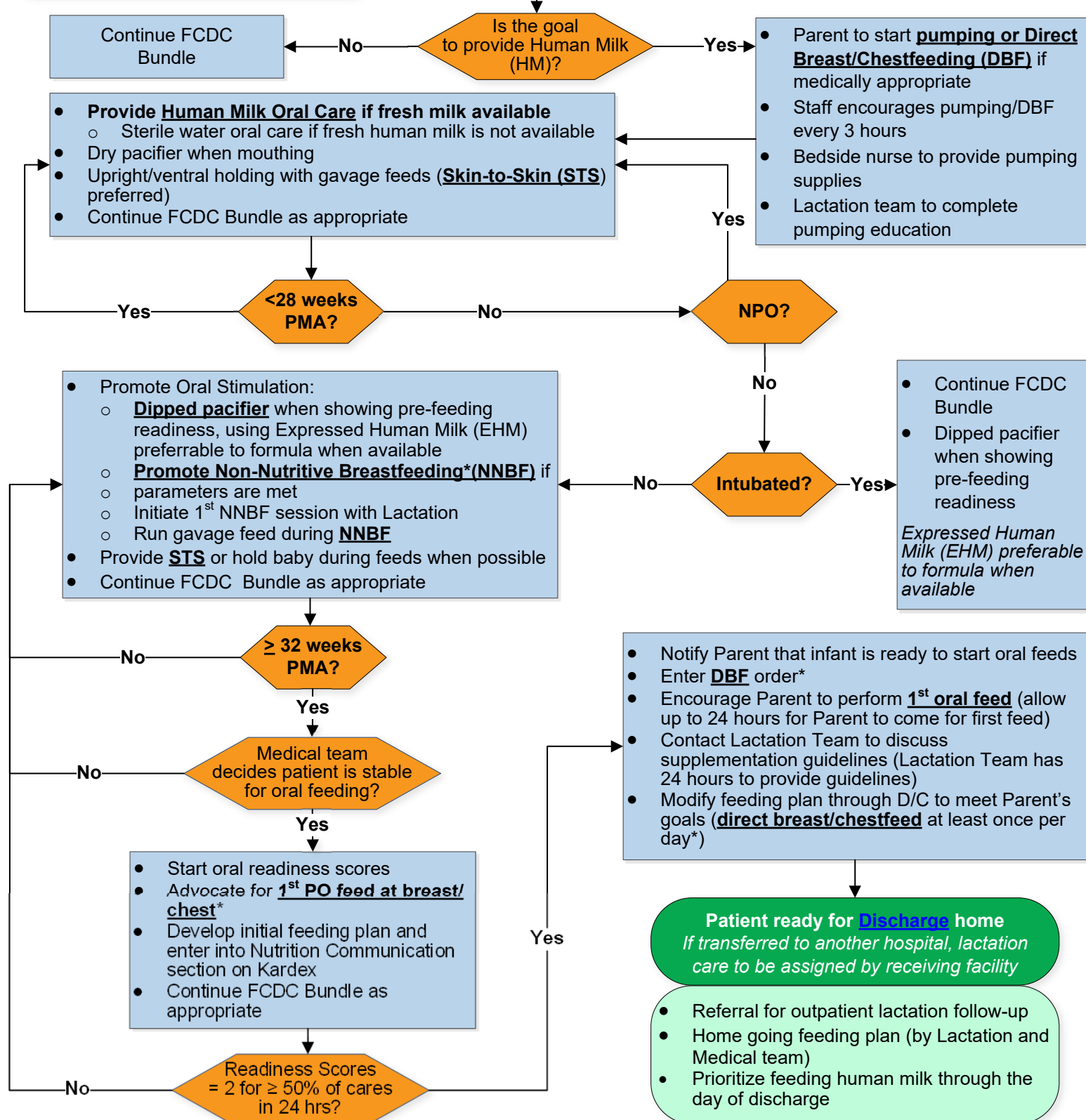


Inclusion Criteria:

Infants admitted to NICU < 7 days of life or receiving human milk

* = If the parental goal is to direct breast/chestfeed

- Begin Family-Centered Developmental Care Bundle (FCDC)
- Document Parental Lactation Goal
 - If parental goal changes at any point, Lactation Team will develop weaning plan, continue FCDC Bundle as appropriate



FAMILY-CENTERED DEVELOPMENT CARE BUNDLE

Consider for ALL ages as often as appropriate:

- Assent for Donor Human Milk when eligible per policy
- Family involvement in cares
- Hand containment with cares and feeds
- **Skin to skin care (STS)**: focus on frequency, duration and synchronize with feeds
- Discuss parental care strategies

Parameters for STS:

Please refer to the [NICU STS](#) policy for the most updated criteria.

All infants are eligible for STS except:

- on ECMO
- Silo
- Fresh Tracheostomy/ Critical airway (until cleared by ENT)
- Therapeutic Hypothermia

Requires an Order for STS:

- Tracheo-Esophageal Fistula/Esophageal Atresia (Intubated)
- Chest tube
- Oscillator

Parameters for Non-Nutritive Breastfeeding (NNBF)* (or Chestfeeding when indicated):

- ≥ 28 weeks GA
- Extubated
- Physiologically stable on respiratory support
- Showing pre-feeding readiness
- Surgical patients must be discussed with Surgery Team prior to placing order
- Discuss with medical team if arterial/umbilical line, chest tube, or aqua/PD catheter is present

Legend:

- PMA= Post Menstrual Age
- *= If the parental goal is to direct breast/chestfeed
- **Bolded**= Lactation Milestones
- EHM = Expressed Human Milk
- DHM = Donor Human Milk
- DBF = Direct Breast/Chestfeed
- NNBF = Non-Nutritive Breast/Chestfeed
- HM = Human Milk
- STS = Skin to Skin care
- Oral Care = immunotherapy, infection control strategy
- Oral Stimulation = supports oral feeding success through NNBF or dipped pacifier

Inclusion and Exclusion Criteria

Inclusion criteria:

- Any infant admitted to NICU less than 7 days of life or receiving human milk

Exclusion criteria:

- Parent does not intend to provide human milk

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Assessment/Policies

- [Human Milk Inpatient: Drugs of Abuse, Opioids and Other Harmful Substances Policy](#)
- [Human Milk Storage, Handling and Exposures Policy](#)
- [Storage and Utilization of Donor Human Milk \(DHM\) in the NICU](#)
- [Breastfeeding and Lactation in Neonatal Services Policy](#)
- [Use of Expressed Breast Milk for Oral Care](#)
- [Kangaroo Care \(Skin-to-Skin Care\)](#)

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Recommended Treatments

- Direct breast/chestfeed (DBF) or pump within first 6 hours of delivery
- DBF (as able) or pump 8 times per day
- Prioritize DBF as often as possible
- Donor Human Milk (DHM) if parental milk is not available
- Follow medical team recommendations to support growth

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Treatments Not Recommended

- Routine use of formula feeds
- Restricting NNBF or DBF opportunities at breast/chest in medically stable patients

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Discharge Criteria & Planning

- Prioritize feeding human milk through the day of discharge
- Home going feeding plan provided by dietitians
- Follow Up with Outpatient Lactation

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Patient & Caregiver Education

Education on (In Appendix):

- [Providing the Safest Milk for Your Baby](#)

Helping Hands Links:

- [Providing Breastmilk for Your Hospitalized Baby](#)
- [Breastfeeding Helping Hand](#)
- [Breast Care and Expressing Milk Helping Hand](#)
- [Breastmilk for Your Hospitalized Infant: Electric Breast Pump Helping Hand](#)
- [Kangaroo Care for Your Infant Helping Hand](#)
- [Oral stimulation](#)
- [Pasteurized Donor Milk](#)

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Risk Awareness & Zero Hero

- Human Milk Errors
 - Wrong milk to wrong patient
 - Incorrect fortification
 - Expiration of milk prior to use
- Human Milk Inpatient: Drugs of Abuse, Opioids and Other Harmful Substances Policy

[Lactation Algorithm](#)

Key References

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Developmental care with parent involvement:

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Dry and Dipped Pacifier:

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Quality Measures

- GOAL: Successful Lactation across a continuum that starts with early initiation of breast stimulation (either pumping or DBF) followed by multiple milestones as emphasized in this pathway eventually leading to successful long-term provision of HM.
- Our goal in this pathway is to enhance compliance with each milestone when clinically applicable to eventually lead to successful long-term provision of HM.
- Rate of HM@ Discharge: Increase percentage of infants (admitted less than 7 days of age and discharged before 120 days) receiving human milk HM[#] at discharge from NICU by a target of 10% from baseline.
- Rate of Human Milk[#] at Discharge stratified by race; sex; insurance; ethnicity
- Oral care: Rate of infants <28 weeks PMA receiving HM[#] receiving daily oral care.
- DBF: Rate of any direct breastfeeding during hospitalization completed in infants (admitted less than 7 days of age and discharged before 120 days of age) receiving human milk (HM)[#]?
- Balancing Measure: HM Errors: The number of human milk administration errors in infants in the NICU

[#]to include parent's milk, and exclude donor milk unless from a gestational surrogate

[Lactation Algorithm](#)

Potential Areas for Research

- Factors that decrease disparities among human milk feedings at discharge
- Assess for disparities and barriers to provision of donor human milk

[Lactation Algorithm](#)

Pathway Team & Process

Pathway Development Team:

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Clinical Pathway Approved

Medical Director – Associate Chief Quality Officer, Center for Clinical Excellence:

Ryan Bode, MD, MBOE

Advisory Committee Date: *December, 2022*

Origination Date: *December, 2022*

Next Revision Date: *December, 2025*

Clinical Pathway Development

This clinical pathway was developed using the process described in the NCH Clinical Pathway Development Manual Version 6, 2022. Clinical Pathways at Nationwide Children's Hospital (NCH) are standards which provide general guidance to clinicians. Patient choice, clinician judgment, and other relevant factors in diagnosing and treating patients remain central to the selection of diagnostic tests and therapy. The ordering provider assumes all risks associated with care decisions. NCH assumes no responsibility for any adverse consequences, errors, or omissions that may arise from the use or reliance on these guidelines. NCH's clinical pathways are reviewed periodically for consistency with new evidence; however, new developments may not be represented, and NCH makes no guarantees, representations, or warranties with respect to the information provided in this clinical pathway.

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For more information about our pathways and program please contact:
ClinicalPathways@NationwideChildrens.org

Lactation Algorithm

Providing the Safest Milk for Your Baby

Your baby deserves the best start and every drop counts! We know that your milk is the very best nutrition for your baby. We encourage you to eat a well-balanced, healthy diet when you are providing breast milk. Do not be afraid to start breastfeeding or pumping because of the medicines you are taking.

Over the Counter Medicines:

- Some over the counter medicines and herbs can cause side effects in your baby.
- Some over the counter medicines and herbs can decrease your milk supply.
- Medicines that dry up your nose may also dry up your milk supply. You should not take medicines that contain “pseudoephedrine” (i.e. Sudafed, Claritin D) because they can dry up your milk supply.
- Check the ingredients in all over the counter medicines before you take them.
- To learn more about medicines and breastfeeding:
 - Visit the <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT> – this is the “Drugs and Lactation Database.”
 - You can search “Lactmed” on your computer’s search engine.
 - “Lactmed” is also a free app you can download on your smartphone!

Recreational Drugs:

- Only take medicines as prescribed when providing breast milk.
- Alcohol can pass through breast milk to your baby. Talk to your baby’s doctor or a lactation consultant if you plan on drinking alcohol.
- Smoking can decrease your milk supply. Ask your doctor if you want help quitting.
- If you use recreational drugs, you must agree to stop using them while you are providing breast milk. Please only bring SAFE MILK to the hospital for your baby (milk that you pumped while not using drugs).
- If you use only medicines (such as Methadone, Subutex® or Suboxone®) prescribed by your doctor, your milk will be fed to your baby and you can breastfeed when your baby is ready.



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Prescription Medicines:

- Most medicines that your doctor tells you to take during pregnancy are safe to take while breastfeeding.
- It is safe to start breastfeeding and pumping while we help you get information about your specific medicines.
- Be sure to tell the baby’s doctor all of the medicines you are taking and the current dose. Tell the doctor if there are any changes to your medicines.
- Your baby’s doctor will closely monitor your baby for side effects of the medicines and will make recommendations as needed.
- Radiology Tests (CT or cat scans, MRI, x-rays, etc.)
 - Some dyes can enter breast milk and require a temporary hold on breastfeeding.
 - If you need a medical test and will be exposed to a dye, do not pump and dump. Save the milk and label it. Talk to the Lactation Team or your baby’s doctor before that milk is given to your baby.

Milk Sharing:

- Give YOUR baby the benefit of YOUR breast milk. We only accept Moms’ OWN milk.
- Sharing breast milk is not safe.
- Studies show that breast milk shared on the internet can have high levels of bacteria in it even if they say it is “safe”.
- Most people do not know how to properly ship milk to make sure it stays cold and does not leak.
- If donor milk is needed, talk to your baby’s doctor. We use the OhioHealth Mother’s Milk Bank. They are a nationally recognized organization and will pasteurize the donated milk.

**Contact your lactation team if you have any questions or concerns.
(614) 722-5228**



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