

Sutter Medical Center, Sacramento  
in collaboration with  
Sutter Education Council Presents

# Pain Management Across the Life Span: From Pediatrics to Geriatrics

## Objectives

At the completion of this program the participant will be able to:

- ❖ Describe patient rights and responsibilities related to pain assessment and management
- ❖ Identify the person best qualified to state the presence and intensity of pain
- ❖ Discuss assessment of pain in the cognitively impaired and/or non-verbal patient
- ❖ Describe the QUESTT method for pain assessment in children
- ❖ Verbalize three (3) hints to use when managing pain in children
- ❖ Compare two (2) myths of pain management with the facts
- ❖ Identify the importance of identifying opioid naïve vs opioid tolerant patient
- ❖ Verbalize two (2) physiological changes that affect the elderly and medication management
- ❖ List three (3) types of non-pharmacological therapies used to manage pain
- ❖ Discuss management of two (2) major side effects related to opioid use
- ❖ Verbalize three (3) interventions to manage sedation



## What is Pain?

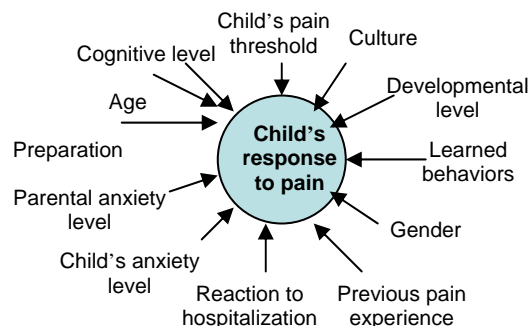
- Pain is an “unpleasant sensory and emotional experience associated with actual or potential tissue damage.” *ISAP*
- “Pain is whatever the experiencing person says it is, existing whenever they say it does.” *Margo McCaffrey*

## Consequences of Untreated Pain

- “Unrelieved pain has negative physical and psychological consequences. Aggressive pain prevention and control that occurs before, during, and after surgery can yield both short-term and long-term benefits.” *AHCPR Clinical Practice Guidelines- Acute Pain Management*
- “Unrelieved pain has enormous physiological and psychological effects on the patient. The Joint Commission believes that effective management of pain is a crucial component of good care. Research clearly shows that unrelieved pain can slow recovery, create burdens for patients and their families, and increase costs to the health care system.” *Dennis O’Leary, MD, President, JCAHO*

## People Express Their Pain Differently

- Pain is a personal experience; it is influenced by many personal factors including emotional, spiritual and cultural issues.
- People with the same medical condition, injury or surgery can have very different experiences with pain.
- Some pain has no clear physical cause, but it is very real for the person who is suffering.
- Assessing pain in children is difficult and requires a more global approach. (QUESTT)
- There are many factors that influence a child’s response to pain. These issues must be addressed to ensure that pain is managed properly in children.



- Children have many reasons as to why they deny, do not report, or are unwilling to display pain behaviors.
  - ✓ Fear of the unknown
  - ✓ Fear of needles (including fear of syringes without needles)
  - ✓ Mental or physical capacity
  - ✓ Severity or chronic state of their illness
  - ✓ Emotional state
  - ✓ Fear of pain itself and what it means.
  
- Encourage family involvement in managing the child’s pain. Parents know the behaviors that their child will display when they are in pain.
  
- Physiological responses may include:
  - ✓ Skin flushing
  - ✓ Diaphoresis
  - ✓ Increased HR and/or increased RR and/or increased BP
  - ✓ Drop in oxygen saturation
  - ✓ Restlessness
  - ✓ Dilated pupils
  
- If there is uncertainty about the presence of pain, a diagnostic trial of medication is appropriate.
  
- Developmental differences in pain expression include:

**(IT IS IMPORTANT TO INVOLVE THE PARENTS IN THE ASSESSMENT OF PAIN)**

Developmental Group	Expressions of Pain
<b>Infants</b>	May demonstrate: <ul style="list-style-type: none"> <li>▪ Body rigidity or thrashing which includes arching</li> <li>▪ Facial expression of pain (brows lowered and drawn together, eyes tightly closed, mouth open and squarish)</li> <li>▪ Intense crying</li> <li>▪ Are inconsolable</li> <li>▪ Draw knees to chest</li> <li>▪ Hypersensitivity</li> <li>▪ Poor feeding</li> <li>▪ Unable to sleep</li> </ul>
<b>Toddlers</b>	May demonstrate: <ul style="list-style-type: none"> <li>▪ Intense crying or verbal aggression</li> <li>▪ Regress or withdraw</li> <li>▪ Physical resistance, pushing stimulus away</li> <li>▪ Guarding of painful areas</li> <li>▪ Unable to sleep</li> </ul>

<p><b>Preschoolers/ Young Children</b></p>	<p>May:</p> <ul style="list-style-type: none"> <li>▪ Be verbal about intensity of their pain</li> <li>▪ Be very quiet and inactive while in pain</li> <li>▪ See pain as a punishment</li> <li>▪ Thrash arms and legs</li> <li>▪ Try to push stimulus away before it is applied</li> <li>▪ Need physical restraint</li> <li>▪ Cling to parent, nurse or significant person</li> <li>▪ Need emotional support</li> <li>▪ Understand rewarding</li> <li>▪ Be unable to sleep</li> </ul>
<p><b>School-Age Children</b></p>	<p>May:</p> <ul style="list-style-type: none"> <li>▪ Verbalize pain</li> <li>▪ Use pain measurement tool</li> <li>▪ Be influenced by culture</li> <li>▪ Have nightmares related to their pain</li> <li>▪ Demonstrate “stalling” behaviors</li> <li>▪ Demonstrate muscular rigidity (clenched fists, white knuckles, gritted teeth, body stiffness, closed eyes, etc.)</li> <li>▪ May regress and demonstrate behaviors similar to preschoolers/young children</li> <li>▪ Be unable to sleep</li> </ul>
<p><b>Adolescents</b></p>	<p>May:</p> <ul style="list-style-type: none"> <li>▪ Localize and verbalize pain using descriptors</li> <li>▪ Deny pain when peers are present</li> <li>▪ Change sleep and eating patterns</li> <li>▪ Be influenced by culture</li> <li>▪ Display regressive behaviors in the presence of family members</li> <li>▪ Demonstrate muscle tensing</li> </ul>

**HINTS TO USE WHEN MANAGING PAIN IN CHILDREN**

- ✓ Be **honest** about what will be painful, but reassuring as well. Trust is important.
- ✓ Explain procedures and sensations that the child will feel.
- ✓ **Children do not like medical surprises, no one does.**
- ✓ Tell the child what is about to happen, each step before the next.
- ✓ Preparing children for procedures will encourage cooperation most of the time.
- ✓ Utilize Child Life services whenever possible.
- ✓ Having a parent or loved one present during a painful treatment may be all that is needed. **Utilize parents for comfort only.**
- ✓ Encourage the expression of feelings and that it is okay to be afraid, cry, shout, etc.
- ✓ Only give a child a choice when one is present. (Which chair to sit in, etc.)
- ✓ Above all, believe children when they say they are in pain. Pain is a complex sensation that takes many factors into consideration and translates into a physical expression.
- ✓ Children should not have to fight to be heard when they are in pain.

## People of different cultures have different ways of expressing and dealing with pain.



\*\*\*These are general guidelines only. Responses to pain are uniquely individual\*\*\*

**Black/African Americans:** Expression of pain generally open and public but can vary. Fearful of addiction. **Tip:** Emphasize teaching re: positive aspects of pain management; pain scales helpful to rate discomfort levels.

**Chinese Americans:** May not complain of pain. Some patients may use acupressure or acupuncture to treat pain or illness. **Tip:** Be aware of non-verbal cues to assess pain. Offer pain meds instead of waiting for patient to ask.

**Filipinos:** Can be stoic. Fearful of addiction. **Tip:** Use numerical pain rating scale. Offer pain meds as ordered. Avoid IM injections if possible, prefer PO or IV.

**Hmong:** Traditionally grew and used opium for its analgesic properties. Expect same relief from Western medicines. Medications readily accepted but instructions regarding dosage may not be followed; may continue to take more in an effort to find relief from pain. **Tip:** Encourage verbalization of proper medication use & side effects.

**Japanese Americans:** Generally, symptom complaints not offered by the patient. May not freely ask for medications to alleviate symptoms & delay seeking assistance until symptoms severe. Older generation fearful of addiction & may refuse meds. **Tip:** Offer pain medications, as ordered. Oral meds preferred to injections; may refuse rectal meds.

**Mexican Americans:** Tend not to complain of pain. Prize inner control and self-endurance. Expression of pain socially more acceptable in women; some men fear expressing pain shows weakness and possible loss of respect. **Tip:** Assess pain by non-verbal cues.

**Russians:** High pain threshold. Very stoic and may not ask for pain medications. **Tip:** Encourage pain medications as ordered. Utilize numeric rating scale for measuring pain.

**Vietnamese:** May be stoic. Will not voluntarily request pain medication for fear of addiction and side effects. **Tip:** Offer pain meds as ordered. Prefer PO or IV. Observe pt's facial expressions for indication of pain. Offer warm compress as needed.

*Acknowledgements: Culture & Nursing Care: A Pocket Guide. Eds. Juliene G. Lipson, Suzanne L. Dibble, and Pamela A. Minarik. School of Nursing, University of California, San Francisco. UCSF Nursing Press, 1996.*

## Patient Rights to Pain Management

All patients at Sutter Medical Center Sacramento can expect:

- To receive information about pain and pain relief measures from the health care team.
- To be treated by concerned staff committed to pain prevention and management.
- To have pain thoroughly assessed and promptly treated.
- To participate actively in pain management decisions.
- All patients, child or adult, have the right to appropriate pain assessment and management on a regular basis whether or not their parent/caregiver is at the bedside.



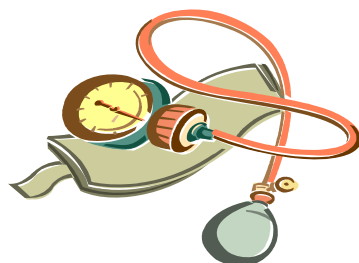
## Patient Responsibilities for Pain Management

All patients at Sutter Medical Center Sacramento are expected to:

- Ask their healthcare providers what to expect regarding pain and its management.
- Discuss pain relief options with doctors and nurses.
- Work with healthcare providers to develop pain management plans.
- Report pain when it first begins.
- Help healthcare providers measure pain at all stages of care.
- Tell healthcare providers if pain is not relieved.

## Pain Assessment: The Fifth Vital Sign

- Assembly Bill 791 (Thomson) was signed into law by Governor Gray Davis on 9/15/99, effective 1/1/00. Section 1254.7 was added to the Health & Safety Code (HSC) as part of this bill. HSC 1254.7 reads:
  - It is the intent of the Legislature that pain be assessed and treated promptly, effectively, and for as long as the pain persists.
  - Every health facility licensed pursuant to this chapter shall, as a condition of licensure, include pain as an item to be assessed at the same time as vital signs are taken. The health facility shall insure that pain assessment is performed in a consistent manner that is appropriate to the patient. The pain assessment shall be noted in the patient's chart in a manner consistent with other vital signs.



# Who Assists With Pain Management?

- Patients/Families & Caregivers
- Physicians
- Nurses
- Rehabilitation Specialists
- Clinical Social Workers
- Case Managers
- Pharmacists
- Respiratory Therapists
- Chaplains



The American Nurses Association (ANA) code makes it clear that RN's have a duty to advocate what's best for their patients. Fulfilling that duty requires that you question any order you believe to be below the standard of care, in violation of a hospital or employer policy or procedure or contrary to the patient's best interests. **Activate the chain of command if your patient's pain needs are not being met.**

## Myths and Misconceptions about Pain

1. Some pain is good for you.

**FALSE.** Research has shown that pain is NOT good for the patient. It can cause depression and weaken the immune system.

2. Newborns/Infants do not feel pain.

That is **NOT TRUE.** Newborns feel the same amount of pain as any other age group. They just can't tell us about their pain.



3. Children tolerate pain better than adults.

**FALSE.** Younger children experience a higher level of pain during procedures than older children. A child's tolerance to pain increases with age. Repeated painful procedures often cause an increase in anxiety and perception of pain.

4. It is unsafe to administer narcotics to children and the elderly.

**FALSE.** The same medications are used to manage pain in children, adults and the elderly. In pediatrics, the doses are adjusted dependent upon the size and weight of the child.

5. The nurse or the doctor is the best judge of the existence and severity of a patient's pain.

This is **NOT TRUE**.

The patient is the best authority of his or her pain. **The patient's self report is the most reliable indicator of pain.**

6. Visible signs, either physiologic or behavioral, always accompany pain and can be used to verify its existence and severity.

**FALSE.** Even with severe pain, periods of physiological and behavioral adaptation occur, leading to periods of minimal or no signs of pain. Lack of pain expression does not necessarily mean lack of pain.

7. If a person does not ask for pain medication, then they don't have pain.

**FALSE.** Some cultures consider asking for pain medication a sign of weakness, however, if asked, they will admit they need pain relief. Some patients don't want to be viewed as a "pest" or "complainer" and will not volunteer that information.

8. Opioids produce limited analgesia effect.

**FALSE.** The dose and the analgesic effect of mu agonist opioids have no ceiling effect. Examples of mu agonists include morphine, hydromorphone (Dilaudid), fentanyl, oxycodone, hydrocodone, codeine, methadone, and meperidine (Demerol). Mu agonists relieve pain by binding to the mu receptor sites in the nervous system.

9. There is an upper limit to the dose of opioid medications that can be given for pain relief.

**FALSE.** Opioid pain relievers can be given in amounts needed to achieve pain relief, and may be combined with other medications to adjust for patient tolerance & side effects.

10. Demerol (Meperidine) is the preferred drug of choice for post-operative pain.

**FALSE.** Demerol is no longer preferred for the pain management of acute or chronic pain because of potential toxicity from accumulation of the metabolite, normeperidine. Half-life of normeperidine is 15-20hrs. Normeperidine is a CNS stimulant and can produce irritability, tremors, muscle twitching, jerking, agitation, and seizures (AHCPR1992). For maximum patient safety and effective pain control, consider these points regarding meperidine:

- The meperidine dose should not exceed 1000mg/day in patients with normal renal function. The dose must be reduced in the elderly and patients with reduced renal function.
- Meperidine use should be limited to less than 72hrs to avoid normeperidine accumulation.
- Meperidine PCA is not recommended.

11. Analgesics are more effective when administered as needed (PRN) rather than around-the-clock (ATC).

**False.** Two basic principles of providing effective pain management are preventing pain and maintaining a pain rating that is satisfactory to the patient. These may require that the mainstay analgesic be administered on a scheduled ATC basis, rather than as needed, to maintain stable analgesic blood levels.

12. People become addicted to pain medicine easily.

**FALSE.** True addiction occurs RARELY when opioids are used correctly to relieve pain. Less than 1%. Addiction is often confused with tolerance and physical dependence.

■ Definitions:

- Tolerance: An increased dose is required to reach the desired effect.
- Physical dependence: A patient will show signs and symptoms of withdrawal when in need of more medication.
- Addiction: A psychological dependence on a drug with or without physical dependence.

- Tolerance to opioids does develop, but this can and should be managed with dose adjustments.
- Physical dependence may be managed with ATC medication weaning schedule.

13. Old people are supposed to have pain.

**FALSE.** Pain and aging do not go hand in hand. The elderly are at greater risk for many disorders that can cause pain, like arthritis. Quality of life is improved for the elderly if they are pain free.

14. Patients should not receive pain medication until the cause of the pain is diagnosed.

**FALSE.** Symptomatic relief of pain should be provided while investigation of cause proceeds.

15. Pain medicine cannot really control pain.

That is **NOT TRUE.** Good pain control can be achieved in over 90% of all patients with pain.

16. It is easier to put up with the pain than the side effects that come from pain medicine.

**FALSE.** The side effects of pain medications are well known and can be easily managed.

17. Sleep equals pain relief

**FALSE.** Patients may sleep as a means to cope with unrelieved pain.



## Are Herbal supplements safe to take prior to surgery?

The available scientific literature suggests that certain herbs can prolong bleeding time, prolong the sedative effect of anesthesia, or cause fluctuations in blood pressure. Since the pharmacology of many herbs is not well documented, it may be wise to opt for the conservative stance of recommending against all herbal-product use in the 2-3 weeks preceding elective surgery. Healthcare professionals should routinely inquire about herb and supplement use when gathering a patient's medical history.

## Barriers to Proper Pain Management



- Inadequate training of healthcare providers in the recognition and management of pain in all populations.
- Fear of addiction and over-dosage.
- Fear of side effects from medications.
- Fear of obscuring the diagnosis.
- Reluctance of patients to complain of pain or demand pain treatment.
- Cultural differences in pain expression.
- Lack of standardized methods of communicating about pain e.g. the failure to provide pain scales on documentation forms.
- The use of the IM route instead of PO, Rectal, IV or intraspinal.
- Physician fears of legal problems and inconveniences with writing prescriptions for opioids.
- Lack of institutional commitment to pain management practices.
- Lack of attention to emotional and spiritual issues that may heighten the experience of pain.

## Ways to Improve Pain Management

- Consider pain the 5<sup>th</sup> vital sign.
- Use age/patient appropriate pain scales to measure the need for and response to analgesic therapy.
- Develop a plan of care to manage pain consistently and document what works.

- Be aware of cultural differences in pain expression.
- Develop protocols and tools to prompt MD's and nurses to assess & treat pain properly.
- Ask every patient/parent/caregiver about pain.
- Measure pain at regular intervals. Be proactive and not just reactive. Treat pain at a lower level before pain is out of control and higher doses are needed.
- Anticipate predictable painful experiences and intervene accordingly. Prevention is better than treatment.
- Use PO or IV meds whenever possible.
- Utilize multiple modalities for pain control. Differing types of pain medications work together to provide better pain management. Use non-pharmacological methods along with medications.
- Offer pain medication ATC, rather than waiting for the patient to ask.
- Patient/parent/caregiver education.

## Assessing Pain

- The single most reliable indicator of the existence and intensity of pain and any resultant distress is the **patient's self report!!!**
- There are many pain scale-rating tools that can help your patients describe their pain.

### 1. Talk to your Patient, Family &/or Caregiver

- Getting a pain history is the first step in pain management.
- The history must include opioid use: the terms opioid tolerant and opioid naïve are used to distinguish between patients who have or have not been taking opioid drugs regularly. **Those who have used opioids regularly for approximately 7 days or more are considered to be opioid tolerant.**
- A full assessment occurs on admission, at the beginning of each shift and if the patient's pain status changes.
- **Remember to reassess pain whenever you obtain vital signs and whenever you intervene to evaluate the efficacy and the patient's satisfaction with the treatment.**

## 2. Pain Assessment



A full pain assessment includes the following:

- ✓ Location- where does the pain start and to where does it radiate? (patient to mark on a diagram or point to site)
- ✓ Intensity/Severity- use rating scales
- ✓ What provokes and/or relieves the pain?
- ✓ Quality and character of pain (use patient's own words)
- ✓ Onset and duration of pain
- ✓ Patient's comfort/function goal (on a 0-10 scale)

When assessing children, it is not just about the pain score. Use the QUESTT (Baker and Wong, 1987) method to assess pain in children.

- ✓ Question the child about their pain.
- ✓ Use age appropriate pain rating scales.
- ✓ Evaluate behavior and physiologic changes.
- ✓ Secure parents' involvement. Parents know their child's pain behaviors.
- ✓ Take cause of pain into account. Disease process, surgery, procedure, etc.
- ✓ Take action and evaluate results.

**FACT:** In many elderly, the effects of Pharmacokinetics need to be considered when ordering medications.

- In general, elderly tend to require lower doses of medications than younger patients.
- Absorption is often irregular because of delayed transit time or malabsorption syndrome.
- Elderly tend to have lower lean body mass.
- Hepatic metabolism and renal clearance is also decreased.
- In many elderly, the effects of opioids may be stronger & last longer, so the basic guideline for administration is to **start low and go slow.**

**FACT:** In the Pediatric population, higher doses of medications (including pain medications) may be required per Kg to get the same effect due to increased metabolic demands. However, when the stimulus is removed, the child may then be at a higher risk for sedation leading to respiratory depression and will need close monitoring.

### 3. Types of Pain

#### **Acute Pain**

- Relatively short-lived up to six months.
- Cause is easily identified.
- Onset is acute.
- Physical response- increased BP, HR, respirations, nausea, etc.
- Children may demonstrate agitation, fear reactions, grimacing, guarding of painful area, clenching teeth, anger, crying, moaning, withdrawal, etc.

#### **Chronic Pain**

- Lasts longer than six months.
- Onset is gradual.
- Intensity – mild to severe.
- Etiology- may be unknown.
- Physical response- vital signs usually within normal limits for the patient.
- Behavioral response- depression, irritability, social withdrawal, change in ADL's.
- Patients with chronic pain may report a higher baseline pain rating.

#### **Nociceptive Pain vs. Neuropathic Pain**

**Nociceptive Pain:** Normal process of stimuli that damages normal tissues or has the potential to do so if prolonged; usually responsive to non-opioids and/or opioids.

Somatic Pain: most common physical type of pain.

- ❖ Skin
- ❖ Bones
- ❖ Muscles
- ❖ Ligaments
- ❖ Tendons
- ❖ Joints

This includes arthritis, tendonitis, and most kinds of headaches, neck pain, and low back pain.

Described as (quality and is well localized):

- ❖ Aching
- ❖ Throbbing
- ❖ Sore
- ❖ Knife-like

Visceral Pain: Arises from visceral organs, such as GI tract and pancreas (contractions of hollow organs)

- ❖ Tumor involvement of the organ capsule that causes aching and fairly well-localized pain.

- ❖ Obstruction of hollow organ, which causes intermittent cramping and poorly localized pain.

Described as (quality):

- ❖ Deep, cramping, boring sensation

Includes:

- ❖ Abdominal cramping
- ❖ Brief periods when stomachs are upset
- ❖ Labor pain
- ❖ Irritable bowel syndrome (commonly chronic)

**Neuropathic Pain:** Abnormal processing of sensory input by the peripheral or central nervous system; treatment usually includes adjuvant analgesics. **Neuropathic pain requires attention to the underlying cause of pain.**

Centrally Generated Pain:

Injury to either the peripheral or central nervous system.

- ❖ **Phantom pain** – may reflect injury to the peripheral nervous system
- ❖ **Burning pain** below the level of a spinal cord lesion, reflects injury to the central nervous system.
- ❖ Associated with dysregulation of the autonomic nervous system.

Peripherally Generated Pain:

Painful neuropathies: Pain is felt along the distribution of many peripheral nerves.

- ❖ Diabetic neuropathy
- ❖ Alcohol-nutritional neuropathy
- ❖ Those associated with Guillain-Barre syndrome

Painful mononeuropathies: Usually associated with a known peripheral nerve injury and pain is felt at least partly along the distribution of the damaged nerve.

- ❖ Nerve root compression
- ❖ Nerve entrapment
- ❖ Trigeminal neuralgia

Described as (quality):

- ❖ Burning
- ❖ Tingling
- ❖ Electric feeling (hitting funny bone)

Includes:

- ❖ Carpal tunnel syndrome
- ❖ Various kinds of pinched nerves
- ❖ Neuropathy or nerve damage due to diabetes or a variety of other illnesses.
- ❖ Postherpetic neuralgia that follows shingles
- ❖ Herpes zoster

## 4. Additional information

Some additional questions you may ask:

- Have you had significant pain in the past?
- If so, how did it affect you?
- Has pain affected your work, social or family life? Does it interfere with your sleep, appetite, activity level, mood?

Obtaining a history of a patient's previous experiences with pain will assist in assessing and managing their pain more effectively. Two forms are available and you may use both if necessary. This information is included in the Admission Data Base.

### Pain Experience History

Child form	Parent form
-Tell me what pain is. -Tell me about the hurt you have had before. -Do you tell others when you hurt? If so, who? -What do you do for yourself when you are hurting? -What do you want others to do for you when you hurt? -What don't you want others to do for you when you hurt? -What helps the most to take your hurt away? -Is there anything special that you want me to know about you when you hurt? If yes, describe.	-What word(s) does your child use in regard to pain? -Describe the pain experiences your child has had before. -Does your child tell you or others when he/she is hurting? -How do you know when your child is in pain? -How does your child usually react to pain? -What do you do for your child when he/she is hurting? -What does your child do for him/herself when he/she is hurting? -What works best to decrease or take away your child's pain? -Is there anything special that you would like me to know about your child and pain? (If yes, describe)

Hester NO, Barcus CS. Assessment and management of pain in children. *Pediatric Nurs Update* 1986;1:1-8.

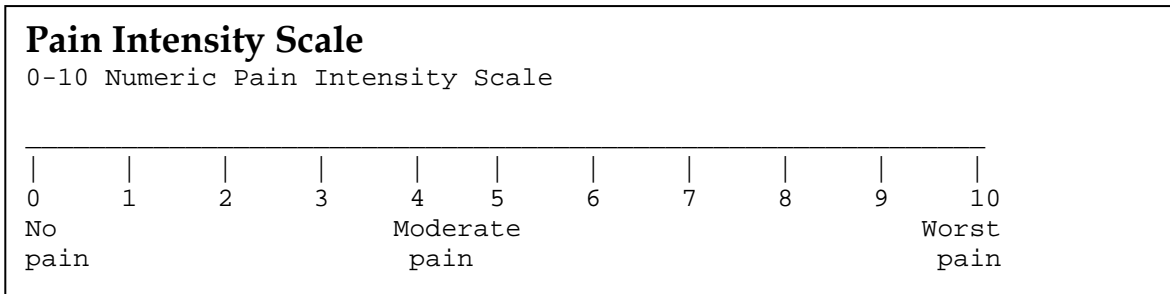
## 5. Words Used to Describe the Quality of Pain

Throbbing	Stabbing	Burning
Aching	Gnawing	Sharp
Dull	Piercing	Boring
Crushing	Numb	Pulling
Electrical	Prickling	Grabbing

\*\*\* Identifying the quality of pain helps determine the type of pain the patient is experiencing i.e., acute, chronic or neuropathic. This information also helps determine what medication will be most effective for the specific type of pain\*\*\*

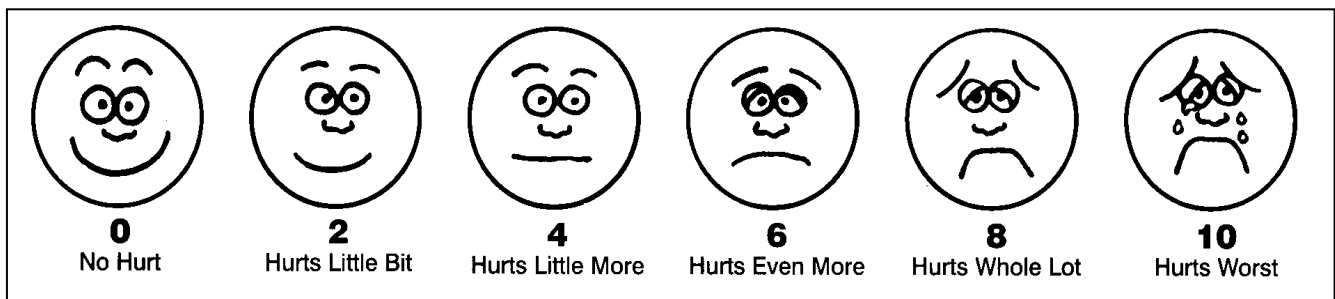
## Pain Scales – Numerical Rating

- Numbers 0 – 10 along a straight line that denotes pain intensity
- 0 = No Pain
- 10 = Worst Pain Possible
- Most widely used for cognitively intact adults. May be used for children age 7 years and older.



## Pain Scales – Faces Rating

- The Wong Baker Faces Scale is extremely helpful in assessing pain in children (ages three years and older), non-english speaking and mentally impaired adults.
- The patient is asked to choose the facial expression that best depicts how they feel.
- When using the tool, it is imperative you use the explanation provided with the tool.



## FLACC SCALE

(FACE, LEGS, ACTIVITY, CRY, CONSOLABILITY)			
<b>The FLACC scale has been proven valid and reliable with infants and children up to 7 years of age. It can also be used in cognitively impaired teens in conjunction with the pain history information.</b>			
	<b>0</b>	<b>1</b>	<b>2</b>
<b>FACE</b>	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested.	Frequent to constant frown, clinched jaw, quivering chin.
<b>LEGS</b>	Normal position or Relaxed	Uneasy, Restless, Tense	Kicking, or Legs drawn up
<b>ACTIVITY</b>	Lying quietly Normal position Moves easily	Squirming Shifting, back/forth Tense	Arched Rigid or Jerking
<b>CRY</b>	No Cry (Awake or Asleep)	Moans or Whimpers Occasional Complaint	Crying Steadily Screams or Sobs Frequent Complaints
<b>CONSOLABILITY</b>	Content Relaxed	Reassured by occasional touching, hugging, or 'talking to.' Distractible	Difficult to console or comfort.
<p><i>Instructions:</i></p> <ol style="list-style-type: none"> <li>1. Rate the patient in each of the 5 measurement categories.</li> <li>2. Observe for activity over 3-5 minutes. Have child turn and observe behavior.</li> <li>3. Add the numbers together.</li> <li>4. Document the pain score. This is a 0-10 pain scale. "0" being no pain and "10" being the worst pain.</li> </ol>			

### Guidelines for using the FLACC Behavioral Pain Scale

**Patients who are awake:** Observe for at least 2-5 minutes. Observe legs and body uncovered. Reposition patient or observe activity, assess body for tenseness and tone. Initiate consoling interventions if needed.

**Patients who are asleep:** Observe for at least 5 minutes or longer. Observe body and legs uncovered. If possible reposition the patient. Touch the body and assess for tenseness and tone.

Face

- Score 0 point if patient has a relaxed face, eye contact and interest in surroundings.
- Score 1 point if patient has a worried look to face, with eyebrows lowered, eyes partially closed, cheeks raised, mouth pursed.
- Score 2 points if patient has deep furrows in the forehead, with closed eyes, open mouth and deep lines around nose/lips.

Legs

- Score 0 points if patient has usual tone and motion to limbs (legs and arms)
- Score 1 point if patient has increased tone, rigidity, tense, intermittent flexion/extension of limbs.
- Score 2 points if patient has hyper tonicity, legs pulled tight, exaggerated flexion/extension of limbs.

Activity

- Score 0 points if patient moves easily and freely, normal activity/restrictions.
- Score 1 point if patient shifts positions, hesitant to move, guarding, tense torso, pressure on body part.
- Score 2 points if patient is in fixed position, rocking, side-to-side head movement, rubbing body part.

Cry

- Score 0 points if patient has no cry/moan awake or asleep.
- Score 1 point if patient has occasional moans, cries, whimpers, or sighs.
- Score 2 points if patient has frequent/continuous moans, cries, or grunts.

Consolability

- Score 0 points if patient is calm and does not require consoling
- Score 1 point if patient responds to comfort by touch or talk in ½-1 minute.
- Score 2 points if patient requires constant comforting or unable to console.

Whenever feasible, behavioral measurement of pain should be used in conjunction with self-report. When self-report is not possible, interpretation of pain behaviors and decision-making regarding treatment of pain requires careful consideration of the context in which the pain behaviors were observed.

Each category is scored on the 0-2 scale, which results in a total score of 0-10.

**Assessment of Behavioral Score:**

0 = Relaxed and comfortable  
4-6 = Moderate pain

1-3 = Mild discomfort  
7-10 = Severe discomfort/pain

## **Assessment of Pain in the Cognitively Impaired and/or Non-Verbal Patient**

No single pain assessment instrument has been shown to effectively detect pain in this population. An attempt should always be made to have the patient self-report their pain. If unable, note presence of pathology or painful condition or procedure and treat for pain accordingly.

Assess for presence of behaviors that may indicate pain (“pain signature”):

- ❖ Facial grimaces
- ❖ Bracing
- ❖ Guarding
- ❖ Rubbing
- ❖ Restlessness
- ❖ Tension
- ❖ Decreased appetite
- ❖ Negative or repetitive vocalizations
- ❖ Motioning for assistance
- ❖ Hitting
- ❖ Anxiety
- ❖ Sighing
- ❖ Insomnia
- ❖ Sadness or crying

An analgesic trial should be implemented in patients who demonstrate pain behavior(s) or who have underlying painful pathology. Note a decrease in intensity of the behavior(s) to help confirm the presence of pain & response to treatment. Adjust the treatment plan as needed e.g., increase in analgesic dose or addition of analgesics if a behavior increases.

## **Setting a Comfort/Function Goal**

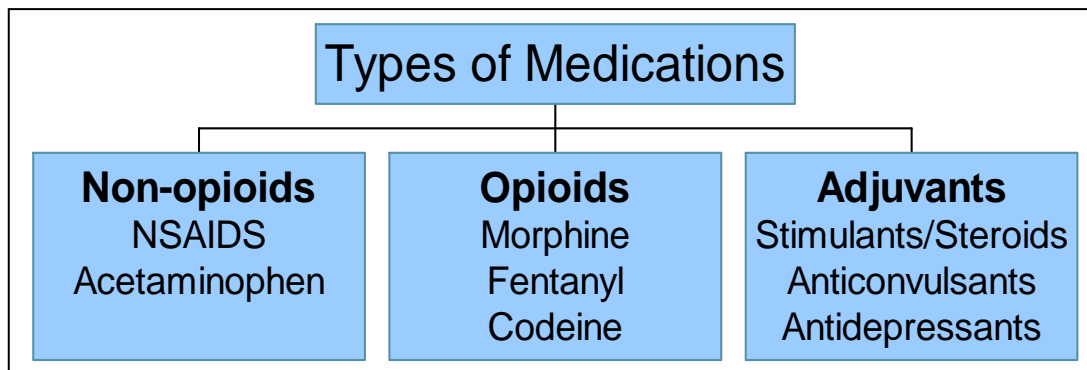
- Ask the patient to identify a comfort/function goal. The comfort/function goal is a pain rating (0-10) that would be acceptable or satisfactory to the patient.
- Satisfactory pain relief is a pain rating that is not distressing (i.e., noticeable but not bothersome).
- The comfort/function goal allows a patient to participate in activities (turning, using an incentive spirometer, getting out of bed) and not be out of control with their pain.
- Any pain above the patient’s comfort goal must be treated.
- If the patient identifies a comfort/function goal that is unrealistic (for example, 0-1) re-educate and negotiate an acceptable and realistic comfort/function goal.
- Research suggest that on the 0-10 pain rating scale, sustained pain ratings of 4 or above may result in delayed tissue healing, depressed immune system response and contribute to prolonged hospital stays.
- It is impractical to ask about a comfort/function goal for infants and children under the age of 4 years so comfort should be based on a goal that will allow the child to be moved or held without increased distress.

## Treating Pain

- 90% of all patients experiencing pain can be easily treated with medications and other therapies.
- Some estimates state 50% of patients experiencing pain do not get relief.
- Generally, any pain rated at 3/10 or greater indicates the need for pain management.
- Remember early treatment with lower doses can prevent many side effects.
- Tylenol is frequently used for the treatment of pain but is not a benign drug. Monitor the total amount of drug used especially if other medication has Tylenol as an ingredient. Educate patient/parent/caregiver as well.

**FACT:** Assume the presence of pain in patients who are unable to provide self-report using a pain rating scale or to fully respond with behaviors indicative of pain. Included in this category are patients during the immediate post-op period, critically ill sedated or chemically paralyzed patients, ventilated patients, non-responsive trauma patients, comatose patients, “locked in” patients, and catatonic & sedated patients undergoing painful procedures.

## Medications Can Help Manage Pain



Combine medication types including alternative methods to make sure that all pain measures are being used before calling MD. Less opioids will be needed when combinations are used thus reducing the risk of oversedation or respiratory depression.

## Use the Right Medication

- Non-opioids are used to treat mild pain (1-4) and opioids are used to treat moderate (5-6) to severe (7-10) pain.
- Acetaminophen reduces pain and fever but not swelling.
- The main concern with Acetaminophen is liver toxicity. Ensure that the total daily dosage doesn't exceed 4,000 mg (2,400 mg for patients who have three or more alcoholic drinks daily).
- The recommended dose of Acetaminophen in pediatrics is 10-15mg/kg every 4-6 hrs.
- NSAIDs help reduce pain, swelling and fever. Used for bone pain too.
- EMLA cream is an effective topical local anesthetic used in pediatrics (should be >1mos old) for IV starts, lab draws, and LPs.
- Avoid Demerol use. Due to its relatively low potency, short duration of action and toxic metabolite, Demerol is a poor analgesic choice.
- Avoid use of analgesic adjuvants such as Hydroxyzine (Vistaril) and Promethazine (Phenergan) for pain management. However, these medications may be useful for management of nausea.



## Opioids

- Opioids are used to treat moderate to severe pain.
- Promote use of Morphine and Hydromorphone (Dilaudid). **Caution:** Mix-ups between these two drugs are among the most common and serious errors that can occur involving two high-alert drugs.
- May be used for acute or chronic pain.
- Safe and effective when used correctly.
- Opioid naïve patients need to be monitored more closely than opioid tolerant patients.
- Routes of administration – PO, SQ, IV, IM, Transdermal, Rectal suppositories, PCA, and Intraspinal. (Try to avoid IM.)
- Cause less long-term damage to body systems than from other drug groups.

**FACT:** Mistakes with Opioid administration represent the largest number of medication-error-related sentinel events.

JCAHO tracks sentinel events, which are defined as incidents that result in death or major permanent loss of function. From January 1995 through 2003, of 276 medication-error-related sentinel events in the JCAHO database, 21% involved opioids (Croteau, 2004). **98% of the opioid related events resulted in patient death.**

## Opioid Naïve / Opioid Tolerant

The terms opioid tolerant and opioid naïve are used to distinguish between patients who have or have not been taking opioid drugs regularly. Most clinicians consider a patient who has NOT used opioids regularly for approximately 7 days or more to be opioid naïve.

### Why is it important to know whether my patient is Opioid Naïve or Opioid Tolerant?

If the patient is opioid naïve, the first dose administered should be the **LOWEST** dose in the range. If the patient is opioid tolerant, or has received a recent dose with inadequate pain relief and tolerable side effects, a dose on the higher end of the range should be administered.

## Opioid Equianalgesia

- The term equianalgesia means approximately equal analgesia and is used when referring to the doses of various opioid analgesics that provide approximately the same pain relief.
- An Equianalgesic Dose Chart provides a list of analgesics at doses, both PO and IV that are approximately equal to each other in their ability to provide pain relief. The opioids/doses are theoretically interchangeable.
- The Equianalgesic Dose Chart is helpful when switching from one medication or route to another.
- Morphine 10mg IV is approx equal to Demerol 75mg IV and Dilaudid 1.5mg IV.

## Pain Medication Dosing

- Promote the use of ATC (Around-the-clock) dosing of analgesics.
- Encourage prescribing of a PRN (as needed) regimen for breakthrough pain.
- **Start with lowest range dose ordered** and titrate based on need and patient assessment, including level of sedation and respiratory rate (refer to Acute & Chronic Pain Management Decision Tree, addendum 4, Protocol for Pain Management)

## Management of Side Effects

- Side effects should be reported promptly & treated.
- Anticipate and assess for the side effects for the medication given.
- Most opioid side effects diminish quickly when a stable dose is established.
- Our goal – Pain Prevention- will be defeated if side effects cause a patient to discontinue, underdone, or take opioids sporadically.

## Side Effects: Sedation

- **Sedation** is an opioid side effect that often goes away as patients adjust to their medication, although it may require a temporary decrease in their dose.
- **Excessive sedation** from opioids in the opioid-naïve patient may affect the patient's ability to participate in the recovery process and may lead to opioid-induced respiratory depression.

### Sedation Assessment Scale

#### - *Mild Sedation*

1=Restless, Agitated

2=Cooperative, Aware

#### - *Mild Sedation*

3=Drowsy, but responds to verbal stimuli or single light touch, able to follow simple commands (if could pre-sedation)

#### - *Moderate Sedation*

4=Response to Stimulus (i.e., loud voice, vigorous touch)

#### - *Deep Sedation*

5=Response to Noxious Stimulus (i.e., pain, suctioning)

#### - *Anesthesia*

6=Unarousable

- Based on our "Protocol For Pain Management", reassessment of the patient must occur within 15-30 minutes following IV administration (based on onset and peak of drug), 30 minutes following IM administration and 1 hour following oral/rectal administration or non-pharmacological intervention.
- Level of sedation is to be assessed & documented prior to and following each pharmacological intervention on the 24 hour Patient Care Record.
- **Clinically significant opioid-induced respiratory depression** in at-risk patients (opioid-naïve elderly patients & infants < 6 months) can be prevented by careful opioid titration and monitoring of sedation and respiratory status.
- Caution is recommended when administering muscle relaxants & anxiolytics due to increased risk of sedation and respiratory depression. Prior to administering these drugs, obtain approval for their administration from the provider responsible for the pain management plan.

**Also watch patients who are receiving sedating antihistamines, such as diphenhydramine and antiemetics such as phenergan & inapsine, because they produce sedation and increased risk of respiratory depression.**

## Management of Sedation & Respiratory Depression

- Most patients experience sedation at the beginning of opioid therapy and whenever the opioid dose is increased significantly (Coyle, Portenoy, 1996)
- If left untreated, excessive sedation in an opioid-naïve patient can progress to opioid induced respiratory depression.
- Clinically significant respiratory depression in opioid-naïve patients can be prevented by careful opioid titration and close nurse monitoring of sedation and respiratory status (Levy, 1994; Pasero, McCaffery, 1994).
- Prevention of clinically significant respiratory depression involves decreasing the opioid dose when excessive sedation is detected.

**\*\*\*The importance of monitoring sedation to prevent clinically significant respiratory depression cannot be overemphasized. As the American Pain Society (1992) states, “No patient has succumbed to (opioid-induced) respiratory depression while awake”\*\*\***

## Additional Side Effects

- **Constipation** from opioids is to be expected. Routine use of laxatives and stool softeners help most people regain bowel function. Increase activity and fluid intake as well.
- **Nausea** is a common side effect of opioid use. It often goes away on its own once patients adjust to their medication. Some anti-nausea drugs can help.
- **Itching** is a side effect of opioids and the most common side effect of intraspinal opioids. Side effects such as itching are often inappropriately labeled as allergic reactions. True allergic reactions to opioids such as morphine are extremely rare as they are endogenous elements. Consult a pharmacist with questionable reactions.
- If additional medications are used to treat side effects, make sure to monitor the patient for complications such as increased sedation and respiratory depression.

## Non-Pharmacological Therapies

- Massage, guided imagery, aromatherapy, and therapeutic touch can help with relaxation and comfort.
- Distraction techniques including music therapy, talking to others, reading a book, watching TV/movies & playing Nintendo/games are effective techniques to be used with children, as well as adults.
- Spiritual practices such as meditation and prayer can help relieve anxiety.
- Heat and cold therapy are used for muscle spasms, swelling and relaxation.
- Acupuncture is widely used in Chinese medicine.
- TENS uses a mild electrical current on the skin to block pain signals to the brain.
- Exercise promotes strength and endorphin release.
- Make sure that specific methods that work for the patient are noted on the plan of care.



## **PAIN ASSESSMENT & DOCUMENTATION IN A NUTSHELL**

1. Establish comfort/function goal on admission and every shift. Comfort/function goal = number at which patient states pain becomes acceptable.  
Be sure the admission database is completely filled out, including the section on pain.
2. For pain assessment, ask the patient to describe their pain using the 0 – 10 pain rating scale (or scale specific to your patient population). Record on the flow sheet.  
Document pain level (0-10) prior to each intervention.
3. If the patient is experiencing pain that exceeds the comfort/function goal, offer the patient pain relief options (medications, positioning, ice-pack, etc).
4. If medication is the pain relief option selected for the patient, record the patient's pre-medication sedation level (1-6) using sedation assessment scale.
5. Provide the pain relief option the patient requests. This can be medication, repositioning, alternatives, etc. Record on the flow sheet. Medication administration must also be documented on the MAR.
6. If medications are the pain option selected for the patient, record the patient's post-medication sedation level using sedation assessment scale (1-6).
7. Record the pain intervention on the flow sheet (Medication and/or non-pharmacological intervention).
8. Evaluate for effectiveness, patient response and presence of side effects:
  - IV or PCA bolus – within 15-30 minutes (based on onset and peak of drug)
  - IM – within 30 minutes
  - PO/Rectal – within 1 hour
  - Non-pharmacological – within 1 hour
9. Record the effectiveness of whatever intervention is chosen. This is the post-intervention pain level (0-10).



## Teach your Patients about:

- Their rights to adequate pain management.
- How and when to discuss their pain with their healthcare providers.
- How to use the age-appropriate pain rating scale.
- How to set a comfort/function goal.
- Treatment options available, both pharmacologic and non-pharmacologic.
- Combining medications and comfort measures to provide the best pain management.
- Potential side effects and their management.
- Discharge plans concerning pain management.
- Community Resources available.
- Remember to utilize the Patient Education Materials that have been developed:
  - “Managing Your Pain: What You Need to Know”
  - Patient Controlled Analgesia (PCA)
    - These resources are available in Russian, Spanish & Hmong, and can be obtained through Central Services.

## What Have We Learned?

- All patients have a right to be as pain free as possible.
- The patient’s self-report is the most reliable indicator of pain.
- Many myths and barriers exist that interfere with proper pain management.
- Pain should be assessed frequently, whenever vital signs are taken --remember *Pain is the 5th Vital Sign*.
- If the patient has not achieved their comfort/function goal, further treatment including pharmacological and/or non-pharmacological interventions need to be utilized.

