**Breastfeeding Pathway for All Mothers and Infants**



This document mirrors the Parent Pathway and offers more in depth information for the nurse to support the breastfeeding mother. Please note that not all infants will advance through the steps in order and many times infants will be on more than one step at a time. For example, Step 2 (Skin-to-skin) can be combined with Step 3 (non-nutritive breastfeeding). Or a baby who is PO feeding will not have to start on Step 1 (Oral Care) as it is not applicable.

**Step One:**

* **Oral Care**
  + Outcomes
    - The Breastfeeding Pathway will be introduced to parents
  + Readiness Indications
    - All babies are candidates for oral care
  + Interventions (Refer to Oral Care Guidelines for details)
    - Baby
      * Have access to MOM (#1 choice) or donor milk (#2 choice and consent obtained)
    - Mom or Dad
      * Perform oral care after instructed
      * Watch video “Maximizing Milk Production”
      * Mom – pump 8-10X per day including once at night
      * Learn how to label expressed breast milk 1-60
    - RN
      * **Place Step 1 crib card at bedside**
      * Coordinate with PP to initiate pumping within 6 hrs of delivery
      * Oral care does not require an order
      * Can use donor milk if MOM not available
      * Use kit if intubated; if not intubated use oral syringe and place 0.1ml in each cheek
      * Instruct and support mom regarding pumping and labeling
      * **Documentation oral care in EPIC**
        + Go to HEENT Care > mouth care > select “oral care with colostrum/breast milk

**Step Two:**

* **Skin-to-Skin Care**
  + Outcomes
    - Skin-to-Skin will be delivered to the patient safely
    - Family will communicate an understanding of Skin-to-skin care
  + Readiness Indications (refer to Skin-to-Skin Guidelines for details)
    - Should be initiated as early in the baby’s life as possible.
    - No weight or gestational age limitations.
    - Infant is stable.
    - Respiratory status stable:
      * Minimal A&B’s
      * Stable CPAP/SiPAP/NIPPV
      * Stable intubated infants
    - Infant does not have a peripheral arterial line, UAL, or chest tube (requires order).
    - Infant does not require vasoactive or continuous analgesic/sedative medications (low dose dopamine OK if not being titrated).
    - Parent’s chest is free of rashes or lesions.
    - Phototherapy is not a contraindication as long as TsB is not rising rapidly, less than 2-3 banks of phototherapy are in use, and infant is not nearing exchange level.
    - Skin-to-skin holding should be done for a time as tolerated by the infant; usually at least one hour (30 minutes minimum) and up to 3-4 hours as tolerated, once daily, and increase as tolerated.
  + Interventions
    - Baby
      * Able to tolerate Skin-to-Skin by demonstrating
        + Stable vital signs
    - Mom or Dad
      * View “Skin-to-Skin Holding (Kangaroo Care)” video on desktops of NICU computers
      * Baby skin-to-skin for at least one hour daily, when possible
    - RN
      * **Place Step Two crib card at bedside**
      * Assist mom and dad on transferring infant from bed to chest
      * Remain at bedside during initial trial in order to assess the infant’s and the parent’s reaction to Skin-to-Skin holding
      * Encourage Skin-to-Skin and discuss benefits with parents:
        + 1) improved physiologic stability of the infant. 2) gained body warmth, 3) faster brain maturation, 4) conserves infant’s calories, 5) stimulation of maternal milk production…and many more
      * Discuss and encourage breast feeding and pumping with mom
      * Step One crib (oral care) should still be continued for infants who are not PO feeding.
      * **Document S2S in EPIC**
        + Daily Care > Stability/Consolability Measures > S2S
        + Coping/Psychological > Maternal/Infant Attachment > S2S

**Step Three:**

* **Non-nutritive breastfeeding** – Suckling at the breast with little or no secretion of milk
  + Outcomes
    - Non-nutritive breastfeeding will be initiated
    - Skin-to-Skin holding will continue
  + Readiness Indications
    - Infant tolerated Skin-to-Skin holding
    - Infant displays or shows rooting, suckling, licking and moving towards the breast (even if minimal)
  + Interventions (refer to guidelines BREASTFEEDING SUPPORT: NON-NUTRITIVE (“DRY”) BREASTFEEDING (NNB) for details
    - Baby
      * Active, alert state
      * Readiness to advance from Skin-to-Skin
      * “Stable” infants defined as infants who are not requiring frequent changes of respiratory support, with stable vital signs in normal ranges, who will tolerate brief handling with no change, or brief changes, in oxygen saturation. Infants on low dose dopamine may be considered stable, if frequent adjustments of the dosage are not required.
      * Extubated
      * If baby NPO, obtain order.
      * Requires discussion with attending physician prior to initiation
    - Mom
      * Pump to empty breast just prior to non-nutritive breastfeeding
      * If infant becomes too sleepy, revert to Skin-to-Skin
    - RN
      * **Place Step Three crib card at bedside**
      * Continue to encourage Skin-to-Skin (Step 2)
      * Initiate non-nutritive breastfeeding
        + Give instructions, assistance and monitor positioning at breast as this is practice for breastfeeding
      * Encourage non-nutritive during gavage feedings
      * Do not record as a breastfeeding session
      * **Document in EPIC**
        + Add “Breastfeeding” to additional documentation for “Nutrition” > breastfeeding > select “non-nutritive breastfeeding”

**Step Four**

* **Nutritive Breastfeeding**
  + Outcomes
    - Mother & infant will learn to breastfeed
    - Skin-to-skin holding will continue to be encouraged (Step 2)
    - An individualized feeding plan will be developed
  + Readiness Indications
    - Infant is active, alert and sucking throughout non-nutritive breastfeeding
    - Stable - Stable VS and RR <60 with no head bobbing, retractions, desaturation/cyanosis with care or during skin-to-skin care.
    - No longer requiring: SiPap, CPAP, NIPPV, High Flow Nasal Cannula (consider)
    - Requires a physician order
  + Interventions
    - Baby
      * Continues to tolerate both Skin-to-Skin and non-nutritive BF
      * Begins to transfer milk at the breast
    - Mom
      * Monitors hunger cues
      * Monitors time of feeding and tolerance during breastfeeding
      * Contributes to assessment of breastfeeding
      * Mom continues to pump after each feeding and participate in S2S
      * Participate in test weights if desired
    - RN
      * **Place Step Four crib card at bedside**
      * Initiate breastfeeding when infant shows feeding cues
      * No bottle feedings at this time unless requested by Mom or ordered by physician
      * Coordinate PO feed attempts with mother’s visitation schedule
      * Alternate feeding methods as appropriate for infants with GA ≥ 35 wks gestation (not corrected GA). SeeBREASTFEEDING SUPPORT: ALTERNATIVE FEEDING METHODSfor details.
      * Use test weights to measure milk transfer (refer to BREASTFEEDING SUPPORT: TEST WEIGHT GUIDELINES for details)
      * Breast milk Supplementation: Continue to encourage mom and reinforce that breast feeding is the best thing she can do for baby but fortification or additional formulas may be necessary due to baby’s high needs
      * Document in EPIC
        + Alternative feeding method

NICU/NB I&O > measured intake > PO method (select spoon, syringe, cup)

* + - * + Test Weight

Nutrition > Breastfeeding > Breastfeeding Test Weight > enter mls transferred during session

**Step Five**

* **Breastfeeding and Bottle feeding**
  + Outcomes
    - Nutritive breastfeeding will progress well
    - Bottle feeding will be initiated per physician order and Mom’s agreement
    - Skin-to-skin holding will continue to encouraged
  + Indication
    - Feeds to be infant driven by showing hunger cues

going no longer than 3-4 hours

* + Interventions
    - Baby
      * Breast feed when mom is at bedside
        + Bottle feed at other feedings
      * Oral feeds on demand; not going longer than 3-4 hrs
        + Signaled by hunger cues
    - Mom
      * Pump after breastfeeding until exclusive breastfeeding is established
      * Learn technique for bottle feeding a breastfed baby – working with cues and pacing
    - RN
      * **Step Five crib card**
      * If mom can’t be there for each PO feeding, ask permission to bottle feed breast milk
      * May need to pace baby as flow is different from bottle compared to breast. Consider switching to cue-based feeds
      * Continue feeding q3h (or as ordered) and supplement with gavage feedings when necessary
        + Initiate on demand feeding when ready

**Step Six**

* **Discharge planning**
  + Outcomes
    - A discharge feeding plan will be developed
    - Mom will be instructed about ongoing pumping needs
    - Family will be prepared for feeding progression post-discharge
  + Indications
    - Infant is at goal feeding plan
    - Getting ready for discharge
  + Interventions
    - Baby
      * Taking all feedings orally; if infant is not taking all feedings orally at discharge, this will be reflected in the discharge feeding plan
    - Mom and Dad
      * Demonstrates understanding of discharge feeding plan
      * Demonstrate understanding in preparation and completing feedings per discharge feeding plan
    - RN
      * **Place Step 6 crib card at bedside**
      * **Support** family in discharge feeding plan in hospital before discharge
      * **Observe and assess** a breastfeeding session prior to discharge and document
      * **Confirm** that parents have a lactation resource for questions or problems after discharge
    - RD
      * Develop individualized discharge feeding plan in conjunction with the LC if possible
        + Frequency of feeds and volume
        + Advancement schedule
        + Recipe instruction, if needed