Breast milk feedings are always the first choice for a NICU infant’s nutrition, but exclusive breastfeeding may not be achieved by NICU discharge. A pre-term or full-term infant with complex medical conditions may not be able to effectively transfer milk from the breast and may require caloric fortification to meet nutritional needs. The infant may consume more volume at the breast over time through maturity and improved skills. Nutritional care plans post-discharge depend on maternal milk supply, feeding goals and the infant’s nutritional status and feeding behaviors. Develop individualized plans to promote breast milk feedings, provide optimal nutritional support (while supporting the mother’s feeding goals), and protect mother’s milk supply. Highest risk infants require additional attention in planning. Infants born <32 weeks of <1500g, or with complex medical conditions such as chronic lung disease are automatically referred to the NICU follow-up clinic at discharge.

ASSESSMENT
Frequently and carefully assess (1) the infant’s ongoing nutritional needs, (2) infant growth, (3) milk transfer and (4) maternal milk supply during the transition to more frequent breastfeeding. Assess latching for adequacy and evaluate breastfeeding effectiveness. Weigh before and after feeding on an electronic scale with an accuracy at minimum of +/- 5g for objective measurement of milk transfer.

MANAGEMENT/TREATMENT
Follow the NICU discharge feeding plan until growth trajectory is established. Time at the breast may need to be limited initially to avoid fatigue. For lower-risk infants (without ongoing prematurity complications, >10th percentile for weight), gradually increase breastfeeding frequency as the infant improves in emptying the breast. Test weights can quantify milk intake at the breast. As breastfeeding frequency increases, supplementation and pumping can gradually decrease. Some infants (especially higher risk) may require continued supplementation with fortified breast milk or preterm formula, depending on family preference, feeding plan sustainability and maternal milk supply. See algorithm (reverse) for more detail.

Breastfeeding mothers of NICU graduates should discontinue pumping gradually (over 1–2 month period following discharge). Continue pumping until infant transitions to exclusive at-the-breast feeding and use of a nipple shield is no longer required.
Breastfeeding Progression in the NICU Graduate

**Inclusion Criteria**
Infant recently discharged from neonatal intensive care

**Patient Presents**

**Standard Workup**
- History of Present Illness
- Family History
- Physical Exam

**HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS**
- Average growth <15g/day
- Maternal history suggestive of poor milk emptying/stasis (e.g., mastitis)
- High-risk infant (<3rd or 5th percentile)
- Maternal history suggestive of decreasing milk supply

**Born at <32 weeks or <1500 grams, or with NICU complications such as chronic lung disease?**
- Yes: Feeding managed by NICU follow-up clinic
- No: Growth concerns?

**Growth concerns?**
- Yes: Conduct breastfeeding assessment and perform test weights before and after feeding
  - Consider altering number of feedings at the breast and increasing the number of feedings of preterm formula or fortified breast milk OR
  - Increase caloric concentration of preterm formula or fortified breast milk supplements OR
  - Increase volume of supplementation following direct at-the-breast feeding
- No: Increase number of direct-at-breast feeds
- Decrease supplemental feeds of preterm formula or fortified breast milk

**Adequate milk transfer?**
- Yes: Continue current number of direct-at-breast feeds
  - Increase calories of preterm formula or fortified breast milk OR
  - Increase volume of supplementation after direct-at-breast feedings
- No: Alter number of direct-at-breast feeds per day with prescribed number of feeds per day of preterm formula or fortified breast milk
  - Increase feedings of preterm formula or fortified breast milk

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.