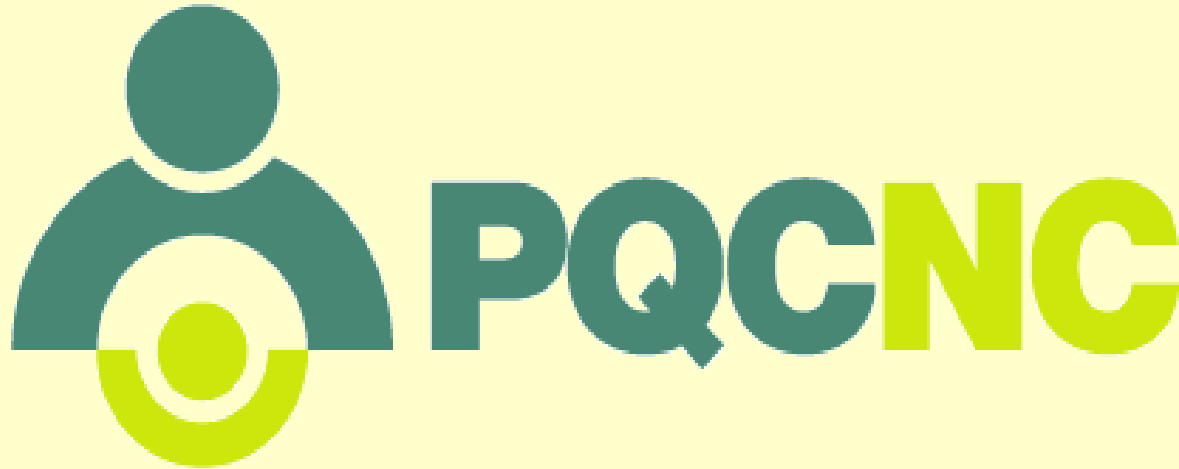


Welcome



**Mother's Milk for the Very Low Birth
Weight Infant**

30 September 2010

call in number: 712-432-6100 / pass code: 96875#



TODAY'S AIM:

Introduce the technical documents, registered teams, clinical leaders and the processes we will use in this breakthrough collaborative

AGENDA

- 9:02 Welcome
- 9:10 Introduction of Clinical Leads
- 9:20 Introduction of Teams
- 9:30 Timeline (to date) and forward
- 9:40 Measures
- 10:15 Building a Team
- 10:30 Next Steps
- 10:45 Action Plan

Co-Directors of the PQCNC Human Milk Initiatives



Miriam Labbok, MD

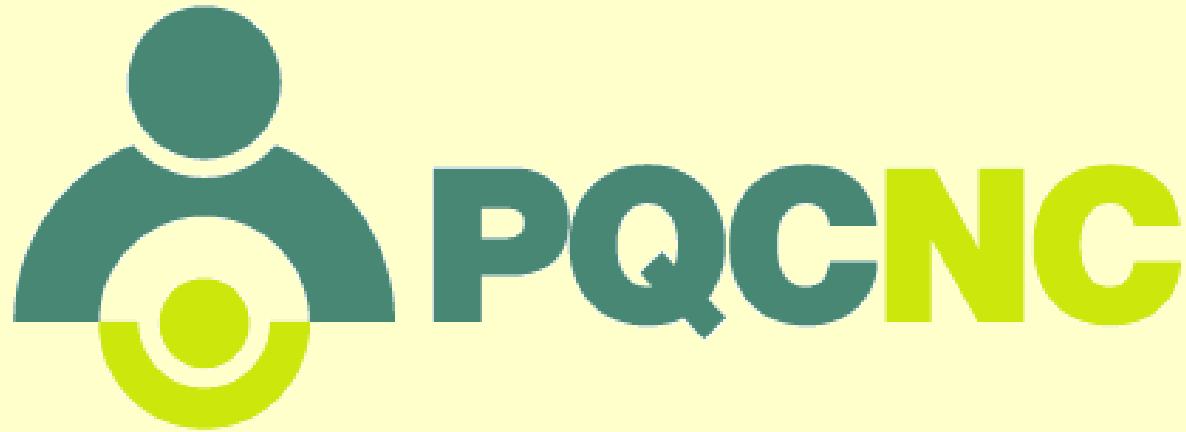
Laurie Dunn, MD

Emily Taylor, MPH

Polly Sisk, PhD

Angela Pittman, RN,MSN

Linda Smith, RN,MSN



**“Not everything that is
faced can be changed, but
nothing can be changed
until it is faced.”**

James Baldwin

Registered Teams

- ❖ Brenner
- ❖ Gaston Memorial Hospital
- ❖ PCMH
- ❖ Cape Fear Valley Medical Center
- ❖ Presbyterian Hospital
- ❖ Women's Hospital of Greensboro
- ❖ Forsyth Medical Center
- ❖ Mission
- ❖ Levine
- ❖ Catawba
- ❖ Wake Med
- ❖ CMC-NorthEast
- ❖ Duke University Medical Center
- ❖ Alamance Regional Medical Center
- ❖ UNC Health Care, Children's Hospital

JANUARY

FEBRUARY

MARCH

APRIL

MAY

JUNE

PQCNC solicits suggestions of pressing perinatal improvement opportunities

Leadership team & Members select from topics which meet criteria

Clinical leads review literature & draft an action plan

An advisory group of experts discuss and “improve” the action plan, aim & measures

- a. PQCNC and Clinical Leads plan pre-work and learning session # 1
- b. Invitations sent to places where babies are born and Newborn Critical Care Centers
- c. data collection tools are developed and piloted

Multi-disciplinary Teams are enrolled and complete the pre-work

Teams come together for Learning Session

JULY

AUGUST

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER

**Perinatal Quality Collaborative of North Carolina
NCCC Collaborative Action Plan
Mother's Milk for VLBW Infants in Newborn Critical
Care Centers**

- A. Promote and use mother's milk as the preferred nutritional substrate for infants
- B. Implement feeding guidelines
- C. Assure safety in the use of expressed human milk



Other work “in the village:”

Create supportive and family-centered environment

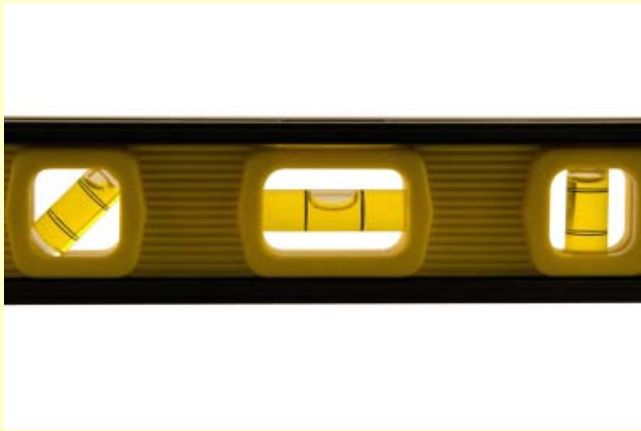
Decrease birthing and other maternal or child health care practices that undermine breastfeeding

Promote Breastfeeding support in the community

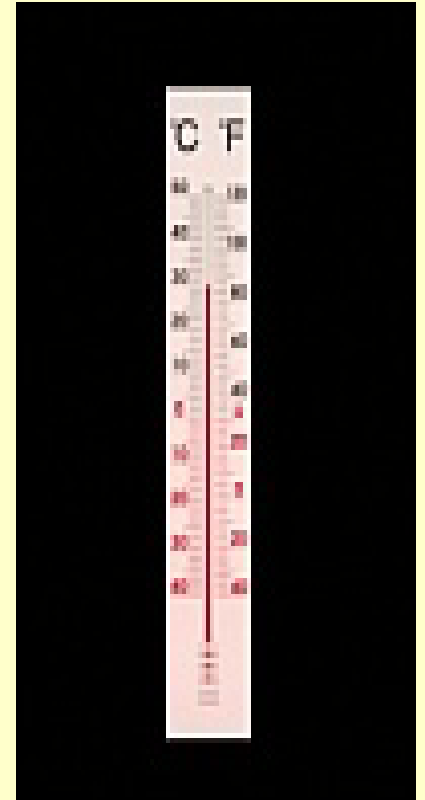
Ensure that health worker education includes the competencies necessary to support optimal infant and young child feeding.

Treat exclusive breastfeeding as a vital health practice, not as a simply a choice.





**Measure
what
Matters!**



The data collection tool is BRIEF for each shift and collected over many days on each shift.

Days 1-14, 21, 28 and discharge

The maximum number of questions on any shift is 9!

Many of the questions answered each shift are the same across the collection tool.

Measurement Strategy

Aim: Collect “just enough” data to help teams focus on processes to improve and to document that the changes you made helped.

October, beginning no later than October 7th, complete the data collection tool for each infant less than 1500 grams (VLBW) admitted before they are 72 hours old to your Newborn Critical Care Center (NCCC or NICU)

November 1-22: complete the data collection tool for each infant less than 1500 grams (VLBW) admitted to your Newborn Critical Care Center (NCCC or NICU)

November 23-December 31: no NEW data collection
December 1- January 7: Baseline entered into web site

January-September: complete the data collection tool for each infant less than 1500 grams (VLBW) admitted before they are 72 hours old to your Newborn Critical Care Center (NCCC or NICU) and enter into web site



Increasing use of human milk for VLBW Infant's in NC's Critical Care Units

- Recognition that there is a dose-related improvement for short and long-term outcomes with respect to the use of human milk used in the first month of life for the VLBW infants
- As mentioned, to be successful, support needs to be multidimensional, a consistent message coming at all levels

Core measurements chosen aim to address items that have been shown to improve provision of milk to VLBW infants

- Providing continued support and education of the mother
- Encouraging early and frequent pumping and/or hand expression
- Encouraging mother to spend time with her baby: touching, providing skin-to-skin care, and pumping at bedside
- But to insure optimal growth, using early parenteral protein, as well as later use of milk fortification

Form A: Complete on first full DAY Shift after baby is admitted

1. Was infant placed skin to skin with mom on this shift? Circle one: Y N
2. Has infant received parenteral protein on this shift?
Circle one: Yes No, Infant on Full Feeds No, Infant not on full feeds
3. Has infant received colostrum for oral care, buccal application of colostrum or feeds on this shift? Circle one: Y or N

If yes, check all that apply:

colostrum for oral care

buccal application of colostrum

maternal milk _____ Milliliters (total on this shift)

donor milk _____ Milliliters (total on this shift)

formula _____ Milliliters (total on this shift)

4. Has mom used hand expression or electric breast pump on this shift?
Check one: () Unknown () Y () N

5. Is documentation found any time since admission that a **neonatologist, neonatal fellow or a neonatal nurse practitioner** discussed the importance of providing milk for this infant? Circle one: Y N

Form A: Complete on first full NIGHT Shift after baby is admitted

1. Was infant placed skin to skin with mom on this shift? Circle one: Y N
2. Has infant received parenteral protein on this shift?
Circle one: Yes No, Infant on Full Feeds No, Infant not on full feeds
3. Has infant received colostrum for oral care, buccal application of colostrum or feeds on this shift? Circle one: Y or N

If yes, check all that apply:

colostrum for oral care

buccal application of colostrum

maternal milk _____ Milliliters (total on this shift)

donor milk _____ Milliliters (total on this shift)

formula _____ Milliliters (total on this shift)

4. Has mom used hand expression or electric breast pump on this shift?
Check one: () Unknown () Y () N

5. Is documentation found any time since admission that a **neonatologist, neonatal fellow or a neonatal nurse practitioner** discussed the importance of providing milk for this infant?

Circle one: Yes is circled above Yes noted on this shift No

B Form: Complete on 2nd through 7th full Day shift after infant admitted:

1. Was infant placed skin to skin with mom on this shift? Circle one: Y or N

2. Has infant received parenteral protein on this shift?

Circle one: Yes No, on Full Feeds No, not on full feeds

3. Has infant received colostrum for oral care, buccal application of colostrum or feeds on this shift? Circle one: Y or N

If yes, check all that apply:

colostrum for oral care

buccal application of colostrum

maternal milk _____ Milliliters (total on this shift)

donor milk _____ Milliliters (total on this shift)

formula _____ Milliliters (total on this shift)

4. Have you discussed importance of providing milk, offered support and guidance or reviewed the pumping log with the mom of this infant?

Circle one: Y or N

5. Has mom used electric breast pump on this shift?

Check one: () Unknown () YES () NO

B Form: Complete on 2nd through 7th NIGHT shift after infant admitted:

1. Was infant placed skin to skin with mom on this shift? Circle one: Y or N
2. Has infant received parenteral protein on this shift?
Circle one: Yes No, on Full Feeds No, not on full feeds
3. Has infant received colostrum for oral care, buccal application of colostrum or feeds on this shift? Circle one: Y or N

If yes, check all that apply:

colostrum for oral care
buccal application of colostrum
maternal milk _____ Milliliters (total on this shift)
donor milk _____ Milliliters (total on this shift)
formula _____ Milliliters (total on this shift)

4. Have you discussed importance of providing milk, offered support and guidance or reviewed the pumping log with the mom of this infant?
Circle one: Y or N

5. Has mom used electric breast pump on this shift?

Check one: () Unknown () YES () NO

C Form Complete on 8th through the 13th Day shift :

- 1. Was infant placed skin to skin with mom on this shift? Circle one: Y N
- 2. Has infant received parenteral protein on this shift?
Circle one: Yes No, on Full Feeds No, not on full feeds
- 3. Has infant received colostrum for oral care, buccal application of colostrum or feeds on this shift? Circle one: Y or N

If yes, check all that apply:

- colostrum for oral care
- buccal application of colostrum
- maternal milk _____ Milliliters (total on this shift)
- donor milk _____ Milliliters (total on this shift)
- formula _____ Milliliters (total on this shift)

Two of three new day shift questions for week 2:

- 4. Has human milk been fortified on this shift? Circle one: Y or N
If yes, check one, concentrated to: () 21-22 cal/oz
() 23-24 cal/oz () > 24 cal/oz
- 5. Has infant received additional enteral protein on this shift?
Circle one: Y or N

6. Has mom communicated that she will **no longer** provide milk for her baby?

Contact but no discussion about breast milk

7. Have you discussed importance of providing milk, offered support and guidance or reviewed the pumping log with the mom of this infant? Circle one: Y or N

Check one: () Unknown () YES () NO

9. In the previous 24 hour period what is mom's estimate of milk pumped?

Fill in here _____ ML/24 hours or circle one:
no contact w mom or not discussed

C Form Complete on 8th through the 13th NIGHT shift after is admitted:

- 1. Was infant placed skin to skin with mom on this shift? Circle one: Y N
- 2. Has infant received parenteral protein on this shift?
Circle one: Yes No, on Full Feeds No, not on full feeds
- 3. Has infant received colostrum for oral care, buccal application of colostrum or feeds on this shift? Circle one: Y or N

If yes, check all that apply:

- colostrum for oral care
- buccal application of colostrum
- maternal milk _____ Milliliters (total on this shift)
- donor milk _____ Milliliters (total on this shift)
- formula _____ Milliliters (total on this shift)

Two new questions for week 2:

- 4. Has human milk been fortified on this shift? Circle one: Y or N
If yes, check one, concentrated to: () 21-22 cal/oz
() 23-24 cal/oz () > 24 cal/oz
- 5. Has infant received additional enteral protein on this shift?
Circle one: Y or N

Form C: continued:

6. Has mom communicated that she will **no longer** provide milk for her baby?

Drop down: Yes No No contact with mom
Contact but no discussion about breast milk

If yes, do not answer questions 7, 8 or 9. If no, answer questions 7, 8, and 9:

7. Have you discussed importance of providing milk, offered support and guidance or reviewed the pumping log with the mom of this infant? Circle one: Y or N

8. Has mom used electric breast pump on this shift?

Check one: ☐ Unknown ☐ YES ☐ NO

Form D- Complete on days 14, 21 and 28 as long as infant is in the unit:

identical for days and nights:

1. Was infant placed skin to skin with mom on this shift? Circle one: Y or N

2. Has infant received parenteral protein on this shift?

Circle one: Yes No, on Full Feeds No, not on full feeds

3. Has infant received colostrum for oral care, buccal application of colostrum or feeds on this shift? Circle one: Y or N

If yes, check all that apply:

colostrum for oral care

buccal application of colostrum

maternal milk _____ Milliliters (total on this shift)

donor milk _____ Milliliters (total on this shift)

formula _____ Milliliters (total on this shift)

4. Has infant received HMF on this shift? Circle one: Y or N

If yes, check one: () 21-22 cal/oz () 23-24 cal/oz () > 24 cal/oz

5. Has infant received additional enteral protein on this shift?

Circle one: Y or N

6. Has mom communicated that she will **no longer** provide milk for her baby?

Drop down: Yes No No contact with mom
Contact but no discussion about breast milk

If yes, do not answer questions 7 & 8. If no, answer questions 7 & 8:

7. Has mom used electric breast pump on this shift?

Check one: () Unknown () YES () No

8. Have you discussed importance of providing milk, offered support and guidance or reviewed the pumping log with the mom of this infant? Circle one: Y or N

Form E: DATA COLLECTION AT DISCHARGE or Death

Did this infant survive until discharge? Circle one: Y N

If yes, skip to line 7 and complete this form.

If no, complete only these fields:

1. Infant Birth month
2. Did baby have NEC that required surgery?
3. Did Baby have NEC that required medical management?
4. Did baby have sepsis requiring treatment for more than 3 days?
5. Cause of death: check all that apply: Sepsis NEC
Other
6. Baby's age in days _____

Form E: DATA COLLECTION AT DISCHARGE

For baby's who survived to discharge complete these fields:

7. Infant Birth month
8. Metrics: Birth Weight_____ (GM) HC_____ (CM) Length_____ (CM)
9. Metrics: Discharge Weight _____(GM)
HC _____ (CM)
9. Inborn or Outborn
10. Gestational Age at birth
11. Did baby have NEC that required surgery?
12. Did Baby have NEC that required medical management?
13. Did baby have sepsis requiring treatment for more than 3 days?
14. Did this baby go home on supplemental oxygen?

Form E: DATA COLLECTION AT DISCHARGE, continued

15. Discharge MONTH and AGE IN DAYS

16. Discharge Destination HOME / OTHER HOSPITAL

17. In previous 48 hours (not on day of discharge)

Infant Feeding Status

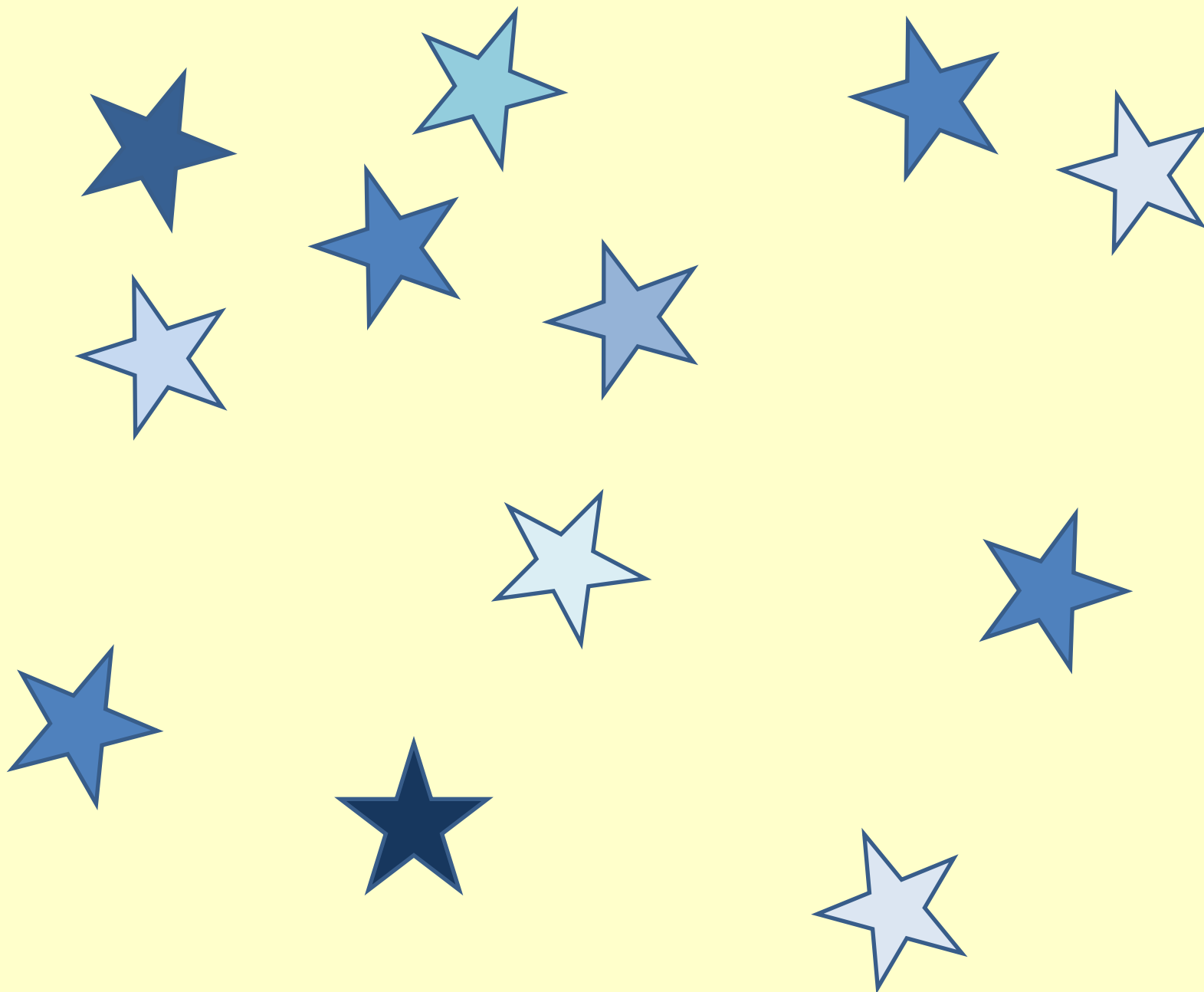
a. 100% Mother's milk without fortification

b. 100% Mother's milk fortified

c. Mother's Milk (either A or B) & Liquid Formula

Mother's milk = <25% 25-75 % >75%

d. Formula only



**Quality
Improvement is not
a spectator sport.**



2011 schedule

13 January Learning Session 1 (LS1) in Winston Salem

Monthly Webinar (2nd Tuesday 2-4 pm)

February

March

April

May Learning Session 2 (last week of April)

Monthly Webinar (2nd Tuesday 2-4 pm)

June

July

August

Data input by 15th of the following month

Final Learning Session and celebration in September



What's Next?



Team development



PQCNC website



Plan for data collection



Anticipate and plan for data entry



Microsystem “Splash of Information”



Baseline data collection



Call-in: 13 October, 10-11am & 28 October, 3-4pm
{919-962-2730 on both days}

Perinatal Quality Collaborative of North Carolina



Action Plan

Mother's Milk for the Very Low Birth Weight Infant

A-1

Assess feeding intention and establish expectations related to premature birth upon admission

Inform all mothers at time of birth of benefits of their milk for their baby including mother's milk as medicine

Use language that distinguishes providing milk from breastfeeding

Encourage early initial visit to facilitate communication

A-2

Support to obtain mother's colostrum and milk

Provide mother with access to appropriate pump (hospital-grade with double pump) and provide necessary supplies

Teach breast massage and relaxation techniques

Teach hand expression and pumping techniques

Provide support from lactation consultant or other breastfeeding expert

Have mothers record daily volume expressed and provide daily review

A-3

Promote regular maternal skin to skin contact

Encourage early maternal visits to include touch

Encourage breast pumping immediately after each skin to skin interaction with mom

Encourage non-nutritive sucking at the breast

Provide appropriate chairs and privacy screens for skin to skin and breastfeeding opportunities

Provide parent literature to promote skin to skin

A-4

Provide age appropriate oral stimulation program

Encourage NNS at the breast or using pacifiers

Consult specialist as needed to include but not be limited to OT, PT, feeding/speech therapist or a developmental specialist

B

Implement feeding guidelines

Provide early small volume feeds using mom's colostrum every chance you get as soon as you get it

Consider using pasteurized donor milk until mom's milk is available

Develop unit specific systematic feeding advancement guidelines including but not limited to volume, fortification, use of additional protein and an algorithm for residuals

C-1

Labeling, storage and administration of breast milk

Consider adopting national guidelines to include but not be limited to containers, labeling protocols, and refrigerator/freezer temperatures

Develop policies for the administration of breast milk to include but not be limited to warming, bolus feedings, and recipes and policies for fortification

C-2

Use of donor milk

Use only screened pasteurized milk

Consider strategies to optimize growth in babies receiving donor milk

Track batch number of milk given to infant

Thank you!



Questions? Comments?
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