Memorial Hospital at Gulfport, Miss.

Below is a summary of the case study as submitted by Memorial Hospital at Gulfport.

Challenge
Mississippi has the highest rate of prematurity in the nation accompanied by the highest infant mortality and obesity rates. Research supports that these rates are associated with Mississippi having the lowest breastfeeding rates in the nation. This is a challenge for any of Mississippi’s maternity services including neonatal intensive care units. Our specific challenge was how to increase the number of infants, including our premature/sick infants, who receive human milk.

Goal
To increase the number of woman who breastfeed, and to protect all women who choose to breastfeed that deliver and/or are transferred to Memorial Hospital at Gulfport (MHG), especially infants in our NICU, MHG created practices that aid mothers and infants in initiation and maintenance of human milk production (mother) and consumption (infant).

Method
The following are practices implemented to overcome our challenge and meet our goal(s):

- A new breastfeeding policy/procedure was developed and implemented including the Ten Steps to Successful Breastfeeding.
- All maternal/child RNs are required to attend a Breastfeeding Basics class with emphasis on protecting a woman’s decision to breastfeed, especially for her NICU infant.
- A standing order was obtained that in part states that if a mother and her infant are separated for any reason, the mother will be provided a breastpump at her bedside and assistance with the use of pump.
- Memorial became a donor milk provider for our extremely low birth weight infants. In 2010, our clinical effectiveness program (CEP) which is comprised of maternal/child physicians, nurses, management, and other department representatives as needed, decided there was a need to provide human milk to infants that were less than 33 weeks gestational age to decrease the risks associated with artificial milk. Policies, procedures and practices were implemented and MHG’s NICU began the provision of human donor milk obtained through Austin Milk Bank in Texas.
- In an attempt to increase awareness of human donor milk for premature infants, our facility became the first donor human milk collection site for Austin Milk Bank in the state of Mississippi. This allows approved donors to bring any amount of their donated milk; once we have collected 200 ounces or more we mail it to Austin Milk Bank.
- Memorial allows rooming-in with not only our post-partum mothers but also mothers of infant(s) transferred from another facility to our NICU for up to several days prior to discharge of infant to home. This allows opportunity for our mothers to nurse their infants and our staff to assist/support their breastfeeding and/or pumping prior to discharge. We have the only NICU for the entire Mississippi Gulf Coast including Hancock, Harrison and Jackson counties.

Outcome
- 120 RNs have been educated on human milk and the benefits to infants.
- As a result of the education, our exclusive breastfeeding rates increased from 1 percent to 67 percent in less than three years.
As a result of education and the introduction of human donor milk, the number of NICU infants receiving human milk increased from 38 percent to 80 percent the following year. Also, the rate of necrotizing enterocolitis (NEC) decreased from seven documented diagnosis of NEC in 2010 to only one in 2011.

Discussion
There are always opportunities to implement best practices, and an opportunity that MHG will target as a next step in protecting human milk is to use waterless milk warmers. We have requested budget consideration and/or a grant for 10 waterless warmers. Data that showed specific organisms cultured from the current milk warmer systems would support our NICU’s request for waterless warmers and would be a consideration for research. Please note that the successful increase in breastfeeding rates was supported by Memorial Hospital at Gulfport participating in a previous Medela Prematurity Awareness initiative by obtaining the most votes from our community for our NICU. Without this support our challenge to promote and protect the provision of human milk to our infants, including our premature/sick infants, would have continued to be a greater challenge and we would not be able to write this essay today.

Tools that supported our success
- **Symphony® Breastpump** (multiple-use electric pump with 2-Phase Expression® technology) — Once we increased awareness, initiation and protection of breastfeeding mothers, we quickly realized the pumps used in our organization, and in our rental fleet, needed to expand. We currently have 33 Symphony pumps in circulation. This includes a Symphony designated for our employee pump room.
- **Symphony® Preemie+ Program Cards** (pumping patterns to initiate and maintain supply in mothers of premature babies) — We purchased nine Symphony Preemie+ cards for the Symphony® breastpumps used in our facility. See research on Symphony® Preemie+ Program Cards.
- **Symphony® Breastmilk Initiation Kits** (personal-use breastshields, collection containers, etc.) — We keep them stocked as we are the only NICU on the entire Mississippi Gulf Coast, and it would be detrimental to not stock these.
- **BabyWeigh™ Scale** — This was purchased for pre- and post-breastfeeding weights and is used daily in our Breastfeeding Center that serves our inpatient, outpatient and NICU population.
- **Medela Storage and Collection Containers** — Expressed breast milk is collected using the colostrum bottles or the 80ml oz bottles according to volume. We also carry these in our Breastfeeding Center that again serves our entire community with a full-service lactation center with four IBCLC’s on staff.
- **Tender Care Lanolin** — Lanolin is a staple on our shelves both on our post-partum unit as well as in our Breastfeeding Center.
- **Medela Transport Bags** — these are a must-have for our NICU parents to collect, store and transport their EBM to their babies in our NICU. Prior to our purchase of these bags, the NICU was using Artificial Breastmilk cooler bags. Once we increased awareness of the benefits of human milk, that practice stopped. These include the containers, pumping logs, cooler packs and Medela NICU Education booklets with tear sheets also.
Images

Consult Room

Employee Pump Room