



# SUPPORTING OPTIMAL OUTCOMES THROUGH A HEALING ENVIRONMENT (SOOTHE): A QUALITY IMPROVEMENT INITIATIVE



**Florida Perinatal Quality Collaborative**

The Supporting Optimal Outcomes Through a Healing Environment (SOOTHE) Quality Improvement Initiative Toolkit is intended to provide guidance to hospitals in the development of individualized policies, protocols, practices, and materials to improve quality of care and outcomes for babies in the neonatal intensive care unit (NICU). This toolkit is not to be construed as a standard of care; rather it is a collection of resources that may be adapted by local institutions to develop and implement their quality improvement initiative and will be updated as additional resources become available.

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## Introduction

The SOOTHE Toolkit is a dynamic document that includes up-to-date clinical, public health practice, scientific and patient safety recommendations. The information presented here should not be used as a standard of care. Rather, this is a collection of resources that can be adapted by local institutions to develop and implement quality improvement initiatives.

The overall goals of the SOOTHE Toolkit are:

1. To implement evidence-based tools and other potentially better practices to improve the sensory environment in Florida NICUs, increasing family readiness to bolster the infant's neuroprotective development.
2. To support collaborating hospitals as they develop and implement multi-disciplinary teams and strategies with the ultimate goal of improving the sensory environment in their individual units.
3. To increase neuroprotective strategies through clinician and family training on SOOTHE topics.

This toolkit will provide pediatric, neonatal, and collaborating healthcare providers and staff with the resources to locally develop their own SOOTHE policies and protocols with a focus on safe practices and optimizing care and outcomes.



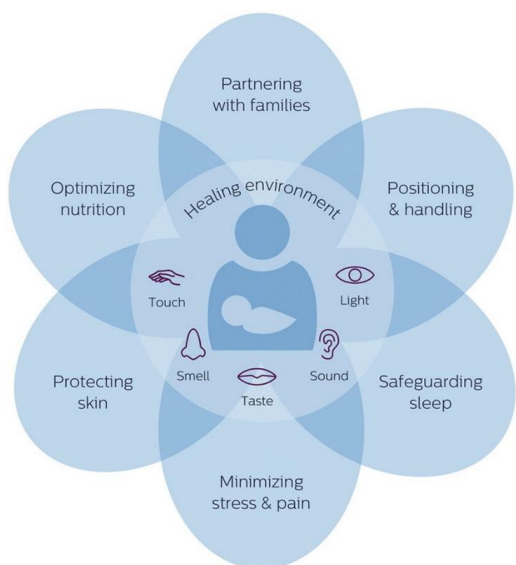
## Background

The newborn brain is remarkably adaptable, capable of forming both short- and long-term neuronal connections in response to sensory input, environmental influences, and experiences. This neuroplasticity is at its highest during early life, coinciding with a period of rapid brain development.

The third trimester is especially critical for fetal brain growth. When infants are born prematurely, this process is disrupted and must continue in the more stressful and unnatural environment of the NICU. Neurologic and sensory systems develop in tandem through cycles of sensory input and behavioral response. Exposure to sensory experiences that are misaligned with a premature infant's developmental stage can result in altered neurosensory and neurobehavioral outcomes when compared to full-term infants.

Infants born before 37 weeks of gestation are at increased risk for developmental delays, behavioral difficulties, and long-term mental health concerns. Those with extremely low birth weight (under 1000 grams) are particularly vulnerable, often facing more severe complications and greater lifelong healthcare needs. Engaging parents early in providing brain-protective, developmentally appropriate care is essential. Evidence shows that these practices benefit not only preterm infants but also near-term and full-term infants and therefore should be standard across all NICU populations.

The Neonatal Integrative Developmental Care (IDC) Model shown below provides a structured framework of seven core measures designed to promote neuroprotective, family-centered care in the NICU. These measures include safeguarding sleep, proper positioning and handling, protecting the skin, minimizing pain and stress, optimizing nutrition, partnering with families, and creating a healing environment. Incorporating the IDC Model into routine care often requires a cultural shift within the NICU. Although implementing evidence-based practices can be challenging, quality improvement (QI) strategies—such as Plan-Do-Study-Act (PDSA) cycles—can help introduce and sustain meaningful change in clinical practice.



Altimier, L., & Phillips, R. (2016). The Neonatal Integrative Developmental Care Model: Advanced Clinical Applications of the Seven Core Measures for Neuroprotective Family-centered Developmental Care. *Newborn and Infant Nursing Reviews*, 16(4), 230–244. <https://doi.org/10.1053/j.nainr.2016.09.030>

## Initiative Goal

By June 2027, SOOTHE hospitals will document:

1. 80% of participating NICUs will implement at least 1 evidence-based strategy from each of the 4 sensory domains to improve the sensory environment
2. Achieve a 20% increase in families recognizing and responding to infant stress cues.

Baseline data will be established after the first quarter of hospital data is received by FPQC. Participating hospitals will use the OHI 2.0 toolkit to implement the needed change package in their hospital.

## Initiative Foci

Standardization of care practices related to:

- **Readiness: Creating a Sensory-Supportive Environment (Every care setting):** Assessing and standardizing environmental practices to support infants' sensory needs. This includes implementing guidelines to reduce unnecessary noise and light, promoting language-rich interactions, introducing comforting scents and tastes, and ensuring safe, developmentally appropriate positioning.
- **Recognition: Identifying Noxious Stimuli and Stress Cues (Every patient):** Promoting early and consistent recognition of infant stress, pain, or overstimulation. Staff and families will build skills to observe and interpret infant cues, reduce harmful interventions, and protect skin integrity.
- **Response: Delivering Intentional, Therapeutic Interactions (Every interaction):** Strengthening caregiving practices in response to stress cues through gentle, purposeful touch. This includes four-handed care, comfort-focused procedures, and skin-to-skin contact to support regulation, bonding, and brain development.
- **Respectful Care: Partnering with Families (Every team member):** Integrating respectful, family-centered care into every stage of the NICU stay. Families are supported as essential partners through clear guidance, training and active participation in their infant's care.

## Definition of Initiative Terms

**Sensory Environment** includes sensory input received by the infant from interactions with family and care team as well as touch, smell, taste, sound, light, temperature and other environmental influences.

**Positive Touch** is the use of gentle, cue-based, developmentally supportive contact, centered on skin-to-skin and contained handling, to help regulate, comfort, and safeguard the neurodevelopment of hospitalized neonates while engaging parents as primary caregivers.

**Noxious Stimuli** are unpleasant sensory experiences that can trigger physiological stress responses and potentially cause discomfort, pain, or developmental disruption in preterm and term infants who are medically fragile. Repetitive exposure to noxious stimuli during this critical developmental period may influence pain processing, stress reactivity, and neurodevelopmental outcomes.

**Infant-driven cue-based care** is an approach to caring for infants, particularly premature or medically fragile newborns, that emphasizes observing and responding to the infant's behavioral cues rather than following a rigid schedule or routines.

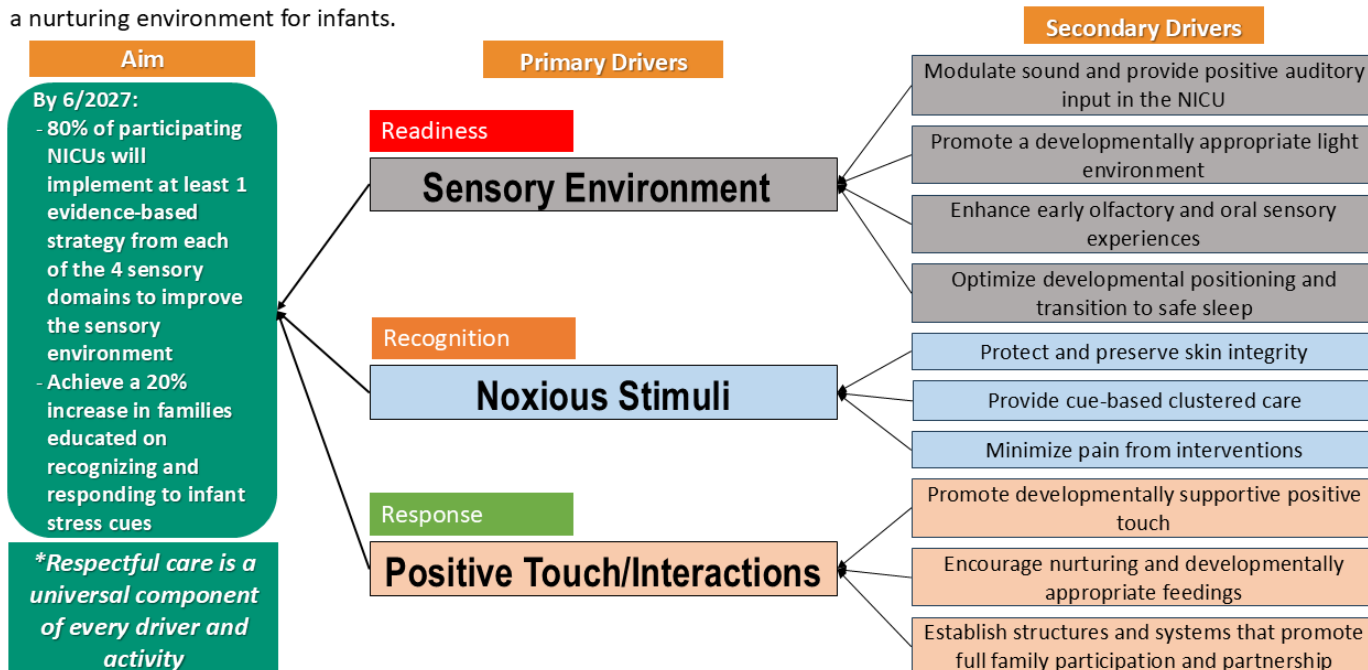
## SOOTHE Toolkit Framework

- **Primary Drivers:** Major processes, operating rules, or structures that will contribute to moving toward the aim. In this toolkit, the primary drivers are based on three of AIM's Five Rs Framework (Readiness, Recognition, Response). Respectful Care is a universal component of every driver and activity. Reporting & Systems Learning is captured through our data collection system.
- **Secondary Drivers:** Broad concepts that are not yet specific enough to be actionable but are used to generate specific ideas for change.
- **Potentially Better Practices:** Actionable, specific ideas for changing a process. Potentially better practices can come from research, best practices, or from other organizations that have recognized a problem and have demonstrated improvement on a specific issue related to that problem.

## Key Driver Diagram

### SOOTHE: Supporting Optimal Outcomes Through a Healing Environment

**Global aim:** Support hospitals and care teams in fostering a neuroprotective NICU culture by training staff and providers, engaging families, optimizing developmentally appropriate sensory care, and minimizing unnecessary interventions to promote a nurturing environment for infants.



## Disclaimer

This toolkit is considered a resource. Readers are advised to adapt the guidelines and resources based on their local facility's level of care and patient populations served and are also advised not to rely solely on the guidelines presented here. This toolkit is a working draft and living document. As more recent evidence-based strategies become available, hospitals and providers should update their guidelines and protocols accordingly. The FPQC will also send out updates as well as revise these materials. Please note the version number in the footer.

Resources in the toolkit with a cost involved are shown in **Bold** type and denoted by an asterisk (\*). These resources were included purposefully by the SOOTHE advisory group because of their strong evidence base and their potential to enhance hospital efforts. We recognize that hospital teams have varying financial resources, so the toolkit contains open-access materials wherever possible. Paywalled tools are optional and are not required for success in SOOTHE.



## SOOTHE Initiative Toolkit

Readiness: Sensory Environment			
Secondary Driver	Potentially Better Practices	Evidence/Rationale	Tools/Resources
<b>1a: Modulate sound and provide positive auditory input in the NICU</b>	<ul style="list-style-type: none"> <li>• Reduce environmental noise with routine dB checks (goal is any sustained noise reduction) and implement scheduled quiet time or rest periods</li> <li>• Provide language rich environment via parental voice (live or recorded) and implement routine reading program</li> <li>• Recommend routine use of evidence based calming sounds within environmental noise limits</li> </ul>	<p><a href="#">Cassavant et al. 2017*</a>: The American Academy of Pediatrics recommends maintaining NICU average noise levels <math>\leq 45</math> dBA and limiting brief peaks to <math>\leq 65</math> dBA to protect infant physiologic stability and neurodevelopment. Multiple observational studies show that most NICUs exceed these limits.</p> <p><a href="#">McGowan et al. 2023*</a>: In preterm infants, increasing caregiver and parent speech exposure in the NICU has been shown to improve later language outcomes and may positively influence brain development.</p> <p><a href="#">Mohan et al. 2021*</a>: Music therapy in the NICU has been shown to enhance short-term physiological stability and feeding, reduce parental anxiety, and may positively influence early brain connectivity in preterm infants.</p>	<ul style="list-style-type: none"> <li>• <a href="#">AAP Recommendations on noise*</a></li> <li>• <a href="#">Sound Level Meter App</a></li> <li>• <a href="#">Johns Hopkins All Children's Hospital Neuroprotective Care of the NICU Infant Clinical Pathway</a></li> <li>• <a href="#">NICU Therapy Lab at USC SENSE Program*</a></li> <li>• <a href="#">Music Therapy Program Implementation</a></li> </ul>
<b>1b: Promote a developmentally appropriate light environment</b>	<ul style="list-style-type: none"> <li>• Develop gestational age-appropriate dimming guideline and or light cycling (&gt;32 GA) for NICU</li> <li>• For infants &lt;28 weeks, lighting should be minimal and purposeful. After ~28 weeks PMA, introducing cycled light supports development, with smooth light transitions</li> </ul>	<p><a href="#">Harvey 2025*</a>: Cycled lighting improves circadian rhythm after 32 weeks gestation.</p> <p><a href="#">Szigiato et al. 2019</a>: Following exams or procedures, photosensitivity may contribute to stress, and light shielding may improve infant comfort.</p> <p><a href="#">Altimier et al. 2023*</a>: Recommendations for standardization of NICU design. This includes spaces for neonates, families, staff, services, and operations.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Recommended Lighting Standards*</a></li> <li>• <a href="#">Designing Lighting Environment for Preterm Infants</a></li> <li>• <a href="#">Johns Hopkins All Children's Hospital Neuroprotective Care of the NICU Infant Clinical Pathway</a></li> <li>• <a href="#">NICU Therapy Lab at USC SENSE Program*</a></li> </ul>

	<ul style="list-style-type: none"> <li>• Use indirect lighting, ensure visual comfort, and support caregiving visibility without overstimulating neonates.</li> <li>• Develop light guidelines for special populations <ul style="list-style-type: none"> <li>○ Post eye exam, procedures, Golden Hour, birthing room and transition to NICU, ELBW cares</li> </ul> </li> </ul>		
<b>1c: Enhance early olfactory and oral sensory experiences</b>	<ul style="list-style-type: none"> <li>• Implement mouth care guideline/practice with expressed BM to include oral swabs and milk drops</li> <li>• Support early skin to skin care to facilitate exposure to parental scent</li> <li>• Promote soothing smell by implementing a scent cloth program to facilitate parent/infant attachment</li> <li>• Implement Policy reducing negative taste and smell experiences with a focus on unscented products for the premature infants</li> </ul>	<p><a href="#">Alenezi et al. 2024</a>: Breast milk odor improves physiological parameters and promotes earlier oral feeding.</p> <p><a href="#">Hopkins Oral Immune Therapy (2023)</a>: Oral immune therapy using colostrum enhances immune function, reduces infections and improves mucosal immunity.</p> <p><a href="#">Laleh et al. 2025</a>: RCTs show smell and taste exposure shortens time to full oral feeds and transition to enteral nutrition.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Johns Hopkins Oral Immune Therapy Protocol (2023)</a></li> <li>• <a href="#">Milk Drop Protocol - Barb O'Rourke*</a></li> <li>• <a href="#">Hand to Hold No Sew Scent Cloth Instructions</a></li> <li>• <a href="#">Project Sweet Peas Scent Heart Template</a></li> <li>• <a href="#">NICU Therapy Lab at USC SENSE Program*</a></li> <li>• <a href="#">SENSE NICU App*</a></li> </ul>
<b>1d: Optimize developmental positioning and transition to safe sleep</b>	<ul style="list-style-type: none"> <li>• Promote midline flexion with 360-degree containment to mimic in utero positioning and allow for appropriate movement</li> <li>• Incorporate safe sleep teaching into discharge planning</li> </ul>	<p><a href="#">Goodstein et al. 2021</a>: The committee on Fetus and Newborn describes proper therapeutic positioning and provides guidance for transition to safe home sleep.</p> <p><a href="#">IJMRPS Journal 2015</a>: Defines containment. Physiologic and emotional benefits are summarized.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Infant Positioning Assessment Tool (IPAT)</a></li> <li>• <a href="#">Dandelion Position Competency Toolkit</a></li> <li>• <a href="#">IFCDC Positioning Recommendations</a></li> <li>• <a href="#">NICU Therapy Lab at USC SENSE Program*</a></li> <li>• <a href="#">SENSE 2<sup>nd</sup> Edition Updates</a></li> </ul>

		<p><a href="#">Pineda et al. 2023</a>: This SENSE 2<sup>nd</sup> edition update advocates that at the earliest PMA possible, infants should be positioned in at least two different positions daily for a minimum of 10 minutes each. These include side lying, prone, supine, upright sitting, and skin-to-skin.</p> <p><a href="#">Goodstein et al. 2021</a>: The committee on Fetus and Newborn provides guidance for transition to safe home sleep. Compliance with modeling can be improved with nursing bundles that include education, crib cards, written instructions reviewed with parents, and sleep sacks.</p> <p><a href="#">Batra et al. 2021</a>: Example of a hospital wide safe sleep bundle. This highlights the following outcome measures: position, head of bed flat, and sleeping space free of extra items.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Neonatal Integrative Developmental Care Model</a></li> <li>• <a href="#">Safe to Sleep® Take the #ClearTheCrib Challenge</a></li> <li>• <a href="#">Recommendations for Sleep Environments</a></li> </ul>
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Recognition: Noxious Stimuli			
Secondary Driver	Potentially Better Practices	Evidence/Rationale	Tools/Resources
2a: Protect and preserve skin integrity	<ul style="list-style-type: none"> <li>Implement evidence-based skin assessment and management protocols</li> <li>Select gentle, appropriate cleansing products</li> <li>Optimize central line use <ul style="list-style-type: none"> <li>Implement an algorithm</li> <li>Use umbilical lines early</li> <li>Limit number of pokes when starting IVs</li> <li>Utilize adjunct techniques for line placement</li> </ul> </li> </ul>	<p><a href="#">AWHONN Neonatal Skin Care 4th Ed*</a>: Evidence-Based Clinical Practice Guideline</p> <p><b>AWHONN recommends:</b></p> <ul style="list-style-type: none"> <li>Assessing neonatal skin surfaces, head to toe, daily or more frequently as needed.</li> <li>Using a valid and reliable skin assessment tool to provide an objective measurement of skin condition.</li> <li>Identifying risk factors for skin injury for each infant (e.g., gestational age, postnatal age, monitoring devices, and use of medical adhesives).</li> <li>Preventing or minimizing the risk of skin injury by assessing skin under medical devices regularly, using appropriately sized devices (e.g., CPAP prongs), using protective dressings, and selecting gentle and appropriate cleansing products.</li> <li>Noncentral venous catheters carry a 28% higher complication rate due to risk of infiltration, phlebitis, and malposition.</li> </ul> <p><a href="#">NANN Neonatal Peripherally Inserted Central Catheters*</a>: Guideline for Practice, 4<sup>th</sup> Ed</p> <ul style="list-style-type: none"> <li>NANN recommends early placement of PICC as it offers safe, long-term venous access with fewer complications and lower infection rates than surgically placed central venous catheters.</li> <li>The increasing number of critically ill and extremely-low-birth-weight</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">AWHONN Skin Care Guideline Summary Slides</a></li> <li><a href="#">NANN PICC Guideline Summary Slides</a></li> <li><a href="#">Brigham and Women's Newborn Venous Access Decision Tree</a></li> <li><a href="#">Baby Steps to Home Peripherally Inserted Central Catheters</a></li> </ul>

		<p>neonates requires reliable vascular access to optimize parenteral nutrition, IV fluids, and medications.</p> <ul style="list-style-type: none"> <li>• Conditions such as gastroschisis and other bowel anomalies often necessitate long-term parenteral support.</li> <li>• Peripheral IVs (PIVs) and umbilical catheters are limited by short dwell times and higher complication risks.</li> </ul> <p><a href="#">Sykes et al 2024*</a>: <b>Midline Catheter Use in the NICU</b></p> <ul style="list-style-type: none"> <li>• Maintaining vascular access in acutely/critically ill neonates is difficult due to vascular immaturity and fragility and flexibility of subcutaneous tissue.</li> <li>• Multiple, painful peripheral intravenous catheter insertions can negatively impact neurodevelopment in acutely/critically ill neonates, especially those born preterm.</li> <li>• Midline catheters offer a solution between peripheral intravenous catheters and peripherally inserted central catheters due to fewer complications, fewer insertion attempts, and longer dwell times.</li> </ul>	
<b>2b: Provide cue-based care</b>	<ul style="list-style-type: none"> <li>• Utilize training materials to recognize stress cues</li> <li>• Incorporate developmentally focused infant-driven care</li> <li>• Involve and empower caregivers to coordinate care and reduce unnecessary disturbances</li> </ul>	<p><a href="#">Hendy et al 2024</a>: <b>Outcome of Creating Clustering Nursing Care and Healing Environment on Premature Infant's Behavioral Outcomes</b></p> <ul style="list-style-type: none"> <li>• Combining clustering nursing care with a healing NICU environment significantly improves the behavioral, neurological, and physical outcomes of preterm</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Emory Department of Pediatrics Understanding Preterm Infant Behavior in the NICU</a></li> <li>• <a href="#">Thames Valley &amp; Wessex Neonatal Operational Delivery Network Nursing Guideline for Individualized Cue-Based Care</a></li> </ul>



		<p>infants, supporting their early development and faster recovery.</p> <ul style="list-style-type: none"> <li>• Clustering care reduces unnecessary stimulation and may protect sleep cycles and stress response systems.</li> <li>• Healing environment promotes neurobehavioral organization and physical growth.</li> <li>• Encourages institutional change toward standardizing practices offering developmentally supportive, infant-driven care in NICUs.</li> </ul> <p><b><u>Macho 2017*</u>: Individualized Developmental Care in the NICU</b></p> <ul style="list-style-type: none"> <li>• Emphasizes observing each infant's behavioral cues to guide care, tailoring interventions to their unique neurodevelopmental needs, stress tolerance, and self-regulation capacity.</li> <li>• Reduces stress behaviors and supports brain maturation, with EEG and MRI findings indicating enhanced brain connectivity, particularly in preterm infants during critical developmental windows.</li> <li>• Enhances physiological stability, promoting more stable heart rates, improved oxygenation, better sleep-wake cycles, and fewer apnea episodes, reflecting better autonomic and behavioral regulation.</li> <li>• Encourages parents as essential caregivers, integrating them into daily</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">NIDCAP Five-Step Dialogue</a></li> <li>• <a href="#">Getting to Know Your Baby</a></li> <li>• <a href="#">Swedish Medical Center Neonatal Neuroprotective Best Practice Guidelines</a></li> <li>• <a href="#">Johns Hopkins All Children's Hospital Neuroprotective Care of the NICU Infant Clinical Pathway</a></li> </ul>
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		care to foster bonding, enhance infant stability, and empower parental confidence and competence.	
<b>2c: Minimize pain from interventions</b>	<ul style="list-style-type: none"> <li>Educate staff and caregivers on pain recognition and assessment tools</li> <li>Implement pre- and post-procedural pain management guidelines and comfort measures</li> <li>Implement staff processes and protocols to avoid duplicate or redundant tests <ul style="list-style-type: none"> <li>Lab draws schedule</li> <li>Time outs/huddles</li> </ul> </li> </ul>	<p><b><a href="#">NANN Newborn Pain Assessment and Management*</a>: Guideline for Practice, 3<sup>rd</sup> Ed and <a href="#">AAP 2016 Policy Statement: Prevention and Management of Procedural Pain in the Neonate (reaffirmed July 2020 and April 2025)</a>:</b></p> <ul style="list-style-type: none"> <li>Institutional Guidelines &amp; Assessment: Neonatal care teams should establish written, evidence-based protocols for pain prevention and management, ensuring routine pain assessment with validated tools before, during, and after procedures, and adjusting strategies throughout hospitalization.</li> <li>Nonpharmacologic Approaches: Comfort measures such as facilitated tucking, non-nutritive sucking, breastfeeding or expressed milk, and sensorial stimulation should be consistently applied to reduce pain during minor and moderately painful procedures.</li> <li>Pharmacologic Management: Oral sucrose/glucose solutions are effective for mild to moderate procedural pain and should be treated as prescribed medications with documented protocols. For major procedures, evidence-based pharmacologic therapies (e.g., opioids, anesthetics) may be required, with careful monitoring to minimize risks such as respiratory depression and hypotension.</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">NANN Pain Guideline Summary Slides</a></li> <li><a href="#">Johns Hopkins All Children's Hospital Neuroprotective Care of the NICU Infant Clinical Pathway (Appendix A)</a></li> <li><a href="#">Comfort Assessment Neo Scale</a></li> </ul>

		<ul style="list-style-type: none"><li>• Education &amp; Research: Ongoing education for providers and families on neonatal pain recognition and management is essential.</li></ul>	
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Response: Positive Touch/Interactions			
Secondary Driver	Potentially Better Practices	Evidence/Rationale	Tools/Resources
<b>3a: Promote developmentally supportive positive touch</b>	<ul style="list-style-type: none"> <li>Promote soothing, cue-based touch by using intentional interventions such as hand hugs, facilitated tuck, and midline flexion before, during, and after care activities—supported with prepared tools</li> <li>Observe the infant closely for stress cues during all care activities</li> <li>Standardize education on optimizing infant handling, including transfers during care for all caregivers</li> <li>Implement four-handed care and cluster interventions to minimize handling and promote stability</li> <li>Engage in care with the infant by responding to their cues and involving them in the process</li> <li>Transition into care in a developmentally appropriate manner, such as dimming lights and using gentle touch</li> <li>Involve trained volunteers or cuddlers to provide comfort and connection when families are unavailable</li> </ul>	<p><a href="#">Byrne et al. 2024*</a>: I-Rainbow, an infant-based tool that guides sensory interventions in the NICU by staging infants based on cardiorespiratory status and physiologic maturity, not age.</p> <p><a href="#">La Rosa et al. 2024</a>: Affective touch, particularly through skin-to-skin contact and kangaroo care, activates specialized comfort touch nerves to promote bonding, stress regulation, and neurodevelopment, making it a critical intervention to improve emotional, physiological, and long-term outcomes in preterm infants.</p> <p><a href="#">Neuroprotective Care of the NICU Infant Clinical Pathway (Johns Hopkins All Children's Hospital)</a>: Kangaroo Pathway: A clinical pathway that standardizes evidence-based, family-centered, neuroprotective care in the NICU, including guidance for transferring care to parents for holding.</p> <p><a href="#">Hignell et al. 2019*</a>: The Cuddler Program may shorten hospital stays for infants with NAS and benefit infants, families, staff, and volunteers.</p>	<ul style="list-style-type: none"> <li>Resources from Thames Valley &amp; Wessex <ul style="list-style-type: none"> <li><a href="#">Side-lying diaper changes</a></li> <li><a href="#">Swaddled Bathing</a></li> <li><a href="#">Swaddled Weighing</a></li> </ul> </li> <li><a href="#">Infant Positioning Assessment Tool (IPAT)</a></li> <li><a href="#">Dandelion Position Competency Toolkit</a></li> </ul>
<b>3b: Encourage nurturing and developmentally appropriate feedings</b>	<ul style="list-style-type: none"> <li>Promote first oral feeding experience with parent or family member</li> <li>Encourage holding during and after enteral feedings</li> </ul>	<p><a href="#">Bigelow et al. 2020</a>: Physical contact between infants and caregivers is essential for healthy emotional, physiological, and developmental outcomes, yet it is often reduced in modern Western practices.</p>	<ul style="list-style-type: none"> <li><a href="#">Dr. Brown's Medical About Infant-Driven Feeding® Program - Dr. Brown's Medical*</a></li> <li><a href="#">Oral Feeding Readiness Assessment</a></li> </ul>

	<ul style="list-style-type: none"> <li>• Create a calm, supportive environment during feedings and encourage holding throughout.</li> <li>• Create culturally sensitive environment that encourages mom and families to be active participants in feedings</li> <li>• Facilitate open, supportive discussions about infant feeding choices</li> </ul>	<p><a href="#">Niaraki et al. 2022</a>: Behavioral and environmental interventions like facilitated tucking, oral sucrose, and kangaroo care reduce pain in preterm infants during procedures.</p> <p><a href="#">Dion Nist et al. 2023</a>: Parental feeding involvement in preterm infants promoted earlier feeding milestones and shorter hospitalization.</p> <p><a href="#">Cooper et al. 2000</a>: Preterm infants' sucking and alertness improved from 34 weeks PCA to term, with alertness supporting feeding success only by 40 weeks.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Oral Feeding Sample Policy</a></li> </ul>
<b>3c: Establish structures and systems that promote full family participation and partnership</b>	<ul style="list-style-type: none"> <li>• Therapist or trained staff provides education to families on neurodevelopmentally appropriate care, including setting sensory/touch goals and anticipatory guidelines</li> <li>• Help families feel confident and comfortable providing care.</li> <li>• Actively include families in daily care routines and decision-making</li> <li>• Set clear, achievable care goals with families to support their involvement</li> </ul>	<p><a href="#">Sampson et al 2025</a>: The Sensory Development Care Map is an educational tool to guide NICU staff and families in providing developmentally appropriate sensory care for preterm infants, improving understanding and support for neurodevelopment.</p> <p><a href="#">NIDCAP: Federation International Voice of the Newborn</a>: The evidence-based NIDCAP model supports the early development of vulnerable newborns and their families in intensive care settings.</p>	<ul style="list-style-type: none"> <li>• <a href="#">NICU Therapy Lab at USC SENSE Program*</a></li> <li>• <a href="#">Blooming Littles</a></li> <li>• <a href="#">Understanding Your Baby's Cues – INFANT</a></li> </ul>