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Healthcare Delegation Protocol  
Pain, Fever, and Anxiolysis Management -- Pediatric

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Reviser (Title): Assistant Nurse Manager, Pediatric Emergency Services	Owner (Title): Medical Director, OHSU Pediatric Emergency Department	

**PURPOSE:**

This Delegation Protocol provides direction for initiation of care by authorized non-providers for patients who have mild to moderate pain, fever, and/or procedure related anxiety; based on specific criteria outlined below. This protocol is intended to improve quality of care and patient experience and is based on best available evidence. The protocol affects approximately 700 patients a month.

**DEFINITIONS:**

- **EHR:** Electronic health record
- **FLACC:** Face, Legs, Activity, Cry, Consolability scale, is a pain scale for non-verbal children
- **IN:** Intranasal
- **LMX:** Lidocaine 4% topical anesthetic cream
- **LET Gel:** Lidocaine 4%, Epinephrine 0.05%, Tetracaine 0.5%
- **Mild pain:** nagging, annoying pain that does not interfere with daily living activities (pain scale 1-4)
- **Moderate pain:** interferes significantly with daily living activities (pain scale 4-6)
- **PO:** Per oral
- **PR:** Per rectum
- **Severe pain:** Distress, significantly limits ability to perform daily activities (pain scale 7-10)

**STAFF AUTHORIZED TO INITIATE THE DELEGATION PROTOCOL:**

Authorized staff are registered nurses who will enter orders using Per “Delegation Protocol” order mode in electronic medical record (EMR) using the order set: [ED Ped Common Orders PO-7848](#).

**INCLUSION CRITERIA:**

- Pediatric patients’ birth-19 years who present with:
  - Mild to moderate pain
  - Undergoing a minor procedure (e.g., venipuncture, urinary catheterization, laceration repair, etc.)
  - Fever ≥ 38.5 Celsius

**EXCLUSION CRITERIA:**

- Patients with severe pain crisis (contact provider)
- Allergies/hypersensitivity to proposed agent to be used
- Known history of renal impairment (Ibuprofen)
- Oncology patients (Ibuprofen)



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- Patient's presenting with abdominal pain (Ibuprofen)
- Neonates (midazolam)
- Patients with respiratory depression (midazolam)
- Premature Infants <28 weeks current or adjusted age (LMX/Lidocaine)
- Broken Skin (LMX)

#### **METHOD OF DOCUMENTING THAT THE DELEGATION PROTOCOL WAS USED TO INITIATE CARE:**

The RN will enter orders using Per "Delegation Protocol" order mode and sign the order using the order set: [ED Ped Common Orders: PO-7848](#).

#### **PROTOCOL REQUIREMENTS:**

The nurse may initiate the following for patients with mild to moderate pain, anxiolysis, or undergoing a minor procedure. For patients in severe pain, shock, or respiratory depression notify a provider immediately.

#### **Acetaminophen for mild to moderate pain or as an antipyretic**

- A. For mild to moderate pain or for fever  $\geq 38.5$  if last dose >4 hours
  - I. Acetaminophen 12.5mg/kg PO/PR, not to exceed 650 mg per dose

#### **Ibuprofen for mild to moderate pain or as an antipyretic**

- A. For mild to moderate pain or for fever  $\geq 38.5$  if last dose >4 hours
  - I. Peds  $\geq 6$  months of age: Ibuprofen 10 mg/kg, not to exceed 400 mg po, if last dose > 6 hours

#### **Nitrous Oxide Gas for Anxiolysis**

See RN Administered Nitrous Oxide in Doernbecher Children's Hospital: [HC-PC-442-POL](#)

#### **Atomized/Intranasal Midazolam for Urgent Procedure related Anxiolysis**

- A. Midazolam 0.3mg/kg for Anxiolysis, max dose 10 mg of the 5mg/1 mL preparation (High concentration, low volume is required)

#### **Topical 4% Lidocaine Cream (LMX)**

- A. Apply 4% LMX cream to diminish/relieve short term procedural pain for newborn infants ( $\geq 37$  week's gestation) and children.
- B. Apply 30-60 minutes prior to a painful procedure 4% LMX cream generously to intact skin at the injection site.

#### **J-Tip Lidocaine 1%**

- A. Follow the J-Tip Venipuncture Pain Management delegation protocol: [HC-DP-297-PRO REV. 061721](#)

#### **Intradermal Lidocaine 1% injection**

- A. Inject lidocaine 1% intradermally; 0.5 cm to the side of the venipuncture site until a small wheal forms.



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**Urojet Sterile Lidocaine Jelly for Urinary Catheterization**

- A. Apply small amount of sterile lidocaine jelly via cotton ball to head of penis or vaginal area approximately 1-2 minutes prior to start of catheter insertion.  
**\*\*Note: maximum dose: 3mg/kg/dose; do not repeat within 2 hours. \*\***
- B. Alternatively, may lubricate catheter with sterile lidocaine jelly rather than another lubricant.

**LET Gel for Lacerations:** Lidocaine 4%, Epinephrine 0.05%, Tetracaine 0.5%

- A. Apply LET gel to Laceration. Paint 3 mL of LET gel to the wound and wound edges using a cotton-tipped applicator. Then cover area with a cotton ball soaked in LET gel for 20-30 minutes.

**LITERATURE DEMONSTRATING THAT THE DELEGATION PROTOCOL IS EVIDENCE-BASED (IF ANY):**

- Frampton, A., Browne, G. J., Lam, L. T., Cooper, M. G., & Lane, L. G. (2003). Nurse administered relative analgesia using high concentration nitrous oxide to facilitate minor procedures in children in an emergency department. *Emergency Medicine Journal*, 20(5), 410-413.
- Gazzelloni, A., Maio, M., Romano, M., Marcone, I., Marino, F., & Labalestra, M. C. (2016). OC39 - The efficacy of a participatory approach in reducing pain related to venipuncture in children. *Nurse Child Young People*, 28(4), 81. <https://doi.org/10.7748/ncyp.28.4.81.s70>
- Kearl, Y. L., Yanger, S., Montero, S., Morelos-Howard, E., & Claudius, I. (2015). Does Combined Use of the J-tip® and Buzzy® Device Decrease the Pain of Venipuncture in a Pediatric Population? *J Pediatric Nurse*, 30(6), 829-833. <https://doi.org/10.1016/j.pedn.2015.06.007>
- Malia, L., Laurich, V. M., & Sturm, J. J. (2019). Adverse events and satisfaction with use of intranasal midazolam for emergency department procedures in children. *Am J Emergency Medicine*, 37(1), 85-88. <https://doi.org/10.1016/j.ajem.2018.04.063>
- Martin, H. A., Noble, M., & Wodo, N. (2018). The Benefits of Introducing the Use of Nitrous Oxide in the Pediatric Emergency Department for Painful Procedures. *J Emerg Nurs*, 44(4), 331-335. <https://doi.org/10.1016/j.jen.2018.02.003>
- Robert M.Kennedy, M. a. J. D. L., MD. (1999). THE "OUCHLESS EMERGENCY DEPARTMENT\*": Getting Closer: Advances in Decreasing Distress During Painful Procedures in the Emergency Department. *Science Direct*, 46(6), 1215-1247. [https://doi.org/https://doi.org/10.1016/S0031-3955\(05\)70184-X](https://doi.org/https://doi.org/10.1016/S0031-3955(05)70184-X)
- Pansini, V., Curatola, A., Gatto, A., Lazzareschi, I., Ruggiero, A., & Chiaretti, A. (2021). Intranasal drugs for analgesia and sedation in children admitted to pediatric emergency department: a narrative review. *Annals of Transl Medicine*, 9(2), 189. <https://doi.org/10.21037/atm-20-5177>
- Schmitz, M. L., Zempsky, W. T., & Meyer, J. M. (2015). Safety and Efficacy of a Needle-free Powder Lidocaine Delivery System in Pediatric Patients Undergoing Venipuncture or Peripheral Venous Cannulation: Randomized



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Double-blind COMFORT-004 Trial. *Clinical Therapy*, 37(8), 1761-1772.  
<https://doi.org/10.1016/j.clinthera.2015.05.515>

**REVIEWED BY:**

Interdisciplinary development occurred by the Pediatric Emergency Medicine Section with review and approval by the Delegation Protocols and Protocol Orders Steering Committee and the Clinical Knowledge and Therapeutics Executive Committee.

**PROTOCOL OWNER:**

Medical Director, OHSU Pediatric Emergency Department

**Responsible Parties for Reviewing and Implementing Protocol**

Medical Director, OHSU Pediatric Emergency Department  
Nursing or clinic lead, Assistant Nurse Manager, OHSU Pediatric Emergency Department

**APPROVING COMMITTEE(S):**

Delegation Protocols and Protocol Orders Steering Committee  
Clinical Knowledge and Therapeutics Executive Committee

**REVISION HISTORY**

**Revision History Table**

Document Number and Revision Level	Final Approval by	Brief description of change/revision
HC-DP-281-PRO REV. 031022	DPC	Updated template. Updated References. Added hyperlinks to related documents

**ADDENDUM (IF ANY):**

NA