Breast Milk Management and Barcode Scanning in the NICU

**Background**

- Human breast milk is widely accepted as the optimal nutrition for infants. Mother’s own milk is optimal under most circumstances, but when unavailable pasteurized donor breast milk is a suitable alternative. With preterm infants, human milk alone may not be nutritionally sufficient so fortification may occur.

- NICU staff has brought state of the art feeding preparation to the most vulnerable of inpatients cared for at NL EMMC. Select RNs and all CNAs have certification as an Infant Feeding Technician from Ohio State University. They have spent many hours standardizing the process of milk preparation.

- Barcode Scanning ensures proper patient identification at each step of the process by using a patient specific barcode found on the infant’s band and all bottle labels. The patient specific barcode is scanned to receive bottles, prepare bottle and administer bottles. This process reduces potential errors in the preparation process and at administration. In the past year 29,792 bottles were administered, 12,459 received, 2,346 combined, 1,068 prepared and 2,118 discharged in the NICU. There were 201 scanned mismatches/near misses. Proper utilization of barcode scanning has prevented known administration errors.

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**Purpose**

- To ensure proper handling, fortification, and distribution of breastmilk.
- To minimize the risk for contamination.
- To ensure proper identification of breastmilk throughout the process.
- To prepare 24 hours worth of feeds to aid in productivity.
- To ensure consistency of feeds.
- To ensure proper patient identification on administration.

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**Process**

**Daily Routine:**

- Milk technician verifies physician order.
- Calculate 24 hour volume and fortification.
- Administration supplies prepared.
- Thaw desired products that are needed.
- Prepare each patient’s individualized feeds and create patient specific label for barcode scanning.
- Deliver to patients’ rooms, double checking formulation with bedside Nurse.
- Clean milk preparation room to maintain aseptic environment.

**Milk Preparation Room**

- Freezer
- Refrigerators
- Waterless Bead Warmer
- Gram Scales
- Barcode Scanner
- Label Printer
- Feeding Supplies