

LEGACY HEALTH

PATIENT CARE

Practice Guideline #: 912.5007
Origination Date: JUL 2000
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SECTION: FUNDAMENTAL PROCEDURES

SUBJECT: PAIN ASSESSMENT AND MANAGEMENT FOR NEONATAL AND PEDIATRIC PATIENTS

FACILITY:

- Legacy Emanuel Hospital and Health Center (as applicable: LEMC only, RCH only, Unity only)
Legacy Good Samaritan Medical Center
Legacy Meridian Park Medical Center
Legacy Mount Hood Medical Center
Legacy Salmon Creek Medical Center
Legacy Silverton Medical Center
Administrative / System Support Services
Legacy Medical Group
Legacy Urgent Care
Legacy Visiting Nurse Association (Hospice)
Legacy Lab Services
Legacy Research Institute
Other:

POPULATION: Adult X Pediatric X Neonate

(Adult > 18 years of age; Pediatric 0-18 and adult patients under care of a pediatric specialty physician at RCH; Neonate 0-28 days and continued hospitalization in the NICU)

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PURPOSE:

- 1. To describe pain assessment, interventions, monitoring, and teaching guidelines for pediatric and neonatal hospitalized patients.
2. To define a systematic approach for titration of approved p.r.n. range medications. (See 900.3233 Medications: Orders, for policy information on approved p.r.n. range medications.)

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**RESPONSIBLE STAFF:**

Registered nurse (RN), pharmacist, licensed independent practitioner (LIP), physical therapist (PT), occupational therapist (OT).

**PRACTICE GUIDELINE:****A. PAIN ASSESSMENT**

1. Perform pain assessment and document findings, including:
  - a. Pain intensity and location, for conscious patients
    - 1) On initial patient assessment and every patient assessment
    - 2) With each set of vital signs

**KEY POINT:** *Assess pain with vital signs unless vital signs are assessed only to monitor hemodynamic status; in this situation pain assessment will be performed per standard of care.*

- 3) Prior to each pain management intervention
- 4) After each pain management intervention once sufficient time has elapsed for the treatment to reach peak effect (e.g., for pharmacological interventions, 60 minutes after PO medications and 30 minutes after injectable medications)
- 5) When patient reports unrelieved pain or appears distressed/in pain
- b. Any observations of behaviors related to pain when appropriate
- c. Patient/family's personal goal for pain relief that will allow participation in therapeutic activities, approximately once per shift.

**KEY POINTS:** *1. Assess patients for pain unless otherwise ordered by the LIP. Patients admitted to Pediatric Development and Rehabilitation Service with a diagnosis of Reflex Neurovascular Dystrophy (RND) will have an order for pain assessment to be performed by the LIP.*  
*2. The patient's developmental level and/or ability to communicate may preclude the nurse from being able to assess all elements above.*  
*3. For clinic areas where patients are frequently discharged before an appropriate time for pain re-assessment to occur following a pain intervention, the nurse should perform reassessment prior to discharge.*

2. More frequent pain screening/assessment should be considered based on potential sources of pain (e.g. lines, drains, tubes, trauma injuries, post-operative).
3. Use a developmentally appropriate pain scale to assess pain intensity. Tools to use include:
  - a. N-PASS (Neonatal Pain and Sedation Scale) (Appendix #1): validated for patients 0 to 100 days of age, and 23 weeks gestation and above.
  - b. Revised FLACC (Face, Legs, Activity, Cry, and Consolability) (Appendix #2): validated for patients ages 3 months to 3 years or non-verbal or cognitively impaired patients up to age 18 years.
  - c. Wong-Baker FACES scale (Appendix #3): validated for verbal children, usually 3 – 8 years of age.
  - d. COMFORT Behavioral Scale (Appendix #4): validated for critically ill, sedated pediatric patients 0 – 18 years of age.
  - e. Individualized Numerical Rating Scale (INRS, 0-10 Visual Analogue Scale) (Appendix #5): validated in verbal children, usually school-age and older.

**KEY POINTS:**

1. *The most reliable indicator of a child's pain intensity is their self-report.*
2. *Utilize a consistent validated scale based on patient age, clinical status and developmental/cognitive status.*

3. Scores can vary between 0, which means no pain, and 10 which means the worst possible pain with the exception of the COMFORT Scale which ranges from 6 to 30 (goal score of 12-18 indicates the patient is comfortably sedated with adequate pain control).

- f. Family report of pain: consider caregiver's (i.e., parent, guardian) interpretation regarding potential pain behavior.

**KEY POINT:** Consider the following guidelines when interpreting a 0-10 pain rating scale:

**0** = Relaxed and comfortable

**1-3** = Mild discomfort

**4-6** = Moderate discomfort and/or pain

**7-10** = Severe discomfort and/or pain

4. Identify actual or potential sources of pain for the patient.
5. Suspect pain in the presence of known painful pathology or procedures. Behavioral indicators such as grimacing, writhing, restlessness may confirm the presence of pain. The absence of behavioral or physiologic signs of pain should not preclude the assumption of the presence of pain.

## **B. PAIN MANAGEMENT**

1. Partner with the patient and caregiver to establish realistic pain management expectations.

**KEY POINT:** Pain after surgery, procedure or injury is normal. It may not be possible to prevent or eliminate all pain. Reassure family that we will do all we can to control pain and make their child comfortable.

2. Usual therapeutic goal may be a pain rating of 3 or less on a 0-10 scale. Focus should be on making the patient comfortable enough to engage in activities that help them recover (such as walking, deep breathing, and sleeping).
3. Collaborate with the multidisciplinary team to advocate for appropriate pain control plan for the patient.
4. Use a multimodal (pharmacologic and non-pharmacologic methods) approach to pain management when possible.
5. Communicate pain management plan to the team, patient, and family.
6. Evaluate effectiveness as needed and modify plan/profile. If interventions do not meet pain management goals, consider additional or alternative interventions. May need to contact LIP and re-evaluate pharmacologic pain management interventions.
7. Teach patients and family effective pain relief is an important part of their treatment. Their communication of unrelieved pain is essential to the on-going evaluation and modification of the pain management plan.

## **C. PHARMACOLOGIC PAIN MANAGEMENT**

1. Refer to policies 900.3233 Medications: Orders and 900.3102 Medications: Administration.
2. When possible, use the simplest and least invasive route to administer medications. If using IV route, transition to oral as soon as possible. Intramuscular route of medication delivery is discouraged.
3. Use around the clock/scheduled pain medications for continuous, predictable, background pain

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4. PRN immediate release medications are appropriate for breakthrough pain, defined as intense episodic pain not relieved by analgesia administered routinely for background pain.

**KEY POINT:** *Multimodal analgesic strategies which emphasize use of scheduled non-opioid adjuncts (e.g., acetaminophen, NSAIDs, and gabapentin) and PRN opioids improve overall pain control, reduce side effects by minimizing overall use of opioids and increase patient satisfaction with pain management.*

5. Selection criteria should be outlined by the prescribing provider within the order when multiple medications are ordered for the same indication.
6. The following general guidelines can further assist the nurse in determining how to choose and administer pain medication when multiple pain medications are ordered:
- Administer scheduled pain medications on time.
  - If PRN pain medications are given with regularity, re-evaluate with the prescribing provider and pharmacist the orders for scheduled (or around-the-clock) pain medications.
  - Choose the least invasive route first if two routes are ordered for the same medication unless there is a contraindication (e.g., PO acetaminophen before PR acetaminophen unless the patient becomes NPO).
7. Approach to titration for p.r.n. pain medications with a dose range are as follows: When administering the first dose of a p.r.n. pain medication with a dose range, start with the lowest dose within the ordered range. The lowest dose may be repeated based on the titration interval to determine the effective dose.
- Unless otherwise specified in the order, titration intervals based on route are defined as follows:
    - Oral (PO)/enteral: 60 minutes
    - Intravenous/injectable: 30 minutes
  - The cumulative titrated dose must not exceed the maximum dose in the ordered range.
  - All p.r.n. medications with a dose range are administered using a static clock (initial dose is the start of the ordered time interval).
    - Example:* Oxycodone 0.05 – 0.15 mg/kg PO for pain p.r.n. q4h is ordered.
      - 0900: The nurse administered 0.05 mg/kg PO oxycodone for pain.
      - 1000: The pain is unrelieved and an additional 0.05 mg/kg was administered.
      - 1100: The pain was unrelieved and an additional 0.05 mg/kg was administered and was effective in relieving pain.
      - 1300: the patient complains of pain. The nurse may give up to 0.15 mg/kg as that was determined as the last effective dose.
  - Symptom reoccurrence:
    - If last dose was **effective**, repeat the therapeutic dose at subsequent ordered intervals, as needed.
    - If last dose was **ineffective**:
      - Repeat lowest dose no sooner than the repeat dose interval based on route.
      - Contact LIP if maximum dose within range is reached without symptom relief.

**KEY POINT:** *The lowest dose within may be repeated at the appropriate dosing interval until the maximum dose in the range is achieved.*

**KEY POINT:** *If the patient's clinical condition changes, restart medication at the lowest dose and increase as needed.*

- Other considerations for interpreting p.r.n. orders with dose ranges:
  - A new order will be required if the maximum prescribed dose has been administered and additional doses are needed before the next dosing interval time. Doses should not

- be escalated further if the patient exhibits sedation scores greater than or equal to 3. Consideration should be given to adding a non-opioid adjuvant.
- ii. If the patient has hepatic or renal insufficiency, anticipate a longer duration of action.
  - iii. Co-morbidities may affect patient response. Debilitated patients or those with respiratory insufficiency are at higher risk for hypoxia if over sedated.
7. Consider adjusting pain medication plan:
    - a. When sedation rating scale indicates over agitation or over sedation.
    - b. When the patient's pain level does not meet patient and family goals with 2 or more assessments.
    - c. When the patient exhibits tolerance as evidenced by increased opioid dosages to maintain an acceptable level of pain control.
    - d. If the patient requires more than two prn. doses in any four-hour interval
    - e. If the patient requires more than six prn doses in 24 hours.
    - f. When patient pain control is adequate and there is no need for breakthrough medication, consider decreasing the dose or frequency of the scheduled pain medication.
  8. Place patient on continuous pulse oximetry monitoring if on continuous opioid infusion or opioid PCA.
  9. Monitor patients receiving PCA or epidural analgesia per appropriate policy (LH.900.4103 Patient controlled analgesia (PCA) for IV administration, LH.900.5505 Epidural and Intrathecal Medication Administration: Adult and pediatric management).
  10. Anticipate, assess for and manage side effects as necessary, including but not limited to:
    - a. Excessive sedation
    - b. Respiratory depression
    - c. Constipation
    - d. Nausea and/or vomiting
    - e. Itching
  11. Use non-pharmacologic measures (e.g., positioning, sucrose, and pacifier for neonates/young infants; comfort positioning and distraction for older children) *in combination* with pharmacologic agents.

**KEY POINTS:**

1. *Acetaminophen/NSAIDS are useful for mild pain and pain due to inflammation. They also provide an additive analgesic effect when combined with an opioid, and can decrease the amount of opioid required.*
  2. *Ibuprofen should not be used for pain in children less than 6 months of age.*
12. Considerations for use of opioids and sedatives neonates, young infants, and all patients in the NICU:
    - a. Infants, especially premature, are at high risk for apnea/hypoventilation/hypoxia as a side effect of opioids and sedatives.
    - b. Administer intravenous opioids/ sedatives over at least 5-10 minutes.
    - c. In premature infants and those with hepatic or renal insufficiency, anticipate a more pronounced peak effect, and a longer duration of action.
    - d. Opioid tolerance may develop in patients who receive opioid infusions for prolonged periods of time (generally more than 72-96 hours); therapeutic withdrawal may be required.
    - e. Consider holding opioid/sedative dose for patients with planned extubation.

**KEY POINT:** *Sedatives do not provide analgesia, and should be used sparingly and in conjunction with opioids for synergistic effect.*

**D. NON-PHARMACOLOGIC PAIN MANAGEMENT**

1. Create an environment that promotes comfort (e.g., quiet room, low lighting).

2. Utilize developmentally appropriate distraction or behavioral pain management interventions (refer to Appendix #6 for suggestions).
3. Involve Child Life Services for non-pharmacologic pain management suggestions specific to the patient.
4. Position for comfort.

#### **E. PROCEDURAL PAIN MANAGEMENT**

##### **4 Non-Negotiables of Procedural Pain:**

1. Always offer a topical anesthetic (i.e., ELA-MAX, J-tip, Cold spray)
2. Use comfort positioning (Use caregiver when possible)
3. Use age appropriate distraction
4. Use Sucrose for infants 0-12 months of age
5. Consider appropriate analgesia for painful procedures/conditions:

<b>PROCEDURE</b>	<b>SUGGESTED MEDICATIONS</b>
PICC placement	morphine IV
Chest needling/chest tube placement	4% lidocaine topical cream + morphine IV
Lumbar puncture	4% lidocaine topical cream
Circumcision	local anesthesia + scheduled acetaminophen for 24 hours
ET intubation	refer to RSI sequence (See Appendix #2)
Post-operative	morphine drip and/or boluses + scheduled acetaminophen as appropriate
NEC	morphine drip and/or boluses

#### **F. OTHER CONSIDERATIONS**

1. Provide procedural preparation as appropriate for age and developmental level.
2. When possible, involve Child Life to provide pre-procedure preparation to patient and family. Child Life Specialists will develop an appropriate plan of procedural support for the child.
3. Utilize treatment rooms for procedures when possible. Have all equipment and staff ready prior to bringing child into room.
4. Provide developmentally appropriate explanations about what they will see, feel, hear and/or smell during the procedure.
5. Give developmentally appropriate control to the child by providing suggestions of how the child can help and what the child can do; establish rules, i.e., time limited breaks during procedure.
6. Administer pain medication before procedures or treatments known to be painful, allowing for an appropriate time for the medication to take effect.

**KEY POINT:** *Children tend to feel less in control when they are in a supine position and/or when being held down by adults. When possible allow parent to hold/comfort child during procedures or allow child to sit in a comfortable position.*

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**G. SUCROSE IN PREMATURES, NEONATES, AND INFANTS**

1. Administer oral 24% sucrose for short duration, painful procedures for children 0-12 months old.
  - a. Total volume per dose should not exceed:
    1. 0.1 - 0.5 mL for infants 25-31 weeks PMA
    2. 0.5 - 1 mL for infants 32 weeks PMA age and above
    3. 1-2 mL for healthy term newborn or infant
  - b. Doses should not exceed four per 12-hour shift for infants for whom cautious use is recommended (see below).
2. Administer the appropriate dose of sucrose directly on the tip of the tongue two minutes prior to painful procedure, immediately prior to the procedure, and 2 minutes into procedure. May repeat as needed throughout the procedure.
3. Offer a pacifier or a gloved finger (for breastfeeding infants) as non-nutritive sucking enhances the sucrose effect (*5-6 months of age, adjusted*).
4. Contraindications:
  - a. Esophageal atresia or tracheal esophageal fistula
  - b. Gastrointestinal surgery in the immediate pre-operative period
  - c. Fructose intolerance
  - d. Paralyzed infants
5. Use with caution:
  - a. Under 28 weeks gestational age for *premature infants* first 7 days of age
  - b. Gastro-intestinal condition, especially necrotizing enterocolitis/ileus
  - c. Vasopressor therapy with poor peripheral perfusion
  - d. Patent Ductus Arteriosus receiving indomethacin therapy
  - e. Poor oral-motor control
  - f. Endotracheal intubation
  - g. Clinically unstable such as cyanotic heart disease or asphyxia
  - h. Polycythemia- hematocrit over 60

**H. FAMILY/CAREGIVER EDUCATION**

1. Coordinate pain management plan with parents or other caregiver(s). Include education on the following topics:
  - a. Effective pain relief is an integral part of the patient's treatment.
  - b. Early pain intervention and management is safer and more effective than delayed intervention and management.
  - c. Behavioral indicators of pain.
  - d. Pain will be assessed at regular intervals.
  - e. Use of pain assessment tools.
  - f. Total absence of pain is not always realistic.
  - g. Non-pharmacologic pain management and how they can participate.
  - h. Pharmacologic pain management including:
    - 1) Pain medications: name, dose, route, schedule
    - 2) Side effects of medication(s)
    - 3) Epidural process if appropriate
    - 4) Clarify the terms "addiction" and "physical dependence" as needed
2. Patients/families should receive Patient/Family teaching sheets appropriate for pain management.

**I. COMMUNICATION**

1. Communicate the pain management plan to health care team and family.
2. If pain management is inadequate, contact LIP and communicate/discuss:
  - a. Current pain management interventions (pharmacologic and non-pharmacologic)
  - b. Behavioral cues related to pain
  - c. Average pain rating-over last 4, 8, or 24 hours; highest and lowest rating over time period
  - d. If opioids are being used report respiratory rate and level of sedation
  - e. If opioids are being used report when the patient exhibits tolerance: the need for increasing opioid dosages or decreasing intervals to maintain an acceptable level of pain control

**J. DISCHARGE INFORMATION:**

1. Reemphasize the importance of pain control in the healing process.
2. Assess pain status at time of discharge and type of intervention needed.
3. Assess/reinforce knowledge and skills regarding pain assessment and management at home.
4. Assess availability of pain management resources.
5. Assess barriers to participation in pain management plan.
6. Coordinate follow-up as needed.

**K. DOCUMENTATION:**

1. Document pain assessment when performed.

**KEY POINT:** *Patients receiving scoring with Neonatal Abstinence Score (NAS) should also receive pain scoring.*

2. Document pain score before and after each pain management intervention at a minimum of one hour following a pain intervention.
3. For any procedure that may cause pain, document non-pharmacologic and pharmacologic interventions, and response.
4. For patients receiving opioids:
  - a. Before opioid administration and at peak action after administration.
  - b. Assess and document sedation score.
  - c. Monitor respiratory function.
  - d. Document parent/caregiver teaching

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Keywords: Pain, Pain scale, pain assessment, pain intervention, non-negotiables, pediatric pain scale, PRN pain medications, range order titration, dose ranges

References:

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Replaces: N/A  
Approval: CSR  
NEC  
P&T  
Medical Executive Committees  
MQ&C  
Originator:

**APPENDIX #1**

**NPASS Scale**

Validated for patients less than 3 months, 0 to 100 days of age, and 23 weeks gestation and above.

**NPASS: NEONATAL PAIN AGITATION AND SEDATION SCALE (Revised 3/28/2008)**

Assessment Criteria:	Sedation		Normal	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 and/ or finger splay Body is not tense	Frequent clenched toes/fists and/ or finger splay Body is tense
Vital Signs HR/RR/BP SaO <sub>2</sub>	No variability with stimuli Hypoventilation or apnea	<10% variability from baseline with stimuli	No sedation/ No pain signs	VS ↑ 10-20% from baseline SaO <sub>2</sub> ↓ to 76-85% with stimulation - quick ↑	VS ↑ >20% from baseline SaO <sub>2</sub> ↓ to <75% with stimulation - slow ↑ Out of sync with vent

**Premature Pain**

d) + 3 if <28 weeks CGA  
e) + 2 if 28-31 6/7 weeks CGA  
f) + 1 if 32-35 6/7 weeks CGA

a) + 3 if <23 0/7 weeks GA  
b) + 2 if 23 0/7-31 6/7 weeks GA  
c) + 1 if 32-35 6/7 weeks GA

Scoring Criteria for the NPASS

**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<sub>2</sub> Saturations

-2 → Any of the following

No variability in vital signs with stimuli

Hypoventilation

Apnea

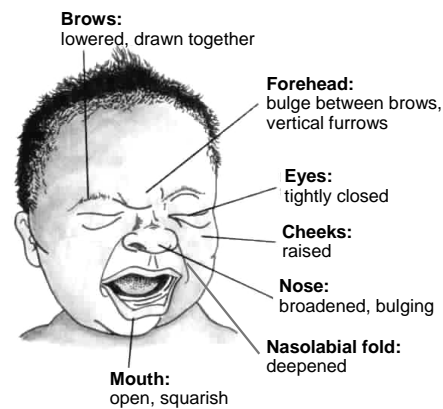
Ventilated infant – no spontaneous respiratory effort

-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



Facial expression of physical distress and pain in the infant

Reproduced with permission from Wong DL, Hess CS: Wong and Whaley's Clinical Manual of Pediatric Nursing, Ed. 5, 2000, Mosby, St. Louis

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With care/stimuli infant desaturates minimally to moderately ( $\text{SaO}_2$  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 ( $\text{SaO}_2 < 75\%$ ) and recovers slowly (> 2 minutes)

Out of sync/fighting ventilator

## APPENDIX #2

**Revised FLACC Behavioral Pain Assessment Scale**

**Validated for pediatric patients ages 3 months to 3 years and patients up to age 18 years who are non-verbal or cognitively impaired and unable to rate their pain**

Score→	0	1	2
Category↓			
FACE	No particular expression or smile	Occasional grimace/frown; withdrawn or disinterested	Consistent grimace or frown; frequent/constant quivering chin, clenched jaw
		<i>Appears sad or worried</i>	<i>Distressed-looking face; expression of fright or panic</i>
LEGS	Normal position or relaxed	Uneasy restless, tense	Kicking, or legs drawn up
	<i>Usual tone and motion to limbs</i>	<i>Occasional tremors</i>	<i>Marked increase in spasticity</i>
ACTIVITY	Lying quietly, normal position, moves easily	Squirming, shifting back and forth	Arched, rigid or jerking
	<i>Regular, rhythmic respirations</i>	<i>Mildly agitated (e.g. head back and forth, aggression); shallow, splinting respirations, intermittent sighs</i>	<i>Severe agitation; head banging; shivering (not rigors); breath holding, gasping or sharp intake of breaths, severe splinting</i>
CRY	No cry/verbalization	Moans or whimpers; occasional complaint	Crying steadily, screams or sobs, frequent complaints
		<i>Occasional verbal outburst or grunt</i>	<i>Repeated outbursts, constant grunting</i>
CONSOL-ABILITY	Content and relaxed	Reassured by occasional touching, hugging or being talked to. Distractible	Difficult to console or comfort
			<i>Pushing away caregiver, resisting care or comfort measures</i>

### How to Use the FLACC

In patients who are awake: observe for 1-5 minutes or longer. Observe legs and body uncovered. Reposition patient or observe activity. Assess body for tenseness and tone. Initiate consoling interventions if needed.

In patients who are asleep: observe for 5 minutes or longer. Observe body and legs uncovered. If possible, reposition the patient. Touch the body and assess for tenseness and tone.

#### Face

Score 0 if the patient has a relaxed face, makes eye contact, shows interest in surroundings.

Score 1 if the patient has a worried facial expression, with eyebrows lowered, eyes partially closed, cheeks raised, mouth pursed.

Score 2 if the patient has deep furrows in the forehead, closed eyes, an open mouth, deep lines around nose and lips.

#### Legs

Score 0 if the muscle tone and motion in the limbs are normal.

Score 1 if the patient has increased tone, rigidity, or tension; if there is intermittent flexion or extension of the limbs.

Score 2 if the if the patient has hypertonicity, the legs are pulled tight, there is exaggerated flexion or extension of the limbs, tremors.

#### Activity

Score 0 if the patient moves easily and freely, normal activity or restrictions.

Score 1 if the patient shifts positions, appears hesitant to move, demonstrates guarding, a tense torso, pressure on a body part.

Score 2 if the patient is in a fixed position, rocking; demonstrates side-to-side head movement or rubbing of a body part.

#### Cry

Score 0 if the patient has no cry or moan, awake or asleep

Score 1 if the patient has occasional moans, cries, whimpers, sighs.

Score 2 if the patient has frequent or continuous moans, cries, grunts.

#### Consolability

Score 0 if the patient is calm and does not require consoling.

Score 1 if the patient responds to comfort by touching or talking in 30 seconds to 1 minute.

Score 2 if the patient requires constant comforting or is inconsolable.

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

#### Interpreting the Behavioral Score

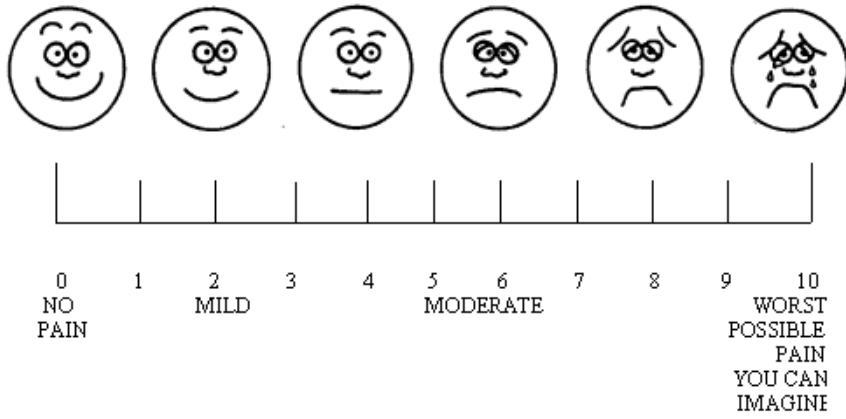
0 = Relaxed and comfortable

1-3 = Mild discomfort

4-6 = Moderate pain

7-10 = Severe discomfort or pain or both

APPENDIX #3  
WONG-BAKER FACES PAIN SCALE  
Validated for patients age 3 and older



**YOUR COMFORT IS IMPORTANT TO US:  
PLEASE TELL US IF YOU ARE HAVING  
ANY PAIN, ACHING, OR DISCOMFORT**

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**APPENDIX #4 COMFORT Behavioral Scale**

Validated for critically ill pediatric patients

Observe for 2 minutes.

**ALERTNESS**

- 1 - Deeply asleep
- 2 - Lightly asleep
- 3 - Drowsy
- 4 - Fully awake and alert
- 5 - Hyper alert

**CALMNESS**

- 1 - Calm
- 2 - Slightly anxious
- 3 - Anxious
- 4 - Very anxious
- 5 - Panicky

**RESPIRATORY DISTRESS (score only in mechanically ventilated children)**

- 1 - No coughing and no spontaneous respiration
- 2 - Spontaneous respiration with little or no response to ventilation
- 3 - Occasional cough or resistance to ventilation
- 4 - Actively breathes against ventilator or coughs regularly
- 5 - Fights ventilator; coughing or choking

**CRYING (if not intubated)**

- 1 - Quiet breathing, no crying
- 2 - Sobbing or gasping
- 3 - Moaning
- 4 - Crying
- 5 - Screaming

**PHYSICAL MOVEMENT**

- 1 - No movement
- 2 - Occasional, slight movement
- 3 - Frequent, slight movements
- 4 - Vigorous movement
- 5 - Vigorous movements including torso and head

**MUSCLE TONE (after stimulation)**

- 1 - Muscles totally relaxed; no muscle tone
- 2 - Reduced muscle tone
- 3 - Normal muscle tone
- 4 - Increased muscle tone and flexion of fingers and toes
- 5 - Extreme muscle rigidity and flexion of fingers and toes

**FACIAL TENSION**

- 1 - Facial muscles totally relaxed
- 2 - Facial muscle tone normal; no facial muscle tension evident
- 3 - Tension evident in some facial muscles
- 4 - Tension evident throughout facial muscles
- 5 - Facial muscles contorted and grimacing

**TOTAL SCORE 6-30**

Goal Score of 10-19 indicates the patient is comfortably sedated with adequate pain control.

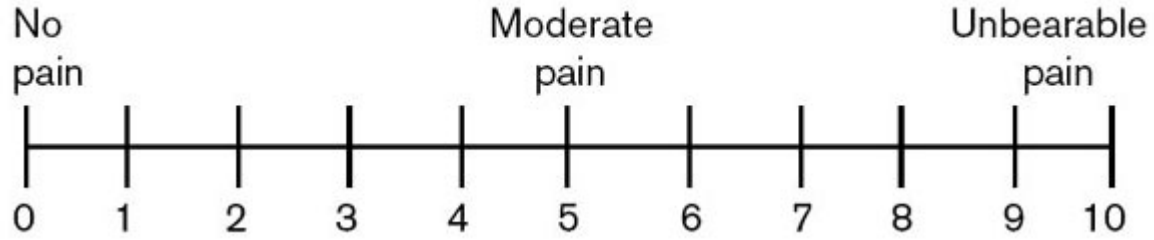


APPENDIX #5

INDIVIDUALIZED NUMERIC RATING SCALE (Visual Analogue Scale)

Validated for verbal patients ages 7 years, children, usually school-age and older.

**0 - 10 VAS Numeric Pain Distress Scale**



## APPENDIX #6

## DEVELOPMENTAL APPROACHES TO NONPHARMACOLOGICAL PAIN MANAGEMENT

	Sensory	Behavioral	Imagery
Infants	Rocking, stroking, sucking, swaddling, containment, nesting, cuddling, kangaroo care, breastfeeding, positioning, music, reposition, bringing infants to quiet awake state for procedures	Holding a toy, bubble blowing, objects that change shapes/ colors	
Toddlers	Security object, cold/ heat, massage	Pop-up books, puppets, magic circle/magic game, songs, nursery rhymes, pat-a-cake, videos, kaleidoscopes, counting/ABC's, doll play/ drawing/painting to ventilate feelings and thoughts. <i>Distractions &amp; Breathing: Pinwheels, blowing bubbles, "meow-meow-woof" breathing; "Go limp as a rag doll", "go limp as a wet noodle" or use bubbles to "blow the hurt away" or ask the child to yawn</i>	Storytelling, speaking through a doll or puppet, use images familiar to a child Therapeutic play before, during and after a painful.
Preschoolers	Patting, stroking, music, squeezing play dough, cold/ heat, massage	Counting, Magic Wand, Videos	favorite hero, pretend situations, role-playing, fantasy; "Pain switch" (i.e. you have a pain switch in your arm let's turn the pain off now.), familiar images with stories
School- Age Children and Adolescents	Music, cold/ heat, massage, hand- holding, squeezing play dough, TENS	Movies, video games, breathing exercises, conversation, humor, biofeedback	taking a trip, guided imagery, pain switch, visual fixation, relaxation, hypnosis, prayers;