

Driver 2: Recognition Noxious Stimuli

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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.

Primary Key Driver

Recognition: Noxious Stimuli

Secondary Drivers

Protect and preserve skin integrity

Provide cue-based care

Minimize pain from interventions

****Respectful care is a universal component of every driver and activity***

2a: Protecting & Preserving Skin Integrity

Potentially Better Practices:

- **Skin Protocols:** Implement evidence-based skin assessment and management practices.
- **Gentle Cleansing:** Use appropriate, non-irritating cleansing products.
- **Optimize Central Line Use:**
 - Follow algorithm-based approach
 - Prioritize umbilical lines early
 - Minimize IV pokes
 - Use adjunct techniques for line placement

Evidence and Tools

- AWHONN Neonatal Skin Care Guideline
- NANN Neonatal PICC Guideline



Peripherally Inserted Central Catheter Lines: Information for Parents

A peripherally inserted central catheter (PICC) is a very thin intravenous (IV) catheter that is inserted in a vein in the arm, leg, or scalp of an infant. A PICC line is used in infants who will need total IV nutrition or medication for more than 7 days. It is usually placed within the first week after birth. A PICC can remain in place for weeks or for as long as the baby needs it.

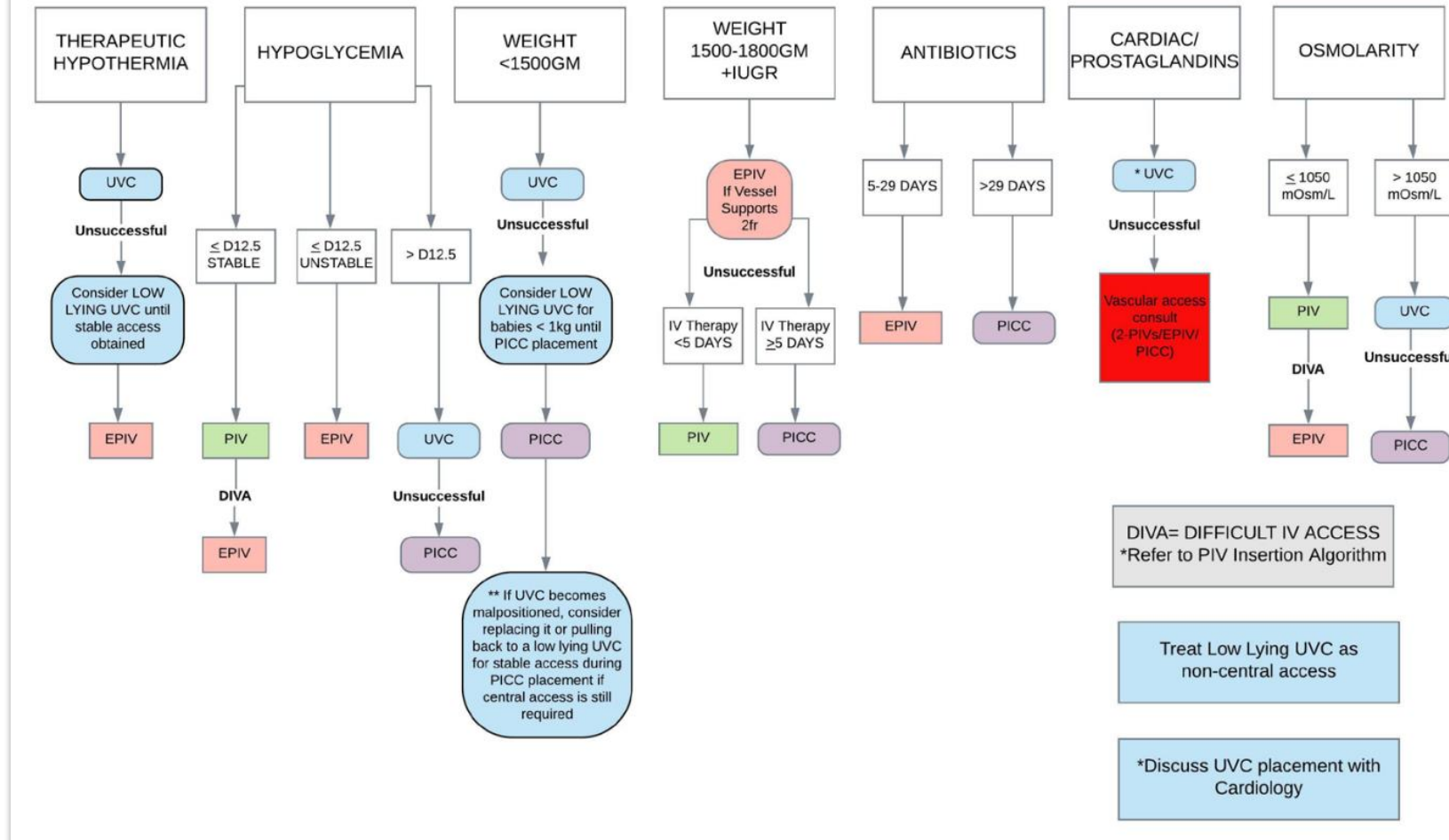
Alternatives to PICC Lines

For babies who need total IV nutrition, the only alternative to a PICC line is having frequent or repeated IVs inserted. While the staff can make sure your baby has pain control with IV sticks, frequent sticks can increase your baby's risk of infection.

PICC Line Removal

Tool: Baby Steps to Home PICC Lines Information for Parents

VENOUS ACCESS DECISION TREE



Tool: Brigham and Women's Newborn Venous Access Decision Tree

2b: Providing Cue-Based Care

Potentially Better Practices:

- **Recognize Stress Cues:** Train staff using standardized materials.
- **Infant-Driven Care:** Incorporate developmentally focused, infant-led approaches.
- **Empower Caregivers:** Involve families to coordinate care and minimize unnecessary disturbances.

Evidence and Tools

- Thames Valey & Wessex Nursing Guideline for **Individualized Cue-Based Care**
- Johns Hopkins All Children's Hospital **Neuroprotective Care of the NICU Infant Clinical Pathway**
- Swedish Medical Center **Neonatal Neuroprotective Best Practice Care Guidelines (4a and 4b)**
- Emory Department of Pediatrics **Understanding Preterm Infant Behavior in the NICU**

Cue-Based Care Tools for Parents

the
childr^{en}'s
hospital at Westmead



Info-sheet

Five Step Dialogue

nidcap
the childr^{en}'s hospital at Westmead
The Australasian NIDCAP Training Centre

Getting to Know Your Baby



2c: Minimizing Pain from Interventions

Potentially Better Practices:

- **Pain Recognition:** Educate staff and caregivers on pain assessment tools.
- **Pain Management:** Use pre- and post-procedural comfort measures and guidelines.
- **Reduce Redundancy:** Implement protocols to avoid duplicate tests (e.g., lab draw schedules, time outs/huddles).

Evidence and Tools

- NANN Newborn Pain Assessment and Management Guideline
- AAP 2016 Policy Statement Prevention and Management of Procedural Pain in the Neonate

Comfort assessment
• • • • • • • •
Neo Scale

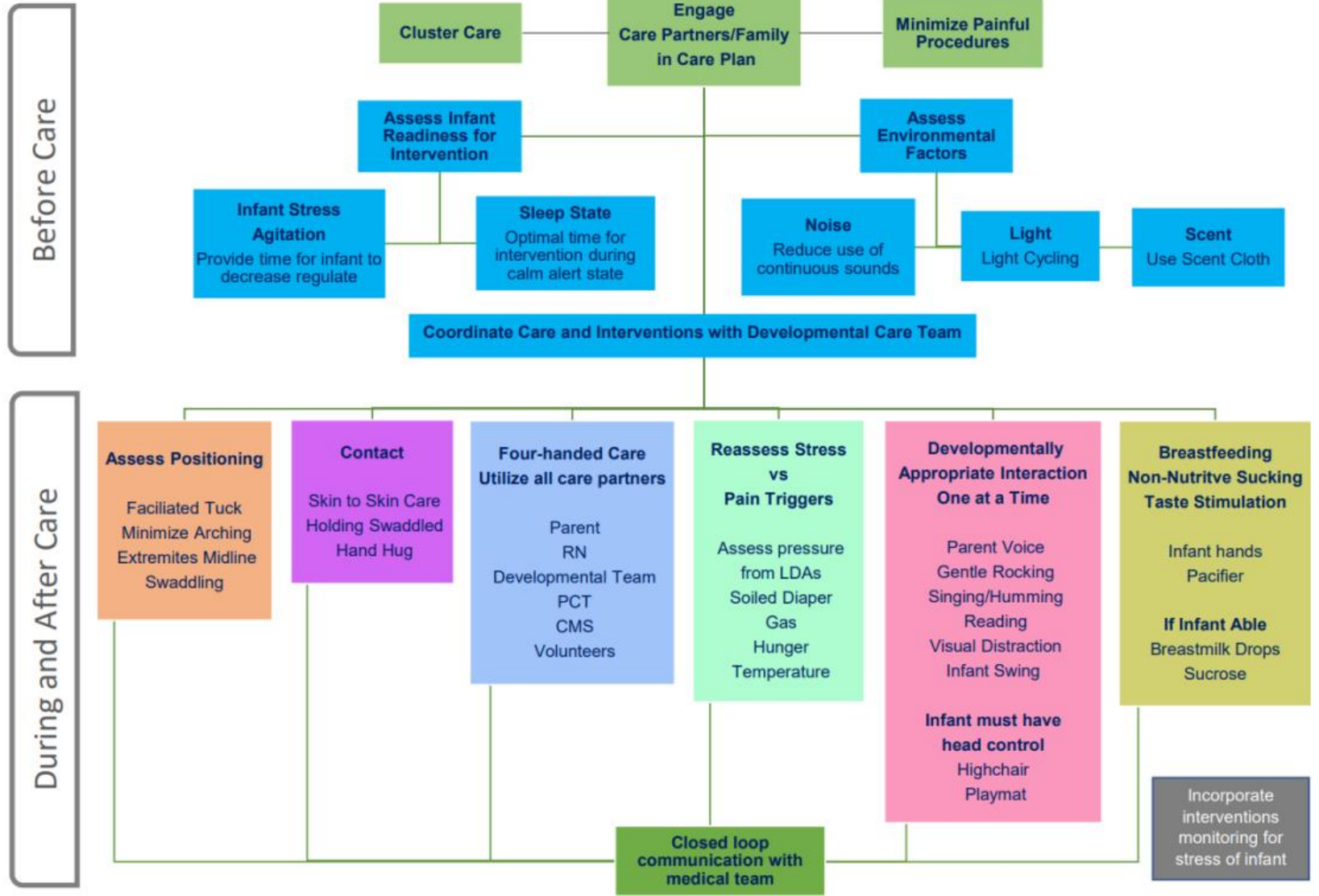
Date/time 1 Date/time 2
Date/time 3 Date/time 4

Place a mark

	1	2	3	4	
Alertness	1. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	quiet sleep (eyes closed, no facial movement)
	2. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	active sleep (eyes closed, facial movement)
	3. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	quietly awake (eyes open, no facial movement)
	4. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	actively awake (eyes open, facial movement)
	5. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	awake and hyperalert
Calmness/ Agitation	1. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	calm (appears lucid and serene)
	2. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	slightly anxious (shows slight anxiety)

Tool:
Comfort Assessment
Neo Scale

Non-Pharmacological Pain Interventions Pathway



Tool:
Johns Hopkins
All Children's
Clinical Pathway
Appendix A

Questions?
