine | Immediate release tablet: 5mg Q8H, up to 10mg Q8H.<br>ER capsule: 15mg to 30mg daily. | Muscle relaxant; unknown mechanism of action. |
| Zonisamide | 100–200mg/day | Sodium & calcium channel blocker.<br>Use when carbamazepine and gabapentin cannot be used. |
| Calcium/Vit D | 1200mg/800IU/day recommended | Prohormone |
| Clonidine | 30mcg/hour, titrate. | Alpha2-adrenergic agonist.<br>Reserved for cancer patients with severe intractable pain that's unresponsive to other opioids. |
| ★ (1) Most of these medications are effective at low to mid-range doses when treating pain.<br>(2) Most of these medications should be started at low doses and tapered up. Please consult with a pharmacist for specific tapers. | | |

*(Appendix 12, page 2 of 2)*

## APPENDIX 13: DENTAL PAIN MANAGEMENT

| PAIN LEVEL | NSAIDS INDICATED | NSAIDS CONTRAINDICATED |
|---|---|---|
| **MILD**<br>• Simple extractions<br>• Complex Restorative procedures<br>• Periodontal scaling<br>• Endodontics<br>• Etc. | • **Ibuprofen[1] 200–400mg[2,3]**<br>*As needed for pain every 4–8 hours for 3 days.*<br>• If pain relief is inadequate, move to moderate pain level. | • **APAP 650–1000mg[4]**<br>*As needed for pain every 4–8 hours for 3 days.*<br>• If pain relief is inadequate, move to moderate pain level. |
| **MODERATE**<br>• Surgical extractions<br>• Quadrant periodontal flap surgery<br>• Surgical endodontics<br>• Etc. | • **Ibuprofen[1] 400–600mg[2,3]**<br>*Strict adherence every 4–8 hours for 24–72 hours; then, Ibuprofen as needed for pain for 3 days.*<br>***OR***<br>• **Ibuprofen[1] 400–600mg[2,3] *PLUS* APAP 650–1000mg[4]**<br>*Strict adherence every 6–8 hours for 24–72 hours; then, Ibuprofen as needed for pain for 3 days.*<br>• If pain relief is inadequate, move to severe pain level. | • **APAP 650–1000mg[4] *PLUS* Codeine 30–60mg**<br>*Strict adherence every 4–8 hours for 24–72 hours; then, APAP as needed for pain for 3 days.*<br>• If pain relief is inadequate, move to severe pain level. |
| **SEVERE**<br>• Surgical extractions of bony impactions<br>• Complex surgery<br>• Etc. | • **Ibuprofen[1] 400–600mg[2,3] *PLUS* APAP 650–1000mg[4] *PLUS* Codeine 30–60mg *OR* Oxycodone 5–10mg**<br>*Strict adherence every 6–8 hours for 48–72 hours; then, Ibuprofen as needed for pain for 3 days.* | • **APAP 650–1000mg[4] *PLUS* Oxycodone 5–10mg**<br>*Strict adherence every 6–8 hours for 48–72 hours; then, APAP as needed for pain for 3 days.* |

[1] Or equivalent NSAID (e.g., Naproxen sodium 550mg every 12 hours).

[2] Or Ibuprofen 800mg 3 times/day.

[3] Daily Ibuprofen doses should not exceed 2400mg.

[4] Daily acetaminophen (APAP) dose should not exceed 3200mg; if prescribing 1000mg, the indication is 3 times/day.

***Adapted from:*** Hersh EV, et al. Prescribing recommendations for the treatment of acute pain in dentistry. *Compend Contin Educ Dent*. 2011;32(3):22–30.

# APPENDIX 14: SIGNS OF OPIOID OVERMEDICATION AND OVERDOSE

## OPIOID OVERMEDICATION

***The most common signs of opioid overmedication include:***

- Unusual sleepiness or drowsiness
- Mental confusion, slurred speech, intoxicated behavior
- Slow or shallow breathing
- Pinpoint pupils
- Slow heartbeat, low blood pressure
- Difficulty waking the individual from sleep

➔ ***Patients who are overmedicated may progress to overdose.*** *Providers must monitor for this possibility and adjust medications to prevent a possible overdose.*

➔ ***Methadone can accumulate in the body over time****; as a result, methadone should only be used by those experienced in prescribing methadone for pain. Refer to the BOP National Formulary for current prescribing restrictions.*

## OPIOID OVERDOSE

***The most common signs of overdose include:***

- Pale and clammy face
- Limp body
- Fingernails or lips turning blue/purple
- Vomiting or gurgling noises
- Cannot be awakened from sleep or is unable to speak
- Very little or no breathing (10 breaths/min)
- Very slow or no heartbeat

➔ ***Signs of overdose require IMMEDIATE medical attention.***
*See Appendix 15, Treatment of Opioid Overdose.*

# APPENDIX 15: TREATMENT OF OPIOID OVERDOSE WITH NALOXONE

## DOSING

***Naloxone should be given to ANY patient who presents with signs of opioid overdose, or when overdose is SUSPECTED.***

➔ *See Appendix 14, Signs of Opioid Overmedication and Overdose.*

- ***Dosing:***
  - Naloxone 0.4–2mg by intramuscular or intravenous injection, every 2–3 minutes
    ***OR***
  - Naloxone 4 mg (contents of 1 nasal spray) as a single dose; may repeat every 2 to 3 minutes in alternating nostrils until medical assistance becomes available

  ➔ *Multiple doses of naloxone may be required to revive the patient.*
- ***Those who have taken opioids with a longer half-life than naloxone*** may require further intravenous bolus doses of naloxone. Even though initial responsiveness might be successful, the patient may slip back into a presentation of overdose as the naloxone is eliminated faster than the offending opioid.

## PREGNANT PATIENTS

***Naloxone is safe to use in managing opioid overdose in pregnant women.*** The lowest dose to maintain spontaneous respiratory drive should be used to avoid triggering acute opioid withdrawal, which may cause fetal distress.

## RESPIRATION

***Supporting respiration is the single most important intervention*** for opioid overdose and may be life-saving on its own.

- Ventilate with 100% oxygen before naloxone administration to reduce the risk of acute lung injury.
- If 100% oxygen is not available, rescue breathing can be very effective in supporting respiration.

## MONITORING PATIENT RESPONSE

- ***Patients should be monitored for re-emergence of signs and symptoms of opioid toxicity for at least 4 hours following the last dose of naloxone.***

  ➔ *Patients who have overdosed on long-acting opioids require more prolonged monitoring. See last bullet under DOSING above.*
- Most patients respond to naloxone by returning to spontaneous breathing, with mild withdrawal symptoms.
- Response generally occurs within 3–5 minutes of naloxone administration.
- Duration of effect of naloxone is 30–90 minutes.

  ➔ *Patients should continue to be observed after that time for re-emergence of overdose symptoms.*
- The goal of naloxone therapy is restoration of adequate spontaneous breathing, but not necessarily complete arousal. Therefore, ***it is essential to get the person to an emergency department or other source of acute care as quickly as possible***, even if he or she revives after the initial dose of naloxone and seems to feel better.

## SIGNS OF OPIOID WITHDRAWAL

Withdrawal triggered by naloxone can feel unpleasant. As a result, some persons become agitated or combative when this happens and may need reassurance to remain calm.

The signs and symptoms of opioid withdrawal in an individual who is physically dependent on opioids may include, but are not limited to, the following:

- Body aches
- Tachycardia
- Fever
- Sweating
- Nausea or vomiting
- Nervousness
- Restlessness or irritability
- Shivering or trembling
- Increased blood pressure

## NALOXONE-RESISTANT PATIENTS

If a patient does not respond to multi-doses of naloxone, an alternative explanation for the clinical symptoms should be considered. The most likely explanation is that the person is not overdosing on an opioid, but rather on some other substance (e.g., benzodiazepine, cocaine, methamphetamines) or may be experiencing a non-overdose medical emergency.

*(Appendix 15, page 2 of 2)*

## APPENDIX 16: RECOMMENDATIONS FOR HANDLING ABERRANT BEHAVIOR

### WITH "AS NEEDED" CONTROLLED SUBSTANCE MEDICATIONS

- Inmates who divert medications prescribed on an as-needed basis should have their medication immediately discontinued by the primary care provider.
- Providers should evaluate the inmate's condition within one business day of discontinuing the medication to ensure that all medical conditions are addressed.
- The local Medical Treatment Team (MTT) and/or the Pain Management Team (PMT) should review the case within 10 business days of the medication discontinuation.
- If the inmate is also on a scheduled long-acting medication, the inmate should be urine-tested to ensure compliance with the regimen and detection of other potential medications.

### WITH SCHEDULED CONTROLLED SUBSTANCE MEDICATIONS

- If an inmate diverts a scheduled medication, the primary care provider will review the inmate's condition within one business day of the alleged incident.
- If the provider determines that there is no longer a medical need for pain medication, the medication should be discontinued. If there continues to be a medical need, but an alternative therapy (a non-controlled substance) can be used to meet that need, then the original medication should be discontinued and the alternative prescribed.
- If the provider determines that the inmate continues to have a medical need for an opioid, the PMT will review the case within 10 business days (preferably sooner).
- If the PMT recommends discontinuation of an opioid, and the provider wishes to keep the inmate on a controlled substance, the provider should engage in further discussion with the PMT prior to re-starting a controlled substance.

## APPENDIX 17: RESOURCE WEBSITES

| Organization | Website |
|---|---|
| American Academy of Family Physicians | *www.aafp.org* |
| American Academy of Pain Management | *www.aapainmanage.org* |
| American Academy of Pain Medicine | *www.painmed.org* |
| American Academy of Physical Medicine and Rehabilitation | *www.aapmr.org* |
| American College of Rheumatology | *www.rheumatology.org* |
| American Pain Society | *www.ampainsoc.org* |
| American Society for Pain Management Nursing | *www.aspmn.org* |
| American Society of Addiction Medicine | *www.asam.org* |
| International Association for the Study of Pain | *www.iasp-pain.org* |
| Joint Commission on Accreditation of Healthcare Organizations | *http://www.jointcommission.org* |
| North American Spine Society | *www.spine.org* |
| Office of National Drug Control Policy | *http://www.whitehouse.gov/ondcp* |
| Wisconsin Medical Society | *www.wisconsinmedicalsociety.org* |

## APPENDIX 18: OPIOID PAIN MANAGEMENT AGREEMENT

A printable copy of the *Opioid Pain Management Agreement* appears on the following page.

# Opioid Pain Management Agreement

*The purpose of this agreement is to maximize the outcome of pain treatment and to improve quality of life and functionality for patients who suffer from pain, by managing the pain according to evidenced-based medical standards, using a multi-disciplinary approach, and maximizing treatment modalities within available resources.*

1. **I understand this agreement is essential to the trust and confidence necessary to the provider-patient relationship.** I understand that it is my responsibility to abide by this agreement. If I am found to violate this agreement, I understand that my provider has the responsibility to review the pain medication regimen, and may discontinue pain medication.
2. **This agreement has a zero tolerance policy** regarding *any* inappropriate use of a formulary or non-formulary pain medication.
   - **a.** If at any time I am found to have manipulated, diverted, or taken the medication prescribed to me in a manner deemed inappropriate,
     1. My prescription will immediately be evaluated for termination AND
     2. An incident report may be completed by the appropriate staff, and documentation will be placed in my medical record.
3. **The goal of pain management therapy is to decrease pain** in order to improve function and quality of life. The goal of pain management is **not** to be pain free. I understand that pain management is different for each patient and condition, and the complete elimination of pain is not the outcome for most patients.
4. **Opioid analgesics may cause physical or psychological dependence.** Tolerance may develop over time. Abrupt discontinuation may result in withdrawal symptoms. These may include runny nose, excessive sweating, excessive tearing, yawning, dilated pupils, and increased temperature. Later signs include: anorexia, nausea, vomiting, diarrhea, feeling of constantly needing to pass stools, goose flesh, weakness, increased blood pressure and pulse, agitation, restlessness, and severe muscle and bone pain. Opioid withdrawal is rarely dangerous, unless a person is medically debilitated or pregnant.
5. **Opioid pain medications are not always necessary for the treatment of pain.** Other non-opioid pain medication therapies are often effective. The best outcomes may be achieved when chronic pain management incorporates other therapies such as exercise, nutrition, pain education, coping skills, and behavioral health therapy. I am expected to be compliant with all recommended therapies. I will communicate honestly with my provider about the type and intensity of my pain, the effect of the pain on my daily life, and how well the treatment is helping to relieve my pain.
6. **I will not use any unauthorized controlled substances** (e.g., marijuana, cocaine, methamphetamines, barbiturates, alcohol) or other prescription medications which have not been authorized by my provider. I understand that using these substances may result in discontinuation of pain medication.
7. **I will not share, sell, cheek, trade, or divert my medication to anyone, at any time, or in any manner.** Doing so will result in discontinuation of the therapy prescribed for my pain.
8. **I will only seek treatment for my condition from my assigned primary care provider during scheduled office hours.**
9. **I agree that I will submit to blood or urine tests if requested by my treating provider** to determine my compliance with my pain management program. If results from these tests are found to be inconsistent with my prescribed treatment, correctional staff may be notified and prescribed medication may be discontinued.

**I agree to follow this agreement as explained to me. All of my questions and concerns regarding treatment have been adequately answered. This document will be filed within my medical record and a copy will be provided to me.**

| | |
|---|---|
| Inmate Name (print): | Registration Number: |
| Inmate Signature: | Date: |
| Health Care Provider Signature: | Date: |