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Children's Hospital and Health System
Patient Care Policy and Procedure

This policy applies to the following entity(s):
☒Children's Hospital and Health System

SUBJECT: Pain Assessment and Management

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Pain Assessment and Management/ Process Owner – Pain Clinic PNP

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PHILOSOPHY

Patients should have access to the safest, most effective pain relief possible during all phases of illness or injury. At Children's Wisconsin Milwaukee (MKE), Primary Care, Surgicenter, Fox Valley (FV), Urgent Cares and Schools (referred to CW in the remainder of the P&P unless information is site specific), assessing and relieving pain is the responsibility of all healthcare professionals (HCPs) caring for patients. Effective pain management depends on collaboration between the patient, family, and health care team. CW provides staff education and pain management resources to promote optimal pain management. To ensure that pain management occurs effectively, formal means must be used to assess pain and obtain patient and family feedback to gauge the adequacy of its control. Pain management plans should be evaluated and revised as needed.

POLICY

1. HCPs are responsible and accountable for collaborating with patients and families regarding pain assessment and management.
2. Pain will be reassessed at regular intervals based on patient condition.
3. Reports of inadequate pain control will result in intervention and evaluation of the pain management plan as appropriate to patient condition.
4. Pain will be assessed using developmentally appropriate, reliable methods.
5. This policy and procedure also applies to patients in the palliative care phase of their illness or injury, as well as patients receiving neuromuscular-blocking medication (example: Vecuronium).
6. A Pulse Oximeter is required for all patients receiving intravenous (IV) opioids.
7. MKE Campus only: A provider order is required for an Acute Pain Service (APS) consult.
8. Placebos will not be used in any way other than as part of a Human Research Review Board (HRRB) approved trial in which the patient and parent have given informed consent. Even with a provider order, placebos will not be used to evaluate or treat pain.

PROCEDURE

I. Pain Assessment & Reassessment

A. A comprehensive pain assessment is conducted as appropriate to the patient's condition and the scope of care, treatment, and services provided.
   1. The assessment should include a pain score and may include any of the following components based on setting, developmental age of the patient, diagnosis, and severity of the condition:
      a. Pain intensity (Pain Score)
      b. Location
      c. Quality, patterns of radiation, character
      d. Onset, duration, variations and patterns
      e. Alleviating and aggravating factors
      f. Present pain management regimen and effectiveness
      g. Pain management history
      h. Medication history
      i. Presence of common barriers to reporting pain and using analgesics
      j. Past interventions and response
      k. Manner of expressing pain
      l. Effects of pain
      m. Impact on daily life, function, sleep, appetite, relationships with others, emotions, concentration, etc.
      n. Patient's pain goal and goals related to function, activities, quality of life
      o. Physical exam/observation of the site of pain

B. Upon initial pain assessment, education will be provided to the patient and caregiver and may include the following based on the patient's needs as appropriate to the care, treatment, and services provided:
   1. Understanding pain and the risk of pain
   2. Effective pain relief is an important part of their treatment.
   3. Health professionals will respond quickly to their reports of pain.
   4. A total absence of pain is often not realistic or even a desirable goal.
   5. Pain will be assessed at regular intervals through the use of self-report and/or behavioral observation tools.
   6. The pain management plan
   7. Possible side effects of any medications
   8. How caregivers can help their child such as informing the nurse when the pain first begins, if the pain is not relieved, about any suspected side effects of pain interventions, and asking any questions they may have regarding their patient's pain management.

C. Nurses are to choose the most appropriate pain assessment scale:
   1. Select a pain assessment tool based on the developmental age of patient, and in collaboration with the patient and family. **Tools are available in Addendum A**.

2. Use self-report scales whenever possible (Bieri Faces Pain Scale and Verbal Numeric Rating Scale <VNRS>).
3. Use the most appropriate behavioral scale with preverbal and nonverbal patients (NPASS in NICU, FLACC for infants outside the NICU, toddlers and patients with developmental delay who are unable to self-report).
4. For chemically parlayed patients: Behavioral pain scales are not appropriate (they cannot display behavioral changes). The terms: "Assume Pain Present" or "Assume Pain Not Present" (along with indicators or factors used to reach that conclusion) are to be used for assessment/reassessment (more information can be found below).
5. Instruct patient and family on the use of the appropriate pain scale. For patients who will be having surgery, instruction should be done preoperatively whenever possible.
6. The same scale should be used consistently by all HCPs caring for the patient. If the scale needs to be changed, rationale should be documented.

D. Scales

1**. NPASS (Neonatal Pain, Agitation, and Sedation Scale**)

a. Used for neonates to assess pain/agitation and sedation
   i. To be used in NICUs for all patients (pain and sedation)
   ii. Pain portion to be used in PICUs for premature infants only ((for infants under 37 weeks corrected age)

b. How to use the NPASS
   i. Pain and sedation are scored separately (you do not add the numbers together to get one number)
   ii. **Pain/Agitation** Assessment
      a) Pain is scored from 0 $\rightarrow$ +2 for each behavioral and physiological criteria, then summed
      b) Points are added to the premature infant's pain score based on the gestational age to compensate for the limited ability to behaviorally communicate pain
      c) Total pain score is documented as a positive number (0 $\rightarrow$ +11)
         1) Treatment/interventions are suggested for scores > 3
         2) Interventions for known pain/painful stimuli are indicated before the score reaches 3
         3) The goal of pain treatment/intervention is a score $\leq$ 3
   iii. **Sedation** cannot be scored without stimulating the baby. Stimulation should be planned with patient cares (e.g. vital signs) so as not to over stimulate the infant.
      a) Assess sedation by observing a baby's behavior, look for an under reaction or subnormal reaction to stimuli for each of the 5 criteria.
      b) Add up the negative numbers to reach a sedation score of -10 to 0.
      c) In general:

1) -10 is the deepest sedation → the baby appears paralyzed.
2) -2 or –3 is light sedation → a baby loaded with phenobarbital may look this way, as may one receiving morphine.
3) The sedation score is "0" if the baby does not have a sub-normal reaction to stimuli.

2. **FLACC – Revised (Face, Legs, Activity, Cry, Consolability)**
   - **a.** Use for infants, toddlers, patients with developmental delay, or any patient who is unable to use a self-report scale (0-10 or Bieri faces).
   - **b.** How to use the FLACC scale:
     - i. Observe your patient for a short time (long enough to observe "consistent" behavior).
     - ii. Indicators in *italics* are intended to be used for patients with developmental delay
     - iii. Assign a score of 0-2 for each of the five categories (Face, Legs, Activity, Cry, Consolability).
   - **c.** In general:
     - i. Scores of 0-3 indicate no pain to minimal pain.
     - ii. Scores of 4-6 indicate moderate pain.
     - iii. Scores of 7-10 indicate moderate to severe pain

3. **Faces Pain Scale – Revised (Bieri Faces)**
   - a. Instructions for the Bieri Faces scale in various languages are available at www.iasp-pain.org/education/content.aspx?itemNumber=1519
   - b. Use for patients > 3 years old who can understand the scale. Self-reports are valid and preferred for most patients > 3 years old.
   - c. How to use the Faces Pain Scale – Revised:
     - i. Explain to the patient "I'd like you to tell me how much you hurt."
     - ii. Point to the appropriate face and say:
       - "This face {pointing to Face 0} doesn't hurt at all. These faces {pointing to faces 2-8} show more and more hurt and this face {pointing to face 10} shows the most hurt you can imagine (or "the worst pain in the whole wide world").
       - the patient to "point to the face that shows how much you hurt right now."
   - d. In general:
     - i. Scores of 0-3 indicate minimal to no pain
     - ii. Scores 4-6 indicate moderate pain.
     - iii. Scores of 7-10 indicate moderate to severe pain

4. **Verbal Numeric Rating Scale (VNRS) (aka "number scale" or "0-10 scale")**
   a. Use for patients who understand the concept of order and number (usually about eight years of age and above).
   b. How to use the VNRS
      i. Explain that "0" means no pain and "10" is the worst pain imaginable (or "worst pain in the whole wide world").
      ii. Additional questions to ask as appropriate to the situation may include:
         a) "What number is your pain right now?"
         b) "What number is your pain when it is the worst that it gets?"
         c) "What number is your pain when it is the best that it gets?"
         d) "What number is the pain at an acceptable level for you?"
         e) "At what number can you deep breath, move and sleep pretty comfortably?"
   c. Utilize interpreter services for translation if needed.
   d. In general:
      i. Scores of 0-3 indicate minimal to no pain.
      ii. Scores 4-6 indicate moderate pain.
      iii. Scores of 7-10 indicate moderate to severe pain

5. **"Assume Pain Present (APP)" (for Chemically Paralyzed Patients ONLY)**
   a. Use for patients who are chemically paralyzed as there are no validated pain assessment tools appropriate for this patient population.
      i. The FLACC is not appropriate and is not to be used for chemically paralyzed patients as the patient cannot respond behaviorally because of the neuromuscular-blockade.
   b. With APP, the clinician has "assessed this patient for pain to the extent possible given the clinical picture and the inadequacy of recognized assessment instruments in this situation. In the clinician's judgment it is reasonable to conclude that the patient is likely to be experiencing pain and the health care team will plan care based on that assumption." (Quinn, 2003).
   c. Assume Pain Present (or not present) is a conclusion reached based on your assessment of BP and HR changes, sweating, tearing, pupil changes, NIRS, and the condition or procedure thought to cause pain.
   d. Changes, or lack of changes, in a patient's assessment can be used to evaluate the effectiveness of interventions

II. Comfort Goal

A. Each hospitalized patient will have a clearly identified goal for pain relief ("comfort goal"). This goal is determined in terms of function and quality of life parameters. The clinician will collaborate with the patient and family to determine what number on the chosen pain

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scale the patient would need to be at or below in order to be able to do patient specific activities such as deep breathe, walk, visit with family, and sleep at night.

B. For the inpatient setting, the goal should be established and/or re-confirmed every 12 hours or as needed.
C. In the clinic or school setting, this goal may be used as appropriate (when it is a natural part of the visit process) to reflect the pain score at which the pain does not significantly interfere with activities of daily living (ADLs), attending school, or socializing with friends.
D. Ideally, the patient should be the person identifying the comfort goal whenever possible. However, if a patient or family member is unable to articulate a comfort goal, the clinician may use the following general guidelines to aid in determining patient care:
    1. FLACC, Bieri Faces Pain Scale or VNRS: 4/10
    2. NPASS: 3/11
E. MKE Campus only: The electronic medical record will trigger the nurse to document why the patient was not able to identify the comfort goal (e.g. age, developmental level, sedation).
F. Inform the patient and caregiver that pain rated above the comfort goal is a guide and may indicate the need of a pain relieving intervention (non-pharmacological or pharmacological).

III. Frequency of Pain Reassessment

A. Pain should be reassessed:
    1. A minimum of every 8 hours (while awake) for all hospitalized patients or as ordered by the health care team *and* as needed based on patient condition (changes in vital signs or behavior suggestive of pain) and level of comfort.
    2. Patients with a high potential for pain (i.e. patients with a known painful condition, post-surgical patients, patients with tubes/drains) and patients whose pain is not adequately controlled, should be assessed more frequently (e.g. every 2-4 hours).
    3. Once a patient has consistently achieved adequate pain control and is able to participate in required activity, assessments may be once every 8 hours.
    4. For patients using a PCA, epidural analgesia, nerve block analgesia, or any continuous opioid infusion (for pain), pain should be reassessed a minimum of every 4 hours (when awake).
    5. Prior to and following a pain-relieving intervention. Time of reassessment should be based on onset and peak of action for individual medication and routes)
B. Patients are not awakened for pain assessments. Coordinate pain assessments with other cares whenever possible. Do not document “0” for pain assessment when patients are asleep. If a patient is asleep when a pain assessment is due, pain should be assessed during their next awake period.

IV. Sedation Assessment

A. A sedation assessment cannot be completed in a sleeping child without stimulating the patient and assessing the response.
   1. If a patient is asleep and not being stimulated; nurses should document "asleep" and *not* document a sedation score.
   2. Group sedation assessments with other cares (e.g. vital signs) to avoid stimulating patients more often than necessary.

B. Sedation assessments should be documented a minimum of every 4 hours *and* as needed (e.g. in cases of suspected over sedation) for patients receiving opioids or other sedating medications via a continuous drip, PCA, or epidural.

C. Sedation assessments should be documented prior to administration and after administration of intermittent dosing of opioids or other sedating medications (e.g. benzodiazepines, dexmedetomidine) by any route. Time of reassessment should be based on onset and peak of action for individual medications and routes.

D. **Richmond Agitation-Sedation Scale (Acute and critical care areas):**
   1. Used for N**on-intubated patients,** mechanically ventilated, non-chemically paralyzed patients, acute and critical care areas excluding NICU which uses the sedation portion of the NPASS.
   2. **Acute care areas**
      a. Sedation scores that are consistently (e.g. for more than two to three hours in a row, other than at night) a -2 using the RASS scale or are a -3 or less, must be reported to the team caring for the patient.

Score	Term	Description
+4	Combative	Overtly combative, violent, immediate danger to staff
+3	Very agitated	Pulls or removes tube(s) or catheter(s); aggressive
+2	Agitated	Frequent non-purposeful movement, fights ventilator
+1	Restless	Anxious but movements are not aggressive or vigorous
0	Alert and Calm	
-1	Drowsy	Not fully alert but has sustained awakening (eye opening/eye contact) to *voice* (>10 seconds)

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-2	Light sedation	Briefly awakens with eye contact to *voice* (<10 seconds)	Verbal Stimulation
-3	Moderate sedation	Movement or eye opening to *voice* (but no eye contact)	
-4	Deep sedation	No response to voice, but movement or eye opening to *physical* stimulation	Physical Stimulation
-5	Unarousable	No response to voice or *physical* stimulation	

Procedure for RASS Assessment

1. Observe patient
    - Patient is alert, restless, or agitated — **Score 0 to +4**
2. If not alert, state patient's name and say to open eyes and look at speaker.
    - Patient awakens with sustained eye opening and eye contact. — **Score -1**
    - Patient awakens with eye opening and eye contact, but not sustained. — **Score -2**
    - Patient has any movement in response to voice but no eye contact. — **Score -3**
3. When no response to verbal stimulation, physically stimulate patient by shaking shoulder and/or rubbing sternum
    - Patient has any movement to physical stimulation. — **Score -4**
    - Patient has no response to any stimulation. — **Score -5**

E. MMAAS (Critical Care Areas)

1. **Chemically paralyzed patients**
2. **MMAAS:**

- indicates vital signs "unresponsive" to stimuli
0 indicates vital signs "response" to stimuli
+ indicated vital signs "hyper –responsive" to stimuli

F. **Modified Ramsey Sedation Scoring System (Peri-operative areas and procedural sedation purposes only)**

(6) Agitated, anxious, or in pain above baseline
(5) Spontaneously awake without stimulus; may exhibit anxiolysis
(4) Drowsy but easily arouses to consciousness to light tactile or verbal/tactile stimulus
(3) Arouses to consciousness with moderate tactile or loud verbal stimulus
(2) Arouses slowly to consciousness with sustained painful tactile stimulus
(1) Arouses, but not consciousness, with painful stimulus

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(0) Unresponsive to painful stimulus

G. NICUs:

1. **NPASS includes sedation (see pain scales above and addendum A)**

H. Surgicenter:

1. **Ramsey sedation scale and Aldrete scoring system to establish discharge readiness**

Aldrete scoring system

Activity	
Able to move 4 extremities voluntarily or on command	2
Able to move 2 extremities voluntarily or on command	1
Able to move 0 extremities voluntarily or on command	0
Respiration	
Able to deep breathe and cough freely	2
Dyspnea or limited breathing	1
Apnea	0
Circulation	
BP ± 20% of preanesthetic level	2
BP ± 20% - 50% of preanesthetic level	1
BP ± 50% of preanesthetic level	0
Consciousness	
Fully awake	2
Arousable on calling	1
Not responding	0
Oxygen Saturation	
Able to maintain oxygen saturation >92% on RA	2
Needs oxygen inhalation to maintain oxygen saturation > 90%	1
Oxygen saturation < 90% even with oxygen supplementation	0
Total	

Aldrete, J. A. (1995).The post-anesthesia recovery score revisited. Journal Clinical Anesthesia, 76, 89-91.
Anesthesia and Analgesia, *Current Researches* VOL.4 9, NO. 6, Nov.-Dec., 1970 p. 926.

V. Intervention Considerations

A. General Principles

1. When pain is identified, the patient should be treated by the health care team, or referred for treatment.
2. In general, the goal of pain management is to have the patient:
    a. Experience a consistent level of pain relief.
    b. Comfortable while performing ADLs.
    c. Able to comfortably take deep breaths.
    d. Able to sleep for a minimum of two hours at a time.
    e. Not be overly sedated (sedation scores should be greater than -2).
    f. Experience minimal side effects (i.e. constipation; nausea/vomiting, itching).
    g. Verbalize satisfaction (patient or parent) with their level of comfort as appropriate for developmental age.

B. Intervention should be considered when:
1. The pain score is greater than the patient's comfort goal *and* interfering with the patient's level of functioning.
2. An increase in activity is anticipated.
3. Treatments that may exacerbate pain are anticipated (i.e. procedures, dressing changes).
4. A patient is unable meet the general goals suggested in 2 above.

C. Non-pharmacologic interventions for pain relief will begin upon recognition of pain. If indicated, pharmacologic interventions should begin as soon as possible.

D. Patients and caregivers should be informed of:
1. Current pain management plan and changes as they occur
2. Pain management options including non-pharmacologic techniques.
3. Patient and caregiver role in the pain management plan.
4. Importance of notifying the nurse about the effectiveness of the pain management plan.

E. Choose a therapeutic intervention based on pain assessment and discussion with the patient and family.

F. Regardless of the setting, unrelieved pain should be communicated by the RN through a clear reporting mechanism to other caregivers.
1. MKE Campus: For patients followed by the Acute Pain Service: Notify the Acute Pain Service
2. MKE Campus: For patients *not* followed by the Acute Pain Service:
    a. Hospital Acute Care Units:
        i. Notify the resident on call for a pain management plan
        ii. If pain is not resolved, notify the senior resident and/or nursing supervisor
        iii. If pain is still not resolved, notify the attending provider.
        iv. Attending providers should be made aware of persistent unrelieved pain.
    b. Hospital Critical Care Units:

i. Notify the NP, fellow, or resident following patient for a pain management plan.
ii. If pain is still not improved, notify the attending provider. **Attending providers should be made aware of persistent unrelieved pain.**

c. Outpatient setting (including schools): Notify the provider caring for the patient. In the schools setting this may be Nurse Practitioner, Community Health Medical Director, or Primary Care Provider

i. FV Campus: Notify the provider caring for the patient.

G. Pain scores that are consistently above the comfort goal but *not* interfering with functioning may indicate a need to discuss the identified goal and possibly establish a different goal (e.g. patient identifies goal of 2/10 but is able to fully function with a reported score of 5 may actually have a comfort goal of 5/10).

H. Pain scores consistently above the comfort goal and *are* interfering with patient's progress should trigger an interdisciplinary review of the pain management plan and possibly a modification of the treatment plan.

I. MKE Campus: Pain scores that still remain above the comfort goal and are interfering with patient's progress despite changes in the treatment plan should result in a consult with the Acute Pain Service. Consultation options include:

1. Advanced Practice Nurse Consult for guidance with assessment and treatment options (no provider order required).
2. Formal APS team Consult (APN and MD) for pain management recommendations (provider order required).
3. APS team consult (APN and MD) consult for management of the patient's pain and 24-hour/day coverage of that plan (provider order required).

VI. Non Pharmacological Interventions

A. General Principles

1. Most pain is best treated with a combination of pharmacological and nonpharmacologic approaches.
2. For mild pain, nonpharmacologic techniques alone may provide sufficient relief.
3. For moderate to severe pain, a combination of pharmacological and non-pharmacological techniques is required.
4. Select the nonpharmacologic technique based on developmental age of patient, effectiveness of prior use, pain and anxiety level of patient and family, and ability and willingness of patient and family to follow instructions.
5. Nonpharmacologic techniques include:

Sensory Physical	Cognitive	Cognitive/Behavioral
• Cold/Heat	• Guided imagery	• Art and Play

• Deep breathing • Distraction • Environmental modification • Essential oils (where permitted) • Exercise • Relaxation • Massage • Pacifier (with or without sucrose) • Expressed breast milk • Containment (for infants)	• Hypnosis* • Information giving • Choices control • Positioning • Psychotherapy*	• Modeling, role playing, behavioral rehearsal • Biofeedback* • Behavioral modification* • Desensitization* • Mindful meditation • Breathing/Relaxation

*Require provider order

VII. Analgesic Administration Guidelines

A. Principles of the medication administration and double check process within the medication administration policy apply to analgesic administration.

B. Base the initial choice of analgesic on the severity and type of pain:

1. Mild pain: non-opioids
   a. Acetaminophen may be given along with, or alternating with an NSAID if both are ordered.
   b. If both acetaminophen and an NSAID are ordered PRN, the clinician will determine the specific medication to be given based on several factors including but not limited to:
      i. The intensity of the pain
      ii. The cause of the pain (e.g., NSAIDS may be better for inflammatory pain than acetaminophen)
      iii. The interval of time since the last analgesic dose.
      iv. The effectiveness of previous doses in relieving pain.
      v. The preference of the patient or family
      vi. Route of administration
2. Moderate to severe pain: opioids, in combination with a non-opioids
   a. Acetaminophen and/or a NSAID may be given with an opioid if both/all are ordered (see section below for more information on opioids).
   b. If orders for more than one dose (e.g. one or two tabs) or more than one medication (oxycodone for moderate pain; morphine for severe pain) exist, the clinician will determine the specific dose based on several factors including but not limited to:
      i. The intensity of the pain.

ii. The clinical condition of the patient including the respiratory and neurological status of the patient.
iii. The interval of time since the last analgesic dose.
iv. Anticipated activity level
v. The effectiveness of previous doses.
vi. The length of time the patient has been on an opioid.
vii. The preference of the patient/family.

c. If both oral and IV routes for opioids are ordered, oral administration should be used unless the patient is NPO. The IV route can be used as a rescue, if the oral dosing does not provide adequate pain control.

C. **Around the clock dosing** *may* be appropriate based on pain scores (not simply by the clock) whenever pain is predicted to be present for more than 12 out of 24 hours. However, if a patient is difficult to arouse, or has a respiratory rate < 20 (children < 1 year of age) or < 12 (children 1-10 years of age), or < 8 (patients >10 years of age), do not administer an opioid without notifying the provider. These are potential indicators of opioid induced respiratory depression.

D. **PRN dosing** of analgesics is appropriate for
1. Intermittent pain (including breakthrough or activity-related pain).
2. Pain that is escalating or decreasing rapidly.
3. Initiating opioid analgesic therapy in patients with moderate or severe pain.

E. **Neuropathic pain** may require adjuvant medications such as antidepressants or anticonvulsants.

F. **Placebos** will not be used as part of any pain management plan (except as part of a research study in which parent/child have given informed consent).

G. **Routes of medication administration**:
1. Oral and intravenous administrations are the preferred routes.
2. Patients can be transitioned to oral administration as soon as they can tolerate oral intake.
3. Intramuscular injections (IMs) are strongly discouraged, will be avoided and will only be used in extraordinary circumstances (**if no other route is available**). IMs are painful, and create fear and anxiety in patients, which may result in avoidance of pain medication.

H. **Opioid General Guidelines**
1. **Opioids can and should be combined with non-opioids** to enhance analgesic effect (opioids work on the central nervous system while non-opioids work more on the peripheral nervous system, thus achieving better pain relief).
2. **Opioids do not have a ceiling effect** for analgesia and can be escalated as high as needed to achieve optimal pain control, as long as patient is not experiencing

respiratory depression, unacceptable sedation or other uncontrollable side effects (nausea, vomiting, itching, dysphoria).

3. **Meperidine (Demerol) cannot be used for pain relief**
   a. Meperidine use can result in an accumulation of active metabolites and is not recommended.
4. **Patient-controlled-analgesia (PCA)** can combine the benefits of continuous infusion (basal rate) and PRN dosing and has the added benefit of putting the patient/family in control of the patient's pain. PCA can be used in patients who can understand the concept of cause and effect (usually four to six years and above). For patients who are unable to understand the relationship between pain, pushing the button, and/or cannot physically self-administer a PCA dose, the nurse or a caregiver, with special education and provider order, may control the PCA. See Medication – Patient Controlled Analgesia – PCA and Parent or Nurse Controlled Analgesia CW or FV P&P as appropriate to location.
5. **Epidural analgesia** (MKE Campus only) is used in some patients having abdominal, thoracic, orthopedic, urologic and plastic surgeries. The Acute Pain Service manages epidural analgesia. Epidurals may also be set up to provide PCA intermittent doses (Refer to the Patient Care Policy and procedure: Epidural Analgesia – Continuous and single shot - CW").
6. **Nerve Block analgesia** is used in some patients having surgeries. The Acute Pain Service manages nerve block analgesia. On the FV campus Nerve blocks are managed by the Theda Care Anesthesia team. Nerve blocks may also be set up to provide PCA intermittent doses (Refer to the Patient Care Policy and procedure: "Medication – Nerve Block Analgesia – Continuous and Single Shot – For the Post-Op patient").
7. **A pulse oximeter** will be used for patients receiving IV opioids, refer to the Patient Care Policy and Procedure: "Monitoring Devices Cardiac-respiratory Pulse Oximetry". A pulse oximeter should be applied immediately before administering an opioid and for 30 minutes afterwards.
8. For non-intubated patients: if a patient is difficult to arouse, or a respiratory rate < 20 (patients < 1 year of age) or < 12 (children 1-10 years of age), or <8 (patients > 12 years of age), **do not administer an opioid without notifying the provider**. These are potential indicators for opioid induced respiratory depression.
9. When utilizing NPASS scoring for sedation, do not administer an opioid without notifying the provider if the patient's sedation score is outside of the desired sedation goal range (for light sedation, sedation score should be -5 to -2, and for deep sedation, sedation score should be -10 to -5).
10. Neuromuscular-blocking medication (example: Vecuronium) that chemically paralyzes a patient does not provide pain control or sedation management; patient

likely to require pain medication for pain management and sedative for sedation management.

11. **Non-opioids**
    a. NSAIDS and acetaminophen are effective for acute or chronic painful conditions of mild to moderate intensity and as an adjunct for severe pain. If both an NSAID and acetaminophen are ordered, it is recommended that nurses alternate them. Alternatively, if a patient (or parent) identifies that one works better than the other, that agent should be used as ordered.
    b. NSAIDS work primarily on the peripheral nervous system (with some impact on the central nervous system) to provide pain relief.
    c. It is safe to administer a non-opioid and an opioid at the same time.
    d. Common side effects of NSAIDS include GI irritation/upset and antiplatelet effects contributing to some bleeding tendencies. **Cyclooxygenase** (COX)-2 inhibitors may be an alternative to avoid these side effects.
    e. NSAIDS have a ceiling effect, which means that increasing the dose above the recommended dose will not provide additional analgesia.
    f. Acetaminophen may be used for mild-moderate pain intensity or in conjunction with opioids for more severe pain. It does not have an anti-inflammatory effect. It also has a ceiling effect.
        i. The amount of acetaminophen in combinations products (i.e. Percocet, Roxicet) is not a full, therapeutic dose. Therefore, a therapeutic dose may be administered within the frequency of a combination dose as long as the total daily dose does not exceed 75mg/kg/day (40mg/kg/day for GA 28-32 weeks; For GA 33 to 37 weeks or term neonates <10 days: maximum daily dose is 60 mg/kg/day).

VIII. Pain Management during Procedures

A. Refer to "*Procedures - Patient Preparation and Assessment for Procedures and Treatments Outside the OR and Special Procedure Rooms*" CW Policy and Procedure
B. General Principles
    1. A plan should be in place for managing patient distress if the procedure is likely to produce pain and/or anxiety. Pharmacological and nonpharmacologic interventions should be considered. Please refer to the procedural sedation policy and procedure.
    2. If the patient will experience repeated procedures, it is critical that optimal pain control be used with the initial procedure, and that a plan is in place for subsequent procedures.

IX. Pain Management Education

A. Caregivers should receive information about our Comfort Zone philosophy either with the Comfort Zone brochure, or with the Discover CW app/parents and guardians/comfort zone) as appropriate to setting, along with a discussion of the importance of pain, pain assessment, current pain management regimen and options.
B. Education should be provided based on the patient's pain management plan.

X. Pain Management at Discharge

A. Prior to discharge, provide the patient and caregiver(s) with:
    1. Specific instructions regarding pain management goals
        a. Anticipated degree of pain
        b. Interventions to be used at home
        c. A means of contacting health care providers if needed
    2. Prescriptions and written instructions for any medications
    3. Opioid safety for any patient receiving an opioid prescription (e.g. never wake a child to administer an opioid; always keep out of the reach of children and other adults; dispose of by taking to a police station or pharmacy drop box). Provide Health Facts teaching sheets, or direct families to the Discover CW app:
        a. Specific to the prescribed opioid (e.g. oxycodone, morphine, etc.)
        b. Opioid Safety
        c. Pain Management at home

XI. Documentation

A. Hospital setting:
    1. Document the initial pain screening.
    2. Document the patient's comfort goal upon admission, or whenever changed,
    3. Document pharmacological techniques in BCMA (barcode medication administration) or in the medical record.
    4. Document pain scores and behavioral cues, along with nonpharmacologic Interventions and patient response
    5. Document patient and caregiver teaching
    6. Document discharge plans and instructions for caregivers.
B. Outpatient setting:
    1. Document initial pain screening, assessment, treatment and education provided in the medical/electronic health record.

Related Patient Care (CW) Policies and Procedures:

Assessment, Reassessment Documentation of patient CW P&P

References

Aldrete, J.A., & Kroulik, D. (1970). A postanesthetic recovery score. Anesthesia and Analgesia, 49(6), 924-936.

American Pain Society (2003). Principles of analgesic use in the treatment of acute pain and cancer pain (5th ed). Glenview, IL: American Pain Society.

Bieri, D., Reeve, R., Champion, G.D., Addicoat, L., & Ziegler, J. (1990). The Faces Pain Scale for the self-assessment of the severity of pain experienced by children: Development, initial validation and preliminary investigation for ratio scale properties. *Pain, 41*:139-150.

Curley, M.A.Q., Harris, S.K., Fraser, K.A., Johnson, R.A., & Arnold, J.H. (2006). State Behavioral Scale: A sedation assessment instrument for infants and young children supported on mechanical ventilation. *Pediatric Critical Care Medicine, 7*(2),107-114.

Czarnecki, M.L., Ferrise, A.S., Garwood, M.M., Sharp, M., Jastrowski Mano, K.E., Davies, H., & Weisman, S.J. (2008). Parent/nurse controlled analgesia in children with developmental delay. *Clinical Journal of Pain, 24* (9), 817-24.

Herr K, Coyne PJ, Key T, Manworren R, McCaffery M, Merkel S, Pelosi-Kelly J, Wild L. Pain assessment in the nonverbal patient: position statement with clinical practice recommendations. *Pain Management Nursing*. 2006 Jun;7(2):44-52.

Hicks, C.L., von Baeyer, C.L., Spafford, P.A., van Korlaar, I. & Goodenough, B. (2001). The Faces Pain Scale – Revised: toward a common metric in pediatric pain measurement. *Pain 93*, (2), 173-183.

Hobson A., Wiffen P.J., Conlon JAAs (2015). Required versus fixed schedule analgesic administration for postoperative pain in children (Review) Copyright © 2015 The Cochrane Collaboration. Published by JohnWiley & Sons, Ltd.

The Joint Commission. (2018). Comprehensive Accreditation Manual for Hospitals: Refreshed Core, Available at http://www.jointcommission.org. (Quick link available through intranet)

Jones P, Dalziel SR, Lamdin R, Miles-Chan JL, Frampton C. (2015). Oral non-steroidal anti-inflammatory drugs versus other oral analgesic agents for acute soft tissue injury (Review). The Cochrane Collaboration. **Published by John Wiley & Sons, Ltd.**

Lundeberg, S. (2015). Pain in children – are we accomplishing the optimal pain treatment? Pediatric Anesthesia 25, 83–92. doi:10.1111/pan.12539

Manworren, R.C.B., & Hynan, L.S. (2003). Clinical validation of FLACC: Preverbal patient pain scale. *Pediatric Nursing, 29*(2), 140-146.

Pain Assessment in the Difficult-to-Assess Patient. (2003). Thomas E. Quinn, MSN, RN, AOCN, Project Director, MGH Cares About Pain Relief. This is an updated version of an article that first appeared in *Pain Relief Connection* Vol 2 #6, 6/2003.

Pasero, C. and McCaffery, M. (2011). Pain assessment and pharmacologic management. St. Louis: Mosby Elsevier.
Schecter, N.L., Berde, C.B., Yaster, M. (2003). Pain in Infants, Children, and Adolescents. (2nd Ed.) Philadelphia: Williams & Wilkins.

Walker, S. (2015). Pain after surgery in children: clinical recommendations. www.co-anesthesiology.com, Volume 28 Number 5 October 2015

Wong, D. (2007). Wong's Nursing Care of Infants and Children. (8th Ed.) St. Louis: Mosby.
World Health Organization. (2012). WHO guidelines on the pharmacological treatment of persisting pain in children with medical illnesses.

Vopel-Lewis, T., Merkel, S., Tait, A.R., Trzcinka, A., & Malviya, S. (2002). The reliability and validity of the face, legs, activity, cry, Consolability observational tool as a measure of pain in children with cognitive impairment. *Anesthesia Analogue, 95*: 1224-1229.

Yaster, M., Krane, E.J., Kaplan, R.F., Cote, C.J., & Lappe, D.G. (1997). Pediatric Pain Management and Sedation Handbook. St. Louis: Mosby.

Approved by the:
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Surgicenter Medical Executive Committee February 27, 2020
Milwaukee Medical Executive Committee March 2, 2020
Fox Valley Medical Executive Committee March 4, 2020

Addendum A (Pain Scales)

FLACC-Revised Scale

Use for infants, toddlers, patients with developmental delay, or any patient who is unable to use a self-report scale (0-10 or Bieri faces)

FLACC Revised			
Category	**0**	**1**	**2**
Face	**No Particular expression or smile**	**Occasional grimace or frown, withdrawn or disinterested;** ***appears sad or worried***	**Constant grimace or frown; frequent or constant quivering chin, clenched jaw;** ***distressed looking face, expression of fright or panic***
Legs	**Normal position or relaxed;** ***usual tone & motion to limbs***	**Uneasy, restless, tense;** ***occasional tremors***	**Kicking or legs drawn up;** ***marked increase in spasticity; constant tremors or jerking***
Activity	**Lying quietly, normal position, moves easily;** ***regular rhythmic respirations***	**Squirming, shifting back and forth, tense;** ***tense or guarded movements; mildly agitated (head back & forth, aggression); shallow splinting respirations, intermittent sighs***	**Arched, rigid or jerking;** ***severe agitation; head banging; shivering (not rigors); breath holding, gasping or sharp intake of breaths, severe splinting***
Cry	**No cry or verbalization (awake or asleep)**	**Moans or whimpers, occasional complaint;** ***occasional verbal outburst or grunt***	**Crying steadily, screams or sobs, frequent complaints;** ***repeated outbursts, constant grunting***
Consol-ability	**Content and relaxed**	**Reassured by occasional touching, hugging, or being talked to. Distractible**	**Difficult to console or comfort;** ***pushing away caregiver, resisting care or comfort measures***
Each category is scored from 0-2 resulting in a total score of 0 - 10.			
Italicized cues are intended to capture unique characteristics of patients with developmental delays. Ask caregivers if there are any individualized characteristics their patient displays when in pain			

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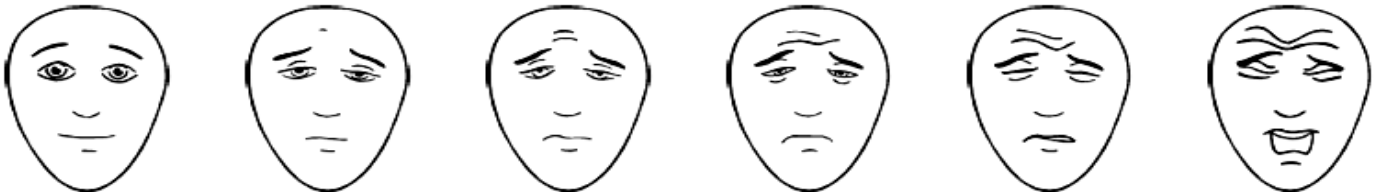
Bieri Faces Pain



0 2 4 6 8 10

Use for patients > 3 years old

1. **Explain to the patient "I'd like you to tell me how much you hurt."**
2. **Point to the appropriate face and say:**
   "This face {pointing to face 0} doesn't hurt at all. These faces {pointing to faces 2-8} show more and more hurt" and this face {pointing to face 10} shows the most hurt you can imagine."
3. **Ask the patient to "point to the face that shows how much you hurt right now."**

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Verbal Numeric Rating Scale (0-10)

Use for patients ≥ 8 who understand the concept of order and number.

Explain that "0" means no pain and "10" is the worst pain imaginable.

Questions to ask:

- "What number is your pain right now?"
- "What number is your pain when it is the worst that it gets?"
- "What number is your pain when it is the best that it gets?"
- "What number is the pain at an acceptable level for you? (At what number can you deep breathe, move and sleep, pretty comfortably?)

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N-PASS:
Neonatal Pain, Agitation, & Sedation Scale

Assessment Criteria	Sedation		Normal	Pain / Agitation	
	-2	-1	0	1	2
Crying Irritability	No cry with painful stimuli	Moans or cries minimally with painful stimuli	Appropriate crying Not irritable	Irritable or crying at intervals Consolable	High-pitched or silent-continuous cry Inconsolable
Behavior State	No arousal to any stimuli No spontaneous movement	Arouses minimally to stimuli Little spontaneous movement	Appropriate for gestational age	Restless, squirming Awakens frequently	Arching, kicking Constantly awake or Arouses minimally / no movement (not sedated)
Facial Expression	Mouth is lax No expression	Minimal expression with stimuli	Relaxed Appropriate	Any pain expression intermittent	Any pain expression continual
Extremities Tone	No grasp reflex Flaccid tone	Weak grasp reflex ↓ muscle tone	Relaxed hands and feet Normal tone	Intermittent clenched toes, fists or finger splay Body is not tense	Continual clenched toes, fists, or finger splay Body is tense
Vital Signs HR, RR, BP, SaO_2	No variability with stimuli Hypoventilation or apnea	< 10% variability from baseline with stimuli	Within baseline or normal for gestational age	↑ 10-20% from baseline SaO_2 76-85% with stimulation – quick ↑	↑ > 20% from baseline $SaO_2 \leq 75\%$ with stimulation – slow ↑ Out of sync with vent

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Premature Pain Assessment → + 1 if <30 weeks gestation / corrected age

PAIN ASSESSMENT / MANAGEMENT

- The goal is to have an NPASS score of ≤ 3 with minimal side effects. Remember to factor in the baby's gestational age to the score.
- Routine assessments are to occur with each set of hands on vital signs. Reassessments occur 30-60 minutes post intervention to assess for effectiveness.
- If the score is > 3 pain interventions should occur. Consideration needs to be given to factors other than pain if the score is > 3 (i.e. – vital sign changes may be due to the baby's pathophysiology such as RDS, hypovolemia, etc.).
- If the pain is mild, reduce stimulation as possible. Provide non-pharmacologic methods of support such as a pacifier, warm blanket, swaddling, position change, rocking, facilitated tucking, etc.
- If the pain is moderate, intervene as with mild pain. Consider adding a mild analgesic such as Tylenol or sucrose (see sucrose policy).
- If the pain is severe, discuss with the physician as to the need for analgesia. The use of sedatives is not an appropriate intervention for pain.
- When possible, provide premedication prior to procedures where pain is expected.
- All babies tolerate procedures (IV starts, suctioning, heel sticks, etc.) better if swaddled or contained.

SEDATION ASSESSMENT / MANAGEMENT

- Sedation is scored to assess the baby's response to stimuli. Complete sedation score with each set of hands on vital signs. Reassessment will depend upon the baby's score.
- Desired levels of sedation may vary according to the situation:
  - Light Sedation Goal = -5 to -2
  - Deep Sedation Goal = -10 to -5
- A negative score without the administration of opioids/sedatives may be due to: neurologic depression, sepsis, other pathology, or a premature baby who is either over stimulated, stressed, or in prolonged pain thus appearing sedated.

Scoring Criteria

Scoring Criteria (NPASS – neonatal pain, agitation & sedation scale)

Crying / Irritability

−2 → No response to painful stimuli
- No cry with needle sticks
- No reaction to ETT or nares suctioning
- No response to care giving

−1 → Moans, sighs, or cries (audible or silent) minimally to painful stimuli, e.g. needle sticks, ETT or nares suctioning, care giving

0 → No sedation signs or No pain/agitation signs

+1 → Infant is irritable/crying at intervals – but can be consoled
- If intubated – intermittent silent cry

+2 → Any of the following:
- Cry is high-pitched
- Infant cries inconsolably
- If intubated – silent continuous cry

Behavior / State

−2 → Does not arouse or react to any stimuli:
- Eyes continually shut or open
- No spontaneous movement

−1 → Little spontaneous movement arouses briefly and/or minimally to any stimuli:
- Opens eyes briefly
- Reacts to suctioning
- Withdraws to pain

0 → No sedation signs or No pain/agitation signs

+1 → Any of the following:
- Restless, squirming
- Awakens frequently/easily with minimal or no stimuli

+2 → Any of the following:
- Kicking
- Arching
- Constantly awake
- No movement or minimal arousal with stimulation (not sedated, inappropriate for gestational age or clinical situation)

Facial Expression

−2 → Any of the following:
- Mouth is lax
- Drooling
- No facial expression at rest or with stimuli

−1 → Minimal facial expression with stimuli

0 → No sedation signs or No pain/agitation signs

+1 → Any pain face expression observed intermittently

+2 → Any pain face expression is continual

Extremities / Tone

−2 → Any of the following:
- No palmar or planter grasp can be elicited
- Flaccid tone

−1 → Any of the following:
- Weak palmar or planter grasp can be elicited
- Decreased tone

0 → No sedation signs or No pain/agitation signs

+1 → Intermittent (<30 seconds duration) observation of toes and/or hands as clenched or fingers splayed
- Body is *not* tense

+2 → Any of the following:
- Frequent (≥30 seconds duration) observation of toes and/or hands as clenched, or fingers splayed
- Body is tense/stiff

Vital Signs: HR, BP, RR, & O_2 Saturations

−2 → Any of the following:
- No variability in vital signs with stimuli
- Hypoventilation
- Apnea
- Ventilated infant – no spontaneous respiratory effort

−1 → Vital signs show little variability with stimuli – less than 10% from baseline

0 → No sedation signs or No pain/agitation signs

+1 → Any of the following:
- HR, RR, and/or BP are 10-20% above baseline
- With care/stimuli infant desaturates minimally to moderately (SaO_2 76-85%) and recovers quickly (within 2 minutes)

+2 → Any of the following:
- HR, RR, and/or BP are > 20% above baseline
- With care/stimuli infant desaturates severely (SaO_2 < 75%) and recovers slowly (> 2 minutes)
- Out of sync/fighting ventilator

Facial expression of physical distress and pain in the infant

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