Ten Guidelines for Assessing and Treating Pain

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Unnecessary pain interferes with patients' well-being and recovery from illness. With proper management, most patients can achieve reasonable comfort and even be free of pain. Consistently following the guidelines across all care settings and populations will dramatically decrease patient suffering and increase the satisfaction of professional care providers.

1. **Pain is a subjective phenomenon; believe the patient**
   - Pain is a complex physical, emotional, psychological, and cultural/social experience
   - Minority patients, women, elders, and small children are particularly susceptible to under treatment of pain: beware your assumptions about their pain
   - Educate patients and families to report pain and to expect relief; treat the worry as well as the discomfort.
   - Elicit the meaning of the pain to the patient

2. **Assess the pain carefully and reassess regularly**
   - Pain cannot be objectively measured. The best we can do is to quantify severity and to characterize etiology by the patient's description of the pain.
   - Vital signs and informally identified behavioral cues are not reliable indicators of pain severity. For neonates and adults who are comatose or cognitively impaired, there are validated behavioral pain assessment tools available that should be consistently used
   - Characterize the pain meticulously, including interference with sleep and daily activities
   - Make a diagnosis: specific pains respond to specific treatments
   - Make pain "visible" as the 5th vital sign; use a 0 - 10 scale (0 = no pain, 10 = worst imaginable) or an age-appropriate tool such as the Faces Scale; be consistent; have everyone use the same pain language

3. **Take advantage of the patient's capacities to learn and to use their own internal resources**
   - Involve the patient in creating and assessing the plan of care (this is a JCAHO standard)
   - Teach the patient about pain and the many ways it can be treated
   - Teach the patient about self-care strategies such as self-hypnosis, meditation, distraction; use biobehavioral techniques in your own practice
   - Especially for severe or chronic pain or end-of-life pain, use a multimodality approach and a multidisciplinary team
   - *Use of nonpharmacologic approaches should be used to complement, not replace, appropriate analgesic therapy*

4. Use the World Health Organization Analgesic Ladder:

Originally intended as a model for cancer pain management, the WHO Analgesic Ladder is also applicable to other diseases and conditions in all settings.

Step I. Mild pain: Prescribe acetaminophen or nonsteroidal anti-inflammatory drugs (NSAID). Note that acetaminophen has analgesic and antipyretic effects, but no anti-inflammatory effect.

Step II. Moderate pain: Add 'weaker' opioids or combination products (those that contain an opioid and acetaminophen or an NSAID). The dose is limited by the 'ceiling effect' of the non-opioid portion of the analgesic. Ceiling effect refers to the dose at which unacceptable toxicity occurs or the dose beyond which no additional analgesic effect occurs.

Step III. Severe pain: Use stronger opioids. Morphine is the reference drug against which other opioids are compared. If pain is both severe and prolonged, long-acting opioids are recommended. The correct dosage relieves pain with acceptable or no side effects.

Some practitioners have proposed a fourth step:

Step IV. Intractable pain or intractable toxicities from standard analgesics: various 'interventional' strategies such as nerve blocks and prolonged intraspinal infusions of anesthetics and analgesics.

Additional principles:

- Whenever possible, treat the underlying cause of the pain. Use adequate analgesia until healing has occurred.
- Use 'adjuvant' medications when appropriate. Sometimes referred to as 'co-analgesics,' these are medications that are approved for an indication unrelated to pain, but which have analgesic properties in specific conditions. Common adjuvants are anti-convulsants and tricyclic antidepressants for certain neuropathic pain syndromes.
- Most side effects of analgesics are readily treatable—do not reduce the analgesic dose to avoid the side effect. The most common side effect of opioids is constipation. Prophylaxis must be a part of any plan of care that includes opioids.

5. **Anticipate and treat side effects of analgesics**

- Opioid receptors in the GI tract are the cause of the most common side effect of opioids: constipation. Every patient with a prescription for opioids should be considered at very high risk for developing constipation and a bowel regimen should be a routine part of pain management with opioids. Bulk laxatives (ex., Metamucil®) are contraindicated for many people taking opioids, especially chronically, because the hypoperistaltic large intestine reabsorbs fluid, causing hard stools and constipation . Stimulant laxatives, possibly supplemented with stool softeners, are more effective for prophylaxis and treatment of constipation. Clinical Practice Committees should consider developing algorithms for prevention and treatment of constipation in both inpatient and outpatient settings. Clear written instructions should be prepared for patients at discharge or in the outpatient setting.
- Nausea and sometimes vomiting may be experienced in opioid naïve patients who are placed on a short course of an opioid. The nausea usually dissipates within a few days, but anti-emetics may be indicated. Certain sensitive individuals may re-experience nausea with each dose increase. Converting to a different opioid drug may be helpful in these patients.

- Some patients may experience drowsiness and other CNS effects. Like nausea, the patient will develop tolerance to this side effect while still experiencing the analgesic effect. However, safety measures to protect the patient from falling or preventing the use of dangerous equipment should be instituted. In rare instances psychostimulants may be needed to counter the drowsiness.
- Itching is caused by opioid-induced histamine release. A short course of low dose antihistamines, such as diphenhydramine, may be needed until the itching subsides. Converting to a different opioid is occasionally required.
- If side effects persist or are intractable to standard treatment, a referral to the MGH Pain Service or the MGH Palliative Care Service may be indicated.

6. **Prescribe an adequate opioid dose at correct intervals; include a breakthrough or rescue dose.**
   - *Adequate dose:*
     - For most opioids there is no ceiling dose; individualize the treatment: the adequate dose is the dose that relieves pain with acceptable side effects.
     - When pain is inadequately relieved, escalate dose by 25 – 50% of the current dose
   - *Prescribe a correct dosage interval:*
     - In general, prescribe "by the clock:" around the clock (ATC) at intervals determined by the pharmacokinetics of the drug and patient response. PRN dosing usually assures regular periods of recurrent pain.
     - Reserve as-needed (PRN) dosing for breakthough/rescue dosing, for intermittent pain states, and for incident pain (see below).
   - *Provide a breakthrough or rescue dose:*
     - People with either acute or chronic pain can be expected to have occasional acute exacerbations of their pain; a **rescue dose** of 15-20% of total daily opioid dosage should be available every 1 – 2 hours as needed for **breakthrough pain**.
     - If the rescue dose is being used frequently, increase the basal 24 hour dose to an amount at least equal to the current dose plus all rescue doses in the past 24 hours. Depending on the opioid being used, decreasing the prescribed interval may also be appropriate.
   - *Provide for pre-emptive doses when appropriate:* activities that can reasonably be predicted to cause exacerbation in pain (**incident pain**) should be scheduled to permit pre-emptive analgesic medication at a dose at least equal to the rescue dose. Common examples of precipitators of incident pain include physical therapy and dressing changes.
   - *Provide for potential missed doses:*
     - When a patient is scheduled to be off the floor for a test or procedure that could potentially delay a scheduled analgesic, make arrangements for the dose to be given at the alternate site.
     - Anticipate that a patient who normally takes PO meds may also need an alternate route.

7. **Address common misconceptions about tolerance and addiction to opioids.**
   A major barrier—perhaps the most important barrier—to effective and consistent approaches to pain relief is widespread fears and misconceptions about opioids. These misconceptions lead to fear and prejudice throughout our society. They interfere with the ability of clinicians to provide appropriate care, and contribute to distrust and non-adherence to treatment on the part of patients.

- Opioids are very safe and effective when used appropriately.
- People who take opioids as medication to relieve pain do not become addicted.
- Addiction is a psychological condition that, like an eating disorder, has a physical component. Addiction to opioids in the general population is very low, approximately 1% of all Americans over the age of 12. Studies of people who have been prescribed opioids for pain show that less than 1% become addicted.
- A far more likely problem is that in the health care setting a patient's pain will be under treated due to withholding of or inappropriate prescribing of opioids. Ironically, this can lead to "drug-seeking behavior," more likely a sign of inadequate analgesia than of addiction.

In 2001 the American Pain Society, the American Society of Addiction Medicine, and the American Academy of Pain Medicine developed a consensus statement on definitions of addiction, dependence, and tolerance that are adapted below. *Please note that development of tolerance and/or dependence are not symptoms of nor risk factors for addiction*.

- ADDICTION is a primary, chronic, neurobiologic disease. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use for effects other than pain relief, continued use despite harm, and craving.
- Physical DEPENDENCE is a state of adaptation that is manifested by a withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, and/or administration of an antagonist. (Dependence can develop in about 7 days. When reducing doses in a person who has developed dependence, reduce by no more than 25% per day to avoid withdrawal syndrome.)
- TOLERANCE is a state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time. (Tolerance is quite variable from patient to patient. One should suspect disease progression or acute psychosocial stress as well as tolerance if the need for analgesics suddenly increases.)

Don't let fears of opioid addiction deprive patients of important drugs that can help them live well: educate patients, families, and colleagues about common, inappropriate, fears and misunderstandings.

8. Use adjuvant medications to supplement opioids

Opioids are usually the most important medications used in the treatment of pain, especially moderate to severe pain. In addition, adjuvant medications (sometimes referred to as "co-analgesics") are frequently indicated. It should be stressed that adjuvants should generally not be used *instead* of opioids, but to *supplement* opioids.

- Neuropathic pain (described as burning, electric, stabbing, paroxysmal) may respond to tricyclic antidepressants (e.g., desipramine) or anticonvulsants (e.g., gabapentin; carbamazepine).
- Bone pain, such as that resulting from primary or metastatic cancer, tends to respond well to nonsteroidal anti-inflammatory agents (NSAIDS), steroids, and bisphosphonates. Primary treatment of the tumor by radiation therapy or chemotherapy should be strongly considered.

- Pain associated with swelling (e.g., intracranial tumor-related edema; pressure on the liver capsule) may respond to glucocorticosteroids. Note that in published guidelines, glucocorticosteroids are not recommended in the management of head injury.
- In advanced cancer or AIDS, psychostimulants (e.g., methylphenidate) may enhance pain relief while reducing drowsiness and improving mood, energy, and appetite.

9. Base analgesic and other interventions on underlying pathology and specific pain syndromes

- If an underlying cause for the pain (e.g., trauma; infection; tumor) can be identified, both the pain and the underlying cause should be treated concurrently.
- Pain can be classified in multiple overlapping categories. Appropriate selection of these categories during the assessment/diagnosis process will greatly assist in treatment planning and follow up. Examples of categories include:
  - Acute, chronic nonmalignant, or malignant pain (associated with life-limiting illnesses such as cancer and AIDS)
  - Nociceptive vs neuropathic pain
  - Somatic vs visceral pain
  - Continuous, recurrent intermittent, incident, or breakthrough pain
  - End-of-life pain

10. Use available resources to update clinical knowledge and to improve utilization of specialty care

The vast majority of patients can have their pain adequately managed by clinicians for whom pain is not a specialty practice. Whether one is a practitioner of another specialty or a generalist, information on the management of most pain is readily available and has been for decades. Some of this information is available on the MGH Cares About Pain Relief web site. JCAHO, some political jurisdictions, and many specialties have mandated that clinicians adequately assess and appropriately treat pain.

Unlearning obsolete practices and assumptions can improve pain management. Examples include:

- Meperidine (Demerol®)should be used only for very short term indications because of neurotoxicity with high doses or repeated dosing. The oral (poor GI absorption) and intramuscular (local pain/irritation and scarring) routes for meperidine administration should be avoided.
- Propoxyphene (Darvon®, Darvocette®), codeine, and mixed opioid antagonist/agonist agents should be avoided for chronic use or for severe pain because of ceiling effects and/or toxicity.
- "Drug-seeking behavior" is more likely to be a symptom of inadequate pain control than of addiction.
- Patients with a history of substance abuse can be treated for pain with opioid analgesics.
- Providing analgesia for patients with acute abdomen does not prevent accurate diagnosis of the underlying condition.
- Neonates and infants experience pain in all situations in which older children and adults experience pain.

It is inevitable that some patients will not respond as expected to standard interventions for pain. When this occurs, the patient's pain should be reassessed, neuropathic pain

should be considered, and psychosocial factors should be explored. Consultation with or referral to a multidisciplinary pain team should be considered when:

- the patient's pain persists beyond the expected time for healing
- symptoms of neuropathic pain are present
- there are concerns about addiction (addiction is a disease that should be diagnosed and co-managed by a specialist in addiction medicine)
- the patient has a current or prior history of substance abuse, including alcohol and prescription drugs
- patient or family psychosocial issues complicate the inherent complexity of patient care

Specialty care or consultation at MGH: The Pain Center (617-726-8810)
Palliative Care Service (617-726-9197)
Substance abuse screening (617-726-2712)