

Children's Health System Patient Care Policy and Procedure

This policy applies to the following entity(s):

- Children's Hospital of Wisconsin Children's Hospital of WI – Kenosha Children's Hospital of WI – Fox Valley
- Children's Medical Group Children's Health Education Center Seeger Health Resources Children's Hospital Foundation

SUBJECT: Pain Assessment and Management

Index

PHILOSOPHY	1
POLICY	2
PROCEDURE	3
PAIN ASSESSMENT	3
I. <i>General Principles</i>	3
II. <i>Initial Assessment</i>	4
III. <i>Patient's Comfort Goal</i>	5
IV. <i>Pain Reassessment</i>	6
INTERVENTION	7
I. <i>General Principles</i>	7
II. <i>Nonpharmacological Interventions</i>	8
III. <i>Analgesic Administration Guidelines</i>	9
PAIN MANAGEMENT DURING PROCEDURES	11
I. <i>General Principles</i>	11
PAIN MANAGEMENT AT DISCHARGE.....	12
I. <i>Prior to discharge, provide the child and caregiver(s) with:</i>	12
DOCUMENTATION	12
I. <i>Inpatient setting:</i>	12
II. <i>Outpatient setting:</i>	13
REFERENCES:	13

PHILOSOPHY

Children should have access to the safest, most effective pain relief possible during all phases of illness or injury. At Children's Hospital of Wisconsin, assessing and relieving pain is the responsibility of all healthcare professionals caring for children. Effective pain management depends on collaboration between the child, the family, and various members of the health care team. Children's Hospital of Wisconsin 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 to obtain patient and family feedback to gauge the adequacy of its control. Pain management plans should be evaluated and revised until pain is well controlled.

POLICY

1. All health care providers are responsible and accountable for ensuring effective pain management. The Registered Nurse (RN) assumes responsibility for delegated nursing acts, as well as for coordination of assessment and evaluation of nursing care provided, refer to the "[Assessment, Reassessment Patient Care Policy and Procedure](#)".
2. The physician, nurse, and other healthcare professionals (e.g. pharmacists, respiratory care practitioners, physical therapists, and childlife specialists) will collaborate to manage pain in the child.
3. Children and their families will be actively involved in pain assessment and management.
4. Pain intensity and pain relief will be assessed and reassessed at regular intervals, and this information will be used in deciding the appropriate therapeutic intervention, which may include pharmacological and non-pharmacological techniques.
5. Reports of inadequate pain control will result in reevaluation and possible revision of the pain management plan until pain is well controlled.
6. Patients are assessed for pain using developmentally appropriate, reliable methods. All pain assessment tools are available at the bedside on inpatient units, and are readily accessible in outpatient settings.
7. Therapeutic interventions will contribute to pain reduction that is satisfactory to child, parent and healthcare provider.
8. Patient assessments, reassessments, interventions, and responses to interventions will be documented.
9. Regardless of the setting (clinic, inpatient unit, etc.) unrelieved pain is not acceptable and will be communicated by the Registered Nurse (RN) through a clear reporting mechanism to other caregivers.
10. This policy and procedure also applies to children in the palliative care phase of their illness or injury.

PROCEDURE

Pain Assessment

I. General Principles

A. Pain assessment consists of scheduled assessment of pain and will be based on the QUESTT model. Healthcare professionals are to incorporate each of the following components into their pain assessments:

Question the child

Use pain-rating scales

Evaluate behavior and physiological change

Secure parental involvement

Take cause of pain into account

Take action and evaluate results

B. Select a pain assessment tool based on the developmental age of child, and in collaboration with the child and family.

1) Use self-report scales whenever possible: (FACES & VAS).

2) Use behavioral scales with preverbal and nonverbal children: (PIPS, NIPS, Comfort).

3) Pain scales include:

- **Premature Infant Pain Scale (PIPS)**

- Use for premature infants (<36 weeks gestation)

- In general:

- Scores <6 indicate minimal to no pain

- Scores of 6-12 indicate mild to moderate pain

- Scores >12 indicate moderate to severe pain (McCaffery, 1999)

- **Neonatal Infant Pain Scale (NIPS)**

- Use for infants, toddlers, or any child who is nonverbal

- For children with severe developmental delay or severe cognitive delay, the NIPS may be modified in collaboration with the parent to better represent that individual child's pain behavior. The Advanced Practice Nurse (APN) from the Acute Pain Service should be consulted in developing a plan for pain assessment and management in this population.

- In general:

- Scores of 0-2 indicate minimal pain to no pain

- Scores of 3-4 indicate moderate pain

- Scores of 5-7 indicate moderate to severe pain

- **Wong-Baker Faces Rating Scale (FACES)**

- Use for children \geq 3 years old

- Self reports are valid and preferred for most children \geq 3 years old

- The FACES scale is available in multiple languages: English, Spanish, Chinese, French, Italian, Japanese, Portuguese, Romanian, and Vietnamese.

- In general:

- Scores of 0-2 indicate minimal pain to no pain

- Scores of 3 indicate moderate pain

- Scores of 4-5 indicate moderate to severe pain

- **Verbal Analogue Scale (VAS)**
 - Use for children ≥ 8 who understand the concept of order and number
 - Instructions for the VAS are available in multiple languages: English, Spanish, Chinese, French, German, Greek, Hawaiian, Hebrew, Ilocano, Italian, Japanese, Korean, Pakistan, Polish, Russian, Samoan, Tagalog, Tongan, Vietnamese.
 - In general:
 - Scores of 0-4 indicate minimal to no pain
 - Scores 5-6 indicate moderate pain
 - Scores of 7-10 indicate moderate to severe pain
- **Comfort Scale**
 - Use for intubated children
 - In general:
 - Scores of 0-17 indicate mild to no pain
 - Scores of 18-27 indicate moderate pain
 - Scores of >27 indicate moderate to severe pain

C. Instruct patient and family on the use of the appropriate pain scale.

D. The same scale will be used consistently by all healthcare professionals caring for the child. If the scale needs to be changed, it will be documented on the patient care plan.

E. Patients are not awakened for pain assessments unless requested by the patient or family. Coordinate pain assessments and interventions with other cares whenever possible.

II. Initial Assessment

A. Patients will have a documented initial screening for the presence of pain (a pain score with an appropriate pain tool). This screening may be completed by the nurse, resident physician, or attending physician caring for the patient.

- EDTC and inpatient units
 - Screen for pain with initial assessment whenever possible
- For primary care clinics
 - Screen for pain at first visit and whenever indicated.
 - If pain is present, or if there is a change, update the assessment information from the last visit to Children's Hospital of Wisconsin.
- For Specialty clinics
 - Screen for pain when it is a natural part of the intake process (e.g. dental clinic)
 - If pain is present, or if there is a change since last visit, complete or update the assessment information from the last visit to Children's Hospital of Wisconsin.
- Diagnostic services
 - Screening for pain is not necessary unless related to positioning

B. Regardless of the setting, if pain is present, an initial pain assessment will be completed as appropriate. The assessment may include the following components based on setting, developmental age of the child, diagnosis, and severity of the condition:

- Pain intensity

- Location
- Quality, patterns of radiation, character
- Onset, duration, variations and patterns
- Alleviating and aggravating factors
- Present pain management regimen and effectiveness
- Pain management history
- Medication history
- Presence of common barriers to reporting pain and using analgesics
- Past interventions and response
- Manner of expressing pain
- Effects of pain
- Impact on daily life, function, sleep, appetite, relationships with others, emotions, concentration, etc
- Patient's pain goal and goals related to function, activities, quality of life
- Physical exam/observation of the site of pain

C. Child and family teaching, upon the initial assessment, will include the following:

- 1) Effective pain relief is an important part of their treatment
- 2) Health professionals will respond quickly to their reports of pain
- 3) A total absence of pain is often not realistic or even a desirable goal
- 4) Pain will be assessed at regular intervals through the use of self-report and/or behavioral observation tools.
- 5) Pain management plan
- 6) Possible side effects of any medications
- 7) Families can help their child by:
 - Informing the nurse when the pain first begins
 - Informing the nurse if the pain is not relieved
 - Informing the nurse about any suspected side effects of pain interventions
 - Asking any questions they may have regarding their child's pain management.

III. Patient's Comfort Goal

- A. Each patient will have a clearly articulated 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 scale the child would need to be at in order to be able to deep breathe, walk, visit with family, and sleep at night. For outpatients, this goal may additionally reflect the pain score at which the pain does not significantly interfere with ADLs, attending school, or socializing with friends. This number will be documented on the patient care plan in the outcomes section or in a clinic note. As this goal may change over time, it will also be documented on the inpatient flowsheet.
- B. 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:
 - PIPS: <6/21
 - NIPS: <3/7
 - FACES: <3/5
 - VAS: <5/10
 - Comfort Scale: <18/45

- C. Inform the patient and family that pain rated above the comfort goal will trigger an evaluation for the possible use of a pain relief intervention (nonpharmacological or pharmacological).
- D. The process of reassessment and intervention will continue until the patient has reached his or her comfort goal and throughout hospital stay.

IV. Pain Reassessment

A. Pain is reassessed:

1. Every 8 hours for all hospitalized patients.
2. For patients with a high potential for pain (i.e. post-surgical patients, patients with sickle cell crisis, oncology patients, patients with chronic pain).
 - at least every 2 hours for the first 24 hours, then every 4 hours
 - prior to a pain relieving intervention
 - within 30–60 minutes after a pain relief intervention.
 - more frequent assessment is required if pain is poorly controlled (if patient's pain score is not at his or her comfort goal).
 - Once a patient has consistently achieved the individualized outcomes identified on patient care plan, assessments may be once every 8 hours.
3. For patients whose pain is poorly controlled:
 - At least every 1-hour until comfort goal is achieved, then every 2-4 hours to maintain pain control.
4. Sedation scores will be documented, along with pain scores, prior to administration and 30-60 minutes after administration of any narcotic by any route. For patients using a PCA or epidural analgesia, or any continuous narcotic infusion, sedation scores will be documented every 4 hours. Sedation scores <4 must be reported to the resident caring for the patient.

Sedation scores are as follows:

- (6) agitated, anxious, or in pain above baseline
- (5) spontaneously awake without stimulus
- (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
- (0) unresponsive to painful stimulus

5. For primary care and specialty clinics
 - Reassess when it is a natural part of the visit process (i.e. with changes in treatment; with procedures)
6. Diagnostic services
 - Reassessing for pain is not necessary unless related to positioning

Intervention

I. General Principles

- A. In general, the goal of pain management treatment is to have the patient:
- Experience a consistent level of pain relief
 - Comfortable while performing activities of daily living (ADLs)
 - Able to comfortably take deep breaths
 - Able to sleep for a minimum of 2 hours at a time
 - Not be overly sedated (sedation scores should be > 3)
 - Experience minimal side effects (i.e. constipation; nausea/vomiting, itching)
- If these goals are not met, the RN will collaborate with the physician
- B. Intervention will be considered when:
- The verbal or behavioral pain scale is greater than the patient's comfort goal
 - An increase in activity is anticipated
 - Treatments that may exacerbate pain are anticipated (i.e. procedures, dressing changes)
 - A child is unable to sleep for 2 hours at a time
 - A child is unable to take deep breaths
 - A child is unable to perform ADLs
 - A child is experiencing unacceptable side effects
- C. Interventions for pain relief will occur within 30 minutes of assessment of scores above comfort goal.
- D. Patients and parents will be informed of:
- Current pain management plan
 - Pain management options
 - Changes to the pain management plan
 - Patient and parent role in the pain management plan
 - Importance of notifying the nurse about the effectiveness of the pain management plan
- E. Choose a therapeutic intervention based on the initial pain assessment and discussion with the patient and family. Therapeutic interventions may include:
- Child-parent teaching
 - Distraction/relaxation techniques
 - Milieu management
 - Analgesics
 - Procedural sedation
 - Child Life referrals
 - PT/OT referrals
 - Pain Service referral
- F. The pain management interventions, whether pharmacological or non-pharmacological, will continue until the effective outcome of pain reduction is achieved to the satisfaction of the child and/or parent and the health care provider.

- G. Regardless of the setting unrelieved pain is unacceptable and will be communicated by the RN through a clear reporting mechanism to other caregivers.
- For patients followed by the Acute Pain Service: Notify the Acute Pain Service
 - For patients not followed by the Acute Pain Service:
 - Inpatient Acute Care Units:
 - Notify the resident on call for a management plan
 - If pain is not resolved, notify the senior resident or nursing supervisor
 - If pain is still not resolved, notify the attending physician. Attending physicians will be made aware of persistent unrelieved pain.
 - Inpatient Critical Care Units:
 - Notify the NP, fellow, or resident following patient for a management plan.
 - If pain is still not resolved, notify the attending physician. Attending physicians will be made aware of persistent unrelieved pain.
 - Outpatient setting: Notify the physician seeing the patient.
- H. Pain ratings consistently above the comfort goal will trigger an interdisciplinary review of the pain management plan and a modification of the treatment plan. Resources may include the patient, family, RN, pharmacist, physician, child life, APN for acute pain service.
- I. Pain ratings that still remain above the comfort goal despite changes in the treatment plan will result in a consult with the Acute Pain Service. Acute Pain Service consults may be initiated by the nurse or physician caring for the patient. Consultation options include:
- Advanced Practice Nurse consult for guidance with assessment and treatment options (no physician order required)
 - APS team consult (APN and MD) for pain management recommendations (physician order required)
 - APS team consult (APN and MD) consult for management of the patient's pain and 24-hour/day coverage of that plan (physician order required).
- A physician's order may be obtained from a resident physician or an attending physician. If a resident wishes to order a pain consult, he or she is responsible for communicating this to the attending physician prior to obtaining the consult.

II. Nonpharmacological Interventions

A. General Principles

- 1) Most pain is best treated with a combination of pharmacological and nonpharmacological approaches.
- 2) For mild pain, nonpharmacological techniques alone may provide sufficient relief.
- 3) For moderate to severe pain a combination of pharmacological and nonpharmacological techniques is required.

- 4) Select the nonpharmacological technique based on developmental age of child; effectiveness of prior use; pain and anxiety level of patient and family; and ability and willingness of patient and family to follow instructions. Nonpharmacological techniques include:

Sensory Physical	Cognitive	Cognitive/Behavioral
<ul style="list-style-type: none"> • Cold/Heat • Deep breathing • Distraction • Environmental modification • Exercise • Relaxation • Massage • Pacifier • TENS* 	<ul style="list-style-type: none"> • Guided imagery • Hypnosis* • Information giving • Choices control • Positioning • Psychotherapy* 	<ul style="list-style-type: none"> • Art and Play • Modeling, role playing, behavioral rehearsal • Biofeedback* • Behavioral modification* • Desensitization* • Mindful meditation • Breathing/Relaxation

*Requires a physician order

III. Analgesic Administration Guidelines

A. General Principles

1. Refer to the Patient Care Policy and Procedure: Medication Administration” which includes the drip double check process, when administering analgesics.
2. Base the initial choice of analgesic on the severity and type of pain:
 - Mild pain: non-opioids,
 - Moderate to severe pain: opioids, often in combination with a non-opioids
 - Neuropathic pain may require adjuvant medications such as antidepressants or anticonvulsants.
3. Around the clock dosing is recommended whenever pain is predicted to be present for more than 12 out of 24 hours. However, if a child has a **sedation score <4** or a respiratory rate < 20 (children < 1 year of age) or < 12 (children 1-10 years of age), or < 8 (children >10 years of age), do not administer an opioid without notifying the physician. These are potential indicators for opioid induced respiratory depression.
4. PRN dosing of analgesics is appropriate for
 - Intermittent pain (including breakthrough or activity-related pain)
 - Pain that is escalating or decreasing rapidly
 - Initiating opioid analgesic therapy in patients with moderate or severe pain.
5. Placebos will not be used as part of any pain management plan.
6. Routes
 - Oral and intravenous administration of analgesics are the preferred routes
 - IV analgesics provide the most rapid and consistent method of pain relief.
 - Children will be transitioned to oral administration as soon as they can tolerate oral intake.
 - 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 children, which may result in avoidance of pain medication.

B. Opioid General Guidelines

1. **Continuous infusion of opioids** is most effective in maintaining continuous pain relief with minimal risk of respiratory depression, especially in infants. Continuous therapy avoids the phenomenon of “stacking” which can occur from repeated frequent intermittent dosing. “Stacking” can lead to severe toxicity including acute respiratory depression. Patients should receive a loading dose upon initiation of the continuous infusion, and should have PRN doses available for breakthrough pain
2. **Intermittent Dosing** is most effective when given in small, frequent doses. These scheduled doses should be given around the clock to avoid large peaks and valleys in pain control. Do not give the scheduled dose if a patient is experiencing increased sedation or respiratory depression (see #9 below).
3. **Patient-controlled-analgesia (PCA)** combines the benefits of continuous infusion and PRN dosing and has the added benefit of putting the patient/family in control of the child’s pain. PCA can be used in children who can understand the concept of cause and effect. 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 family member, with special education, may control the PCA.
 - RNs will follow the drip double check policy (see Medication Administration Policy) before initiating, and with any changes to a PCA.
 - RNs will document PCA settings and hourly injections: Attempts ratio on the flowsheet.
4. **Epidural analgesia** is used in some children having abdominal, thoracic, orthopedic, urologic and plastic surgeries. The Acute Pain Service from the Department of Anesthesia manages epidural analgesia. Epidurals may also be set up to provide PCA intermittent doses (Refer to the Patient Care Policy and procedure: “[Epidural Analgesia](#)”).
5. **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).
6. **Opioids may be combined with non-opioids** to enhance analgesic effect (opioids work on the central nervous system while non-opioids work on the peripheral nervous system, thus achieving optimal pain relief).
7. Some medications (i.e. Meperidine) result in an accumulation of active metabolites. If used, discontinuation of these medications should be considered after 48 hours.
8. **A pulse oximeter** will be used for children <6 months of age receiving IV opioids, refer to the Patient Care Policy and Procedure: “[Monitoring Devices](#)”. A pulse oximeter may be used for older children as well per physician order.
9. If a child has a sedation score <4 or a respiratory rate < 20 (children < 1 year of age) or < 12 (children 1-10 years of age), or <8 (children > 12 years of age), do not administer an opioid without notifying the physician. These are potential indicators for opioid induced respiratory depression.

C. Non-opioids

- 1) NSAIDS and acetaminophen are effective for acute or chronic painful conditions of mild to moderate intensity.

- 2) NSAIDS work primarily on the peripheral nervous system to provide pain relief.
- 3) It is safe to administer a non-opioid and an opioid at the same time.
- 4) Common side effects of NSAIDS include GI irritation/upset and antiplatelet effects contributing to some bleeding tendencies.
- 5) NSAIDS have a ceiling effect, which means that increasing the dose above the recommended dose will not provide additional analgesia.
- 6) 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.

Pain Management during Procedures

I. General Principles

- A. A plan must be in place for managing patient distress if the procedure is likely to produce pain and/or anxiety. Pharmacological and nonpharmacological interventions should be considered. Please refer to the procedural sedation policy and procedure.
- B. Assessment during procedures
 - Prior to the procedure, patients will be asked to rate the level of acceptable pain (experienced during the procedure) on a developmentally appropriate pain scale.
 - During the procedure, the child will again be asked to rate their pain on the same scale, if they are able to give a rating.
 - If the pain level is above the acceptable level, intervention is needed (pharmacological or nonpharmacological).
 - Patients will again be asked their pain score after the procedure is completed to assess whether or not pain relieving measures were sufficient.
- C. Provide developmentally-appropriate procedural information
 - What will happen
 - Timing of events
 - Characteristics of the sensations the patient is likely to feel
 - Attention will be given to using body language and words, which do not instill fear.
 - Be aware that patients and families vary in the amount of detail they wish to know about a procedure. Provide information based on your assessment of their desire to know. Teaching should begin as soon as a procedure is planned, and should be tailored to meet the families needs as far as quantity of information given at one time.
- D. Provide an appropriate environment during the procedure:
 - Privacy
 - Lighting
 - Noise
 - Number of people in the room
 - Offer to provide favorite toy/security object
 - Supplies for nonpharmacological techniques readily available
 - Monitor parent and staff behavior and provide feedback to ensure the environment remains safe and relaxed for the patient

- E. When at all possible, painful procedures will not be performed in the child's bed or room unless absolutely necessary, or developmentally appropriate, or if the patient/family requests.
(Respiratory therapy procedures are almost always done in bed).
- F. Parents may be allowed to remain with their child during procedures. Health care providers should use their judgement regarding the presence of parents and siblings based on the procedure being performed, space available, severity of the situation, and perceived benefit to the child. However, parents should be given the option to step away. Parents who choose to stay will be given specific behavioral instructions on how to support their child.
- G. Child Life staff are experts in helping children cope with discomfort using distraction and relaxation techniques, and should be considered when developing a pain management plan.
- H. If the patient will experience repeated procedures, it is critical that optimal pain control be used with the initial procedure, and that a plan be in place for subsequent procedures.

Pain Management at Discharge

I. Prior to discharge, provide the child and caregiver(s) with:

- Specific instructions regarding pain management goals
- Anticipated degree of pain
- Interventions to be used at home
- A means of contacting health care providers about problems
- Prescriptions and written instructions for any medications

Documentation

I. Inpatient setting:

- A. Document the initial pain screening on the Admission Assessment-Screening form, and briefly on the patient care plan history and physical.
- B. Initial pain assessments will be documented on the Initial Pain Assessment tool.
- C. Document the patient's comfort goal upon admission on the patient care plan with the outcomes. It will also be documented on the flow sheet, as this goal may change over time.
- D. Document the pain management plan on the patient care plan.
- E. Document pharmacological techniques on the medication administration record.
- F. Document pain scores and behavioral cues, along with nonpharmacological interventions and patient response on the patient flowsheet and progress notes as appropriate.
- G. Document patient and family teaching on the interdisciplinary teaching evaluation form.
- H. Document discharge plans and instructions on the discharge instruction sheet.

II. Outpatient setting:

- A. Initial pain assessment may be documented on the Initial Pain Assessment tool.
- B. Document on the outpatient flowsheet
 - Initial pain screening
 - Patient's comfort goal
 - Pain management plan
 - Pharmacological techniques
 - Pain score and name of tool utilized
 - Teaching
 - Discharge instructions

REFERENCES:

- Acute Pain Management Guideline Panel. (1993). Acute Pain Management in Infants, Children, and Adolescents: Operative and Medical Procedures, Quick Reference Guide for Healthcare professionals. AHCPR Pub. No 92-0020. Rockville, MD.
- Joint Commission on Accreditation of Healthcare Organizations. (2000). Pain Assessment and Management: An Organizational Approach. Oakbrook Terrace: Joint Commission.
- McCaffery, M., and Pasero, C. (1999). Pain: Clinical Manual. (2nd ed.) St. Louis: Mosby.
- Wong, D. (1997). Essentials of Pediatric Nursing. (5th ed.) St. Louis: Mosby.

Approved by Clinical Practice Council 04/2001

Approved by Medical Executive Committee 05/2001