Donor Milk
Beyond the NICU

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Is this Donor Milk?
Why Donor Milk?

• Use of donor milk began in September 2010 in our NICU
• Neonatologist requested this for our very preterm babies
• Realizing their fragile gut couldn’t handle formula
• The results of this commitment were so amazing we started looking beyond the NICU
What were the differences?

✓ Babies were being discharged earlier
✓ Fewer complications
✓ Babies gaining more weight
✓ Babies were calmer, digestion improved (less gas and constipation)
✓ Families were more satisfied
Why did we see all these improvements?

‣ Bifidobacteria and Lactobacillus
‣ Antibodies
‣ Lactose and Oligosaccharides
‣ Lactoferrin
The Newborn’s Gut

△ = Enterocytes lining the gut
● = Pathogens in the gut
Formula binds the pathogens to the Enterocytes

This causes the pathogens to colonize or bunch up
This leads to bunching up of pathogens along the lining of the newborn’s gut

Obviously interfering with digestion
Breastmilk prevents the pathogens from colonizing and bunching up, allowing them to pass on through.
Is donor breast milk safe?

(There is a very rigorous process that potential donors must go through and an equally extensive process the milk goes through before dispensing)

✓ Phone interview
✓ Extensive written interview (several pages long)
✓ Potential donor has blood testing
✓ Milk is collected and pasteurized
✓ Milk is retested after pasteurization before shipping
How is the milk processed?

- Milk in glass flasks and mixed (3-5 donors combined)
- Milk is tested for bacteria
- 4 oz bottles are filled
- Pasteurized (145 degrees for 30 min)
- Samples are again taken and tested for bacterial growth
- Must pass this process before distribution
- Frozen and ready for distribution
Currently there are 14 Human Milk Banks in USA and Canada. We use Iowa and Colorado. They come frozen in 4 ounce bottles. The cost is $4.50 per ounce.
We knew we had to expand the use of donor milk beyond NICU

Time to let Leadership in on our plan!
How we got ready to present to Leadership

- Audits were done to see our current practice on supplementation
- We looked at these 3 main points:
  How much
  How often
  How many babies
The Truth!

- We realized how much education we had to do (again!)
- We were supplementing over 50% of our breastfed babies
- And most of them were being overfed ~ Yikes!

No one was happy about that!
We had to do some number crunching to be able to give quantitative support.

We put together a power point presentation with our data asking Leadership to support donor milk for ALL babies.
What our data included:

✓ Audit results
✓ Projected costs
✓ How we would pay for it

Perform Audit
Evaluate Audit Results
Figure Projected Costs
Create Proposal
Present to Leadership
Cross Our Fingers!
Our cost analysis:

Deliveries - 1,600
80% breastfeeding mothers - 1,280
10% of our breastfed babies supplemented - 128

(Each baby received an average of 60 cc’s during their stay)

128 babies (10%)

\[ 128 \text{ babies} \times 60 \text{ (cc’s)} = 7,680 \text{ cc’s/year} \]

7,680

\[ -/- 30 \]

256 ounces per year

256

\[ \times 4.50 \]

$1,152 per year
20% supplementation rate = $2,304 per year
30% supplementation rate = $3,456 per year
40% supplementation rate = $4,608 per year
50% supplementation rate = $5,760 per year

This was “do-able”!
How did we propose to pay for this?

We currently own 14 hospital grade breast pumps for rental

This brings in $400-600 per month

Averaging $6,000/year
We got the OK and forged ahead

Next task...
more staff education
- We created an information sheet for staff
- Scripting ideas for staff to help educate the families
- Information sheet for the families
- Handout for locations for families to purchase donor milk after discharge
- Consent for infant supplementation (sign for either donor milk OR formula)
- Worked with IT department to get charting in Epic
✓ We created an education “Road Map” for staff to follow the necessary steps before we went “live” with donor milk

✓ They had to complete this Road Map within a designated period of time so everyone would be ready

✓ This was a great time to review the supplementation policy: when, how, amounts
Drawing up the milk

- Multiple draws with a sterile syringe can be taken from one bottle of milk
- Each draw should have a label with the baby’s identification
Warming the milk

- We purchased a Penguin Warmer System for warming up the milk
- Most staff already knew how to use this in NICU
Verifying and Charting

- IT created a build in Epic that automatically populated two rows when donor milk was being used
- Verified by two staff members and lot number of batch
- The Learning Packets included a ‘screen shot’ of what it would look like in Epic
The success stories came flooding in....

We were all so thrilled!
Our first donor milk recipient: Mason

“I wanted to say how awesome I think it is that North Memorial is starting the donor milk program for newborns. It provided my husband and I some peace of mind knowing that when I was not able to provide that milk for him, we were still able to supplement it. Very cool!”

~ The Womer Family
Mason - 4 days old

Mason 8 months old
Currently twin cities hospitals are getting their donor milk from Colorado, Iowa and Ohio

There is no non-profit human milk bank in Minnesota

But the vision is here.....
We have begun this process!

‘Breast Milk for Babies’ is the nonprofit fundraising organization that sees the need and is working hard for this to become a reality

Our dream is to see this happen in 2013
Breast Milk for Babies needs you......