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Pain Medicine: Principles and Assessment, 10774

Policy/Procedure

PURPOSE:

To standardize approach to pain assessment and reassessment with common philosophy and utilization of validated developmentally appropriate tools.

POLICY:

We partner with children and families to **prevent** and **relieve** pain to the degree possible. The following content defines our philosophy for consistent approach, assessment, and reassessment of pain.

PROCEDURE:

I. Pain Principles and Philosophy:

- A. One of the core values of Seattle Children's is compassion, "Empathy for patients, their families and staff is ingrained in our history and inspires our future. We do more than treat the child; we practice family-centered care as the cornerstone of compassion.." Included in this commitment to children and families is our fundamental and humanitarian responsibility to reduce pain and related suffering.
- B. We collaborate with children and families to *prevent* and *relieve* pain to the degree possible. Optimal pain management is defined conjointly by patients and families and the treatment team. This implies that contextual factors are important as pain is intimately linked to overall quality of life.
- C. Consistent with the Rights and Responsibilities of patients and families, we take actions to relieve children's pain using medicines and other comfort measures.
- D. Pain is the fifth vital sign. As a consequence, high intensity pain is considered a medical emergency and must be recognized and responded to promptly.
- E. Central to interventions to prevent and treat pain are reliable and valid methods of assessment. This includes measures that are developmentally appropriate, evidence based, and clinically sensitive enough to detect changes in pain state.
- F. Staff will educate children and families to facilitate understanding of:
 - 1. concepts of pain and realistic expectations of relief
 - 2. their role and input in managing pain

3. the potential limitations and side effects of multi-modal pain treatment

G. Children and families will:

1. Be actively involved in pain assessment, as well as the strategies and goals of pain interventions
2. Expect their reports of pain to be acknowledged and to trigger appropriate methods of assessment and intervention in a timely fashion
3. Advocate for their pain and comfort needs to be met

H. Definitions:

1. Pain is an unpleasant, sensory and emotional experience, associated with actual or potential tissue damage.
2. Pain is a subjective experience influenced by a number of developmental and contextual factors, only one of which is the nature of pathophysiology.
3. Acute pain is of finite duration, often with a clear onset and offset, associated with tissue injury or inflammation.
 - a. Examples include pain related to surgery, invasive treatments, procedures or diagnostic tests, a fracture, a cut, or burns.
 - b. In most circumstances, the goal of treatment for acute pain is eradication.
4. Recurrent or episodic acute pain includes all of the features of acute pain, but recurs over time.
 - a. Common types include tension and migraine headaches, some types of abdominal pain, limb pains, and irritable bowel syndrome.
 - b. Although the goal of treatment typically is still eradication of pain, greater focus on contextual factors is often in order.
5. Chronic pain is ongoing, lacking a clear onset or offset.
 - a. Examples include: joint pain associated with juvenile idiopathic arthritis (JIA), complex regional pain syndrome (CRPS), and neuropathic pain.
 - b. The goals of treatment include eradication to the degree possible, as well as rehabilitative approaches to maximize function and enhance pain coping.
6. The comprehensive treatment of pain often involves interdisciplinary approaches that may include pharmacologic, interventional, psychological, physical, and complimentary and integrative methods.

II. Pain Assessment: Standard Tools and Documentation

- A. The effective treatment of pain is contingent upon appropriate pain assessment at regular intervals, including re-assessment after pain relief interventions.

B. Initial Assessment:

1. The patient or caregiver is asked a pain screening question, such as:
 - a. **Do you have any pain issues or concerns? Or, does your child have any pain issues about which you are concerned?**
 - b. **Are you (is your child) in pain or hurting now?**
2. The response to an initial pain screening question is documented during each ambulatory and

inpatient encounter.

C. The following validated, developmentally age-appropriate pain intensity tools are used.

1. See also APPENDIX I: [Standard Pain Rating Scales](#).

Table 1

DEVELOPMENTAL AGE	PAIN INTENSITY RATING TOOL
<1 year	<i>NPASS</i> (Neonatal Pain, Agitation, and Sedation Scale)
1-3 years	<i>FLACC</i> (Faces, Legs, Activity, Cry, Consolability)
3-7 years	<i>Faces</i> (Faces Pain Scale-Revised)
>7 years	<i>NRS</i> (Numeric Rating Scale – 0 to 10 self report)
Child with developmental disability unable to self-report	<i>r-FLACC</i> (revised - Faces, Legs, Activity, Cry, Consolability)

2. Special Populations:

- a. For children with chronic pain, consider using the tool most familiar to child and incorporate functional measures.
- b. For end of life care, choose a pain intensity tool based on the energy level of the child, burden of struggle, motivation, and ability to interact. Consider using the tool most familiar to child and family.
- c. For children supported by mechanical ventilation, consideration of level of consciousness and ability to use age appropriate scales is considered. Extended use of FLACC or r-FLACC may be used for ages greater than 3 years of age, while patients are supported by mechanical ventilation.

3. Other Considerations:

- a. Physiological assessment, including increases in HR, BP, RR, sweating and pallor, can also be useful components of acute pain assessment. However, these indicators of physiological stress are usually seen only briefly with the onset or exacerbation of pain, and often return to normal despite the continued experience of pain.
- b. Behavioral sequelae often seen when pain continues to reflect anxiety, irritability, fatigue, depression, and altered level of activity.
- c. Absence of above cues does not necessarily indicate the absence of pain.

D. Ongoing Assessment:

1. Pain intensity is measured and documented in patients of all developmental ages **at a minimum** with vital signs, at the time patient complains of pain, before and after pain relief interventions, or as medically indicated.

2. The general categories of mild (1-3), moderate (4-7), and severe (8-10) pain can be interpreted using the above scales. For determination of pain 'level' (mild, moderate, severe) associated with analgesic orders, see **Clinical P&P**, [Pain Medicine: Analgesic Medications](#).
 3. Pain reassessment:
 - a. Measured and documented within 60 minutes after intervention or more frequently as indicated by the individual patient context. Pain relieving interventions may be pharmacological, physical, psychological, and complimentary or integrative in nature.
 - b. If a patient is reassessed as sleeping, document as level of consciousness instead of pain intensity score.
- E. Comprehensive assessment (especially for recurrent and chronic pain) includes:
1. Sensory description
 2. Location
 3. Frequency
 4. Duration
 5. Associated symptoms
 6. Exacerbating or alleviating factors
 7. Impact on ADL and quality of life
 8. Pain relief measures and effectiveness
 9. Past history with pain
- F. Evaluation of relevant contextual factors that influence the pain experience may include emotions, cultural and spiritual beliefs, environmental factors, cognition and development, and messages from health care professionals.

See also **Patient and Family Education:**

- [Assessing Children's Pain](#)

See also related **P&Ps:**

- [Pain Medicine: Analgesic Medications](#)
- [Pain Medicine: Patient Controlled Analgesia \(PCA\)](#)
- [Pain Medicine: Lidocaine Infusion for Analgesia in Malignant and Chronic Non-Malignant Pain](#)
- [Pain Medicine: Oral Sucrose Administration for Analgesia](#)
- [Regional Analgesia: Epidural Catheter](#)
- [Regional Analgesia: Continuous Peripheral Nerve Infusion](#)
- [Local Analgesia: Incisional Soaker Catheter](#)
- [Medication Drips: Continuous Infusion](#)
- [Ketamine Continuous Infusion for Analgesia in Acute Care](#)
- [Acupuncture Therapy](#)
- [Energy Healing](#)
- [Use of Treatment Rooms for Invasive Procedures](#)
- ICU GOC: [Comfort and Sedation](#)

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APPENDIX I: Standard Pain Intensity Rating Scales

INDEX:

- A. [Neonatal Pain, Agitation, and Sedation Scale \(N-PASS\)](#)
- B. [Face, Legs, Activity, Cry, Consolability \(FLACC\) Pain Rating Scale](#)
- C. [Revised Faces, Legs, Activity, Cry, Consolability \(r-FLACC\) Pain Intensity Scale](#)
- D. [Faces Pain Scale - Revised \(FPS-R\)](#)

A. Neonatal Pain, Agitation, and Sedation Scale (N-PASS)

I. Developmental age < 1 year

A. The Neonatal Pain, Agitation, and Sedation Scale (N-PASS) is an infant assessment tool which uses behavioral states and physiological parameters to assess pain and sedation.

B. Instruction:

1. Assess the infant in each of the five categories, add together, and document:
 - a. total pain score (0 to 10)
 - b. total sedation score (0 to -10) as appropriate (sedation is scored by assessing the infant's response to stimulation)

Assessment Criteria	Sedation		Sedation/ Pain	Pain / Agitation	
	-2	-1	0/0	1	2
Crying Irritability	No cry with painful stimuli	Moans or cries minimally with painful stimuli	No sedation/ No pain signs	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	No sedation/ No pain signs	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	No sedation/ No pain signs	Any pain expression intermittent	Any pain expression continual
Extremities Tone	No grasp reflex Flaccid tone	Weak grasp reflex ↓ muscle tone	No sedation/ No pain signs	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, SaO₂	No variability with stimuli Hypoventilation or apnea	< 10% variability from baseline with stimuli	No sedation/ No pain signs	↑ 10-20% from baseline SaO ₂ 76-85% with stimulation –	↑ > 20% from baseline SaO ₂ ≤ 75% with stimulation – slow ↑ Out of sync/fighting vent

				quick ↑	
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+ 1 if < 30 weeks gestation/corrected age

B. Face, Legs, Activity, Cry, Consolability (FLACC) Pain Rating Scale:

I. Developmental age 1-3 years.

A. The **FLACC** is a behavior pain assessment scale for use in non-verbal patients unable to provide reports of pain.

B. Instruction:

1. Rate patient in each of the five measurement categories, add together, and document total pain score (0 – 10).

	0	1	2
FACE	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant frown, clenched jaw, quivering chin
	0	1	2
LEGS	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
	0	1	2
ACTIVITY	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arches, rigid, or jerking
	0	1	2
CRY	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
	0	1	2
CONSOLABILITY	Content, relaxed	Reassured by occasional touching, hugging, or "talking to"; distractible	Difficult to console or comfort

Source: Merkel SI, et al. (1997). Practice applications of research. The FLACC: a behavioral scale for scoring postoperative pain in young children. *Pediatric Nursing*, 23(3):293-297.

C. Revised Faces, Legs, Activity, Cry, Consolability (r-FLACC) Pain Intensity Scale

I. Children with developmental disability unable to self-report

A. The r-FLACC is a behavioral pain assessment scale for children with developmental disabilities unable to report their level of pain.

B. Instruction:

1. Interview the parent or caregiver to add individualized behavior that indicates moderate to severe pain for their child.
2. Rate patient in each of the five measurement categories, add together, and document total pain score (0 – 10).

rFLACC Behavioral Pain Assessment Scale			
Categories	Scoring		
	0	1	2
Face	No particular expression or smile	Occasional grimace/frown; withdrawn, disinterested; appears sad or worried	Consistent grimace or frown; Frequent/ constant chin, clenched jaw, distressed-looking face; expression of fright or panic. Individualized behavior: _____ _____
Legs	Normal position or relaxed; usual tone and motion to limbs	Uneasy, restless, tense; occasional tremors	Kicking or legs drawn up; marked increase in spasticity, constant tremors or jerking Individualized behavior: _____ _____
Activity	Lying quietly, normal position, moves easily; regular rhythmic respirations	Squirming, shifting back and forth, tense or guarded movements; mildly agitated (head back and 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 Individualized behavior: _____ _____
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint; occasional verbal outburst or grunt	Crying steadily, screams or sobs; frequent complaints; repeated outbursts, constant grunting Individualized behavior: _____ _____
Consolability	Content, relaxed	Reassured by occasional touching, hugging or being talked to; distractible	Difficult to console or comfort; pushing away caregiver, resisting care or comfort measures Individualized behavior: _____ _____

At the time of admission or new visit: review the rFLACC with parent/guardian; ask the parent/guardian to provide any individualized pain behaviors for all categories under score 2 column. Please keep original copy with the bedside chart.

During Pain Assessment: Refer to the individualized pain behaviors identified on the rFLACC Tool in the bedside chart. Discuss your pain assessment with the parent/guardian if present.

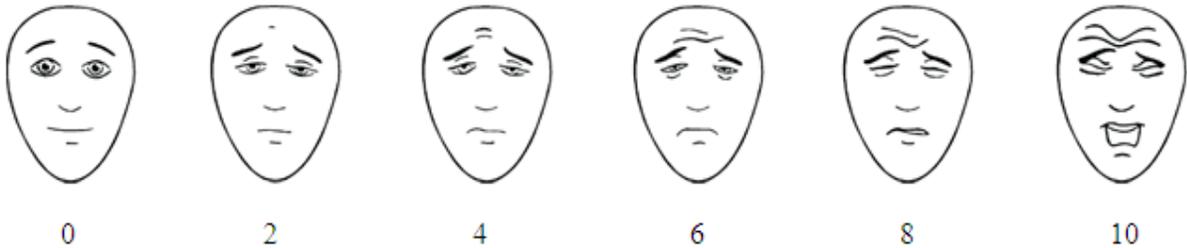
The revised FLACC was developed by Shobha Mahiya MD, Terri Vaappel-Lewis, MSN, RN, Constance Burke, BSN RN, Sandra Merkel, MS RN, and Alan R. Taft, PhD at the Department of Anesthesiology, University of Michigan Health Systems, Ann Arbor, MI.

D. Faces Pain Scale - Revised (FPS-R):

I. Developmental age > 3 years.

A. Verbal Instructions:

1. **These faces show how much something can hurt. This face [point to left-most face] shows no pain. The faces show more and more pain [point to each from left to right] up to this one [point to right-most face] – it shows very much pain. Point to the face that shows how much you hurt [right now]."**
2. *Score the chosen face 0, 2, 4, 6, 8, or 10, counting left to right, so '0' = 'no pain' and '10' = 'very much pain.' Do not use words like 'happy' and 'sad'. This scale is intended to measure how children feel inside, not how their face looks.*



Faces Pain Scale – Revised (FPS-R) (2001) Hicks CL, von Baeyer CL, Spafford P, van Korlaar I, Goodenough B. *Faces Pain Scale-Revised: Toward a Common Metric in Pediatric Pain Measurement.* *Pain* 93:173-183. With the instructions and translations as found on the website: <http://www.usask.ca/childpain/fpsr/>. This figure has been reproduced with per mission of the International Association for the Study of Pain® (IASP®). The figure may not be reproduced for any other purpose without permission.

0 TO 10 Pain Intensity Scale

I. Developmental age > 7 years.

A. Verbal instructions:

1. On a scale of 0 to 10, with '0' being no pain and '10' being the worst pain you can imagine, what number are you feeling right now?

Attachments:

Approval Signatures

Step Description	Approver	Date
Release for Publication	& Procedures Policies: Policies & Procedures	1/28/2020
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	Pharmacy & Therapeutics Commit	1/22/2020

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