Pain Assessment and Monitoring

Site	All BCH
Setting/Population	All Settings/All Populations
Clinician	All Clinicians

Policy

- Obtain a Pain History and an Initial Pain Assessment for every patient admitted to gain knowledge about the patient's personal, cultural, spiritual and/or ethnic beliefs and practices.
- Identify and document pain intensity using the standardized pain assessment tools appropriate to the age, medical condition and level of cognitive development of the child in conjunction with the child's self-report, family member's and health professional's assessment of pain.
- For patients with a primary pain disorder, (such as migraines, functional abdominal pain, complex regional pain syndrome (CRPS)) that is confirmed by team impression and a prescriber order, assess pain through clinician observation rather than self-report.
- Notify the appropriate clinician if the patient's pain is NOT consistent with illness or surgery or if pain is significant and unrelenting. See the ***Safe and Effective Pain Management*** reference tool and algorithm for more information.
- Use cardio-respiratory and oxygen saturation monitoring for:
  - Patients on epidural analgesia (with or without opioids).
  - Full term infants 0 to 3 months on opioids via any route (PO, IV, etc).
  - Full term infants 0 to 6 months on IV opioids.
  - Former premature infants with a post-conceptual age less than 60 weeks
  - on any opioids (PO, IV, etc).
  - Patients on opioids-scheduled or PRN for less than 72 hours (opioid naïve) with continuous opioid infusions.
  - Any patient with increased risk of respiratory depression. See list ***below*** for more conditions that increase risk. For more information on respiratory depression see ***Critical Alert*** below.

    Note: **Exception to monitoring requirement:** Cardio-respiratory monitoring may be discontinued intermittently while patient is awake and alert and when a responsible adult is present.
- Assess and reassess and document pain intensity using a valid and reliable tool:
  - on admission,
  - before and after analgesic administration or any interventions to decrease or alleviate pain

  - Pre and post procedure where analgesia is used as pre-medication
- at a minimum of every shift, typically pain is assessed every 4 hours with vital signs when awake and /or at risk for experiencing pain

Purpose

To decrease pain as much as possible while ensuring patient safety.

Critical Alerts

Pain NOT Consistent with Illness or Surgery

Unexpected intense pain, particularly if sudden or associated with altered vital signs such as respiratory distress, hypotension, tachycardia or fever must be evaluated by the primary service and new diagnoses such as wound dehiscence, bladder distension, ileus, compartment syndrome, tight cast or dressing, bleeding or infection should be considered. The first priority in caring for a patient with significant pain not consistent with illness or surgery is to stabilize and treat the primary cause of the pain especially if associated with altered vital signs. For additional information, refer to the, refer to the following pain reference tool and algorithm: ***Safe and Effective Pain Management***.

Respiratory Depression

The least common, but most serious, side effect of opioids is respiratory depression. Monitoring of the patient's responsiveness can alert the clinician to early signs of problems. For patients with significant cognitive/developmental impairment, refer to the Nursing Inpatient Assessment History for the patient's cognitive/developmental baseline.

Increased Risk of Respiratory Depression

Selected patients with increased risk of respiratory depression may require cardio-respiratory monitoring. This includes but is not limited to the following conditions:

- Compromised airway
- Significant kidney disease
- History of respiratory depression with opioid use
- Large opioid doses for patient's weight and/or condition
- Neurological impairment
- Opioid naïve (use of opioids-scheduled or PRN for less than 72 hours) and concurrent use of other medication capable of central nervous system depression (e.g. benzodiazepines
- Significant lung disease in patients who are not ventilated

  Somnolence
- Significant liver disease
- Morbid obesity
- Muscle weakness

Responsiveness Assessment

- Awake and alert
- Easily aroused but drowsy
- Drowsy but opens eyes when name is called several times
- Hard to arouse – needs tactile stimulus in addition to loud voice
- Responds to pain only
- No response

Emergency Response

Opioid related respiratory depression and serious complications requiring ventilatory support are treated by emergency response (anesthesia STAT or Code Blue), and with Naloxone (Narcan) as needed. For detailed information about Naloxone (Narcan) refer to:

- Boston Children's Hospital ***Formulary:*** Narcan
- Patient Care Manual: ***The Parenteral Naloxone (Narcan) Administration by Rapid Intravenous Administration***
- Emergency equipment (at bedside):
  - oxygen
  - ambu bag
  - proper size mask for patient
  - suction equipment
  - Naloxone (Narcan) stocked in PYXIS

Placebos

Placebos (i.e. saline injections for analgesia) are NOT administered as a method for assessment or treatment of pain except with informed consent or in clinical trials. A placebo is defined as any medication or procedure that produces an effect in a patient because of its implicit or explicit intent and not because of its specific physical or chemical properties. Placebo use deprives the patient of appropriate treatment or diagnostic measures.

Procedure

Resources

- Pain Treatment Service (page # 7246 [PAIN])
- Patient's ***Pain History and an Initial Pain Assessment***
- Laminated ***Pain Assessment tools***
  (Non-English versions of the Wong-Baker FACES tool are available from the Family Education ***Home Care Instructions*** area in the e-library)
- Pain Management Modules [***NetLearning***]
- Ordersets for specific medications
- Coping Kit (located in unit treatment rooms)
- Child Life Specialist
- ***Pain Management Website***

- ***Needle Pain Management (inpatient)***
- ***Needle Pain Management for Non-Inpatient Areas***

Planning

Administer therapeutic interventions per level of patient's pain and as condition warrants. Interventions may include:

- Patient and/or parent/caregiver teaching:
- Administering analgesics as ordered;
- Behavioral distraction techniques; and/or
- Other pharmacologic and non-pharmacologic interventions, including needle pain interventions per the needle pain protocol, (***inpatient*** and ***non-inpatient***)

Assessment

1. Obtain a **Pain History** for every patient **within 24 hours** of admission. Document an **Initial Pain Assessment on the Flowsheet** when clinically indicated.
   - In the **Ambulatory setting**, ask the patient if they are having any pain.
2. Select a ***pain assessment tool*** based on the developmental level, medical condition, patient's language preference, past experience, and patient and family choice of tool. Use a self-report tool whenever possible. Instruct patient and family on its use.
   - For non-verbal patients, Use the INRS to capture the patient's typical pain behaviors as described by the parent/guardian.
   - Patients with a primary pain disorder (such as migraines, functional abdominal pain, complex regional pain syndrome (CRPS)) that is confirmed by team impression and a prescriber order, assess pain through clinician observation rather than self-report, ***Chronic Pain*** .

     Rationale: Frequent self-reports of pain may direct the child's attention toward the pain stimulus. The purpose of pain management is to direct attention towards improving function (increased physical activity),
3. Complete the pain assessment tool or by clinician observation (primary pain disorder) to assess reassess and the patient's pain intensity or functionality Document the results. Follow these frequency criteria: link chronic pain order set
   - On admission.
   - Before and after analgesic administration or any intervention to decrease or alleviate pain. Refer to Formulary for peak and duration of specific drugs.
   - pre and post procedure where analgesia is used as pre-medication
   - At a minimum of every shift. Typically pain is assessed every 4 hours with vital signs while the patient is awake and/or at risk for experiencing pain. More frequent assessment is necessary in patients in whom pain has not been well controlled. For example, pain assessment after surgery or an invasive procedure may require assessment as frequently as every 15-30 minutes.
4. Assess patient receiving opioids or other sedating medications for ***respiratory depression*** and ***responsiveness***.

- When you obtain vital signs; and
- Before and after administering sedating medications. Refer to the ***Formulary*** and the Patient Care Manual: ***Patient Controlled (PCA)/Nurse Controlled (NCA) Analgesia*** or ***Epidural Analgesia.***

5. For need pain management, consider interventions such as analgesics, topical local anesthetics, sucrose. Refer to the ***Needle Pain Management (inpatient)*** and ***Needle Pain Management for Non-Inpatient Areas*** for more information.
6. Reassess pain and document if interventions performed do not produce the intended effect.
7. Document the ***Responsiveness Assessment*** when you obtain vital signs and before and after administering sedating medications.
8. Manage side effects of opioids.
9. Use cardio-respiratory and oxygen saturation monitoring as indicated.
10. Refer to the ***Safe and Effective Pain Management*** reference tool and algorithm to communicate inadequate pain relief, change in vital signs from patient's baseline and uncontrolled side effects to the appropriate team members.

Assessment of a Sleeping Patient

In the case of the sleeping patient, the frequency of pain assessment is based upon:

- Patient's medical condition
- Past reports of pain
- Analgesics orders
- Consult with the family whenever possible

Pain cannot be assessed when the patient is asleep. By definition pain is awareness of an unpleasant sensory experience at the cortex level (i.e. consciousness). Therefore, when the patient is asleep, pain intensity cannot be documented, rather document observations of the patient such as vital signs. It is not always necessary to wake the sleeping patient for a pain assessment.

Patient/Family Education Regarding Pain Management

- How to use the appropriate pain assessment tool or methods.
- Effective pain management is an important part of treatment.
- Pain assessment and management is guided by type of pain
- A total absence of pain may not be a realistic goal.
- Pain is assessed at regular intervals through the use of self-report pain tools, and/or behavioral observation tools or methods.
- Communication of suspected side effects of pain interventions is important.
- Pain medications prescribed upon discharge: usage, dosage, potential side effects, safe handling and disposal of medication.

Evaluation

Evaluate effectiveness of the procedure and patient outcomes.

Remember the AIR Cycle: Assessment, Intervention and Reassessment when treating pain.

Documentation

Complete ***patient care documentation*** as described in the Patient Care Manual. In addition, document specific Pain Assessment and Management information as follows:

Pain History and Initial Assessment Form	Obtain a ***pain history*** for every patient from the patient and/or family/caregivers upon admission and an Initial Pain Assessment when clinically indicated.
Patient Care Flow Sheet/ Electronic Documentation	Document the selected pain tool or by clinician observation for patients with a primary pain disorder (chronic pain) Record the pain assessment a minimum of **once per shift** for all patients. Typically pain is documented every 4 hours with vital signs while the patient is awake and/or at risk for experiencing pain. Record the ***Responsiveness Assessment*** as indicated. Record all changes in pain management plan, and communication of unexpected outcomes (unsatisfactory pain relief, significant side effects, dose changes, etc.) along with response to changes.

Related Content

Websites

- ***Pain Management Website (Libguide)***
- ***Formulary*** (for specific drug information)

Education Materials/ Family Education Sheets

- ***Caring for Patients with Chronic Pain (FES)***
- ***Patient-Controlled Analgesia for Pain Relief***
- ***Nurse-Controlled Analgesia (NCA) for Pain Relief***
- ***Epidural Catheter for Pain Relief***
- ***Pre-filled Oxycodone Syringes for Pain After an Operation***
- ***Learning to Measure Your Child's Pain***
- ***Learning to Measure Your Child's Pain with INRS***
- ***Managing your Child's Pain in the Hospital***
- ***Numbing cream to Prepare Your Child for a Needle Procedure***
- ***Weaning and Signs of Withdrawal from Medication***
- ***Frequently Asked Questions about Safety of Prescription Pain Medications***
- ***Frequently Asked Questions about Opioid Treatment for Long-Term Pain***
- ***Wound or Peripheral Nerve Catheter for Pain Relief***
- Click ***here*** for all pain related family education information sheets
- Nursing Competency
- Pain Management Modules [***NetLearning***]
    - ❖ Updates to Pain Assessment and Management (Algorithms and Pain View) Module
    - ❖ Peripheral Nerve and Wound Catheters

Patient Care Manual

- ***Patient Controlled (PCA)/Nurse Controlled (NCA) Analgesia***

- ***Controlled Substances***
- ***Local Anesthetics Infusions via Wound and Peripheral Nerve Catheters***
- ***Intrathecal Analgesics***
- ***Parenteral Naloxone (Narcan) Administration by Rapid Intravenous Administration***
- ***Epidural Analgesia***

Patient Protocols

- ***Needle Pain Management***
- ***Needle Pain Management for Non-Inpatient Areas***

Reference Tools

- ***Pain Assessment Tools***
- ***Individualized Numeric Rating Scale***
- ***Behavioral Distraction Techniques***
- ***Conversion to Oral Analgesics for Patients Admitted with Vaso-Occlusive Crisis***
- ***Safe and Effective Pain Management***
- ***Chronic Pain and Pain Related Disability Algorithm***

References

American Pain Society (APS). (2008). Principles of analgesic use in the treatment of acute and cancer pain (6th Ed.). Glenview, Ill: APS.

American Academy of Pediatrics, Committee on Psychological Aspects of Child and Family Health Task Force on Pain in Infants, Children, and Adolescents, (2001) The assessment and management of acute pain in infants, children, and adolescents Pediatrics Vol, 108, No (3), 793-797

Berde C. Developing better local anesthetics. Anesthesia and Analgesia. 2015;120(4):718-20.

Bursch, B. (2000). Pain in infants, children and adolescents SIG: Policy Statement on Pediatric Chronic Pain. APS Bulletin.Franck. L.S., Greenberg, C.S. & Stevens, B. (2000.) Pain assessment in infants and children. Pediatric Clinics of North America, 47(3), 487-511.

Farkas C, Solodiuk L, Taddio A, Franck L, Berberich FR, LoChiatto J, Solodiuk JC. Publicly available online educational videos regarding pediatric needle pain: a scoping review. Clin J Pain. 2015 Jun;31(6):591-8.

Kazak, A. E., Penati, B., Brophy, P, & Himelstein, B. (1998). Pharmacological and psychological interventions for procedural pain. American Academy of Pediatrics, 102, 59-68.

Kuttner, L. (1991). Helpful strategies in working with preschool children in pediatric practice. Pediatric Annals, 20, 120-127.

Kuttner, L. (2010) Child in Pain: What Health Professionals Can Do to Help. Crown House Publication

McCaffery, M. & Pasero, C. (1999). Pain: Clinical manual. St. Louis: Mosby.

McGrath, P.J., Rosmus, C, Canfield, C., Campbell, M.A. & Hennigar, A. (1998). Behaviors caregivers use to determine pain in non-verbal, cognitively impaired individuals. Developmental Medicine and Child Neurology, 40, 340-343.

Schechter, N.L., Berde, B. Charles, Yaster, M. (2003) Pain in Infants, Children and Adolescents (2nd Ed.), Baltimore , MD:Williams and Wilkins

Shah P.S, Herbozo C., Aliwalas L.L, Shah V.S. Breastfeeding or breast milk for procedural pain in neonates . Cochrane Database Systematic Reviews2012, Issue 12. Art no CD004950 DOI: 10 1002/14651858. CD004950. pub 3

Stevens, B. (1997) Pain Assessment in children: Birth through Adolescence. Child and Adolescent Psychiatric Clinics of North America 6(4). 725-43.

U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. Acute Pain Management: Operative or Medical Procedures and Trauma. Clinical Practice Guidelines. DHHS Pub. No (AHCPR) 92-0032. Silver Springs, MD AHCPR Clearinghouse, 1992.

Von Hehn, C.A., Baron, R., and Woolf C.J., (2012). Deconstructing the Neuropathic Pain Phenotype to Reveal Neural Mechanisms. Neuron 73, 638-652

Document Attributes

Title	Pain Assessment and Monitoring		
Author	Jean Solodiuk, RN, Ph.D, CPNP Joyce LoChiatto, RN, MS, CPNP	**Date of Origin**	09/09/02
Reviewed/ Revised by	Jean Solodiuk, RN, Ph.D, CPNP Joyce LoChiatto, RN, MS, CPNP	**Dates Reviewed/ Revised**	11/02, 03/03, 08/05, 08/06, 11/08, 05/09, 04/13, 04/14, 02/16
Copyright	© Boston Children's Hospital 2019	**Last Modified**	02/26/16
Approved	**Signature on File** Laura J. Wood, DNP, MS, RN Senior Vice President for Patient Care Operations, Chief Nursing Officer		