ASTHO Breastfeeding Learning Community

Orange: Award States
Blue: Coalition Enhanced Award States
Welcome and Introductions

- ASTHO
  - Sanaa Akbarali, Director, Family and Child Health
  - Richa Ranade, Senior Analyst, Maternal and Child Health
  - Ify Mordi, Director, Maternal and Infant Health Improvement
Call Objectives

• Discuss perinatal quality collaboratives (PQCs) and their role in promoting breastfeeding
• Discuss how state breastfeeding initiatives can partner with PQCs
• Share resources and tools for engaging PQCs in breastfeeding work
• Share updates on IL and OH Innovation Grant projects
Call Agenda

2:00-2:10  Welcome, Introductions and Opening Remarks

2:10-2:45  Improving Care by Partnering with State Perinatal Collaboratives

2:45-2:55  Innovation Grant Project Updates

2:55-3:00  Next Steps and Adjourn
CDC Opening Remarks

- **Carol MacGowan**, Division of Nutrition, Physical Activity, and Obesity
Improving Care by Partnering with State Perinatal Collaboratives

Susan Gutierrez BS, BSN, RN
Clinical Initiative Manager
Perinatal Quality Collaborative of North Carolina
Objectives

- Gain understanding of how a state perinatal collaborative functions to improve care
- Identify benefits of partnering with a state perinatal collaborative to improve breastfeeding rates
- Gain understanding of recent literature highlighting the impact of breastfeeding on maternal and neonatal health and outcomes
- Identify areas of focus in ASTHO participating states to increase breastfeeding rates
History

- The first state perinatal collaborative began in California NICUs in 1997
- Partnered with the State of California Department of Health Services, Maternal and Child Health Branch
- Initial goals:
  - allow for the timely analysis of perinatal care, outcomes, and resource utilization based upon a uniform statewide data base
  - provide mechanisms for bench-marking and continuous quality improvement activities
  - serve as a model for other states
- These goals exist for state PQCIs today
Examples of State PQC projects

- Nosocomial infection in newborns
- Human milk use
- Neonatal abstinence syndrome
- Early term deliveries without a medical indication
- Maternal hemorrhage
- Maternal hypertension
Because being better matters
Stakeholders
Stakeholders
MATERNAL

PQCNC

NEBORN
PQCNC Initiatives to Date 2009-2015

- Reduction of Early Elective Deliveries (<39 Weeks) (2009)
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2016-2018 PQCNC Initiatives

- Conservative Management of Preeclampsia (CMOP)
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- AIM (Alliance for Innovation on Maternal Health)
  - National project sponsored by ACOG (American Congress OB GYN)
  - Leading NC Partnership for Maternal Patient Safety AIM Effort
  - Project will focus on reducing and treating maternal hemorrhage
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  - Anticipate enrollment of all maternity hospitals in NC
- Improving Birth Certificate Accuracy
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- Improving Birth Certificate Accuracy
- Managing neonatal hypoglycemia in newborn nursery and NICU
Maternal or Newborn Initiative

JANUARY - Call for Projects

MARCH - General PQCNC Meeting to hear presentations and dot vote on projects

APRIL - AUGUST - Convene Expert team to determine scope and structure of project

JUNE - AUGUST - Team Recruitment

SEPT/OCT/NOV - Initiative kickoff

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Maternal or Newborn Initiative
## Action Plan for Well Baby Breastfeeding

<table>
<thead>
<tr>
<th>A. Support breastfeeding from admission through the first hours of life</th>
<th>Actions:</th>
</tr>
</thead>
</table>
| 1. Support optimal feeding intentions and establish maternal expectations for maternity care upon admission | a. Engage all mothers in discussion with support and information to promote the exclusive use of mother’s milk for newborns  
   b. Inform mothers about the presence of skilled support for breastfeeding available to them  
   c. Consider the potential impact on successful breastfeeding when making labor intervention decisions |
| 2. Initiate skin-to-skin contact of mother and baby immediately after birth | a. Place baby on mother’s upper abdomen and/or chest prior to cord clamping. Place a warm blanket over baby, and place infant hat if available  
   b. Facilitate uninterrupted skin-to-skin contact for AT LEAST the first hour of life; preferably until after the first feeding is complete  
   c. Administer Vitamin K and eye prophylaxis while baby and mother are skin-to-skin |
## Action Plan for NICU Breastfeeding

<table>
<thead>
<tr>
<th>A. Promote and use mother’s milk as the preferred nutritional substrate for infants</th>
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</table>
| 1. Assess feeding intention and establish expectations related to premature birth upon admission | a. Inform all mothers at time of birth of benefits of their milk for their baby including mother’s milk “as medicine”  
    b. Use language that distinguishes providing milk from breastfeeding  
    c. Encourage early initial visit to facilitate communication and assistance to obtain colostrum and milk |
| 2. Provide early and continuous support to obtain mother’s colostrum and milk | a. Provide mother with access to appropriate pump (hospital-grade with double pumping kit) and provide necessary supplies  
    b. Teach breast massage and relaxation techniques  
    c. Teach hand expression & pumping techniques using mechanical pump  
    d. Provide support from lactation consultant or other breastfeeding expert  
    e. Provide daily review of mothers records of pumping and volume expressed |
| 3. Promote regular maternal skin to skin contact | a. Provide staff & parent education to promote skin to skin |
| b. Encourage early maternal visits to include touch and skin to skin as soon as possible  
    c. Encourage breast pumping immediately after each skin to skin interaction with mom  
    d. Encourage non-nutritive sucking at the breast  
    e. Provide appropriate chairs and privacy screens for skin to skin and breastfeeding opportunities |
| 4. Provide age appropriate oral stimulation program | a. Encourage non-nutritive sucking at the breast or use pacifiers  
    b. Consult specialist as needed to include but not be limited to OT, PT, feeding/speech therapist or developmental specialist |
PQCNC Breastfeeding Initiative
Supporting Interventions

- Skin to Skin Delivery Room
- Separation
- Breastfeeding Support
- Hand Expression
- Skin to Skin in Mother Baby

Increase the overall rate of exclusive breastfeeding
Well Baby Exclusive Breastfeeding Outcomes

- Increased breastfeeding support by 78%
- Increased skin to skin by 33%
- Reduced pacifier use by 53%

20% increase in exclusive breastfeeding
NICU Exclusive Breastfeeding Outcomes

- increased breastfeeding support by 425%
- skin to skin days increased by 450%

34% increase in VLBW infants exclusively fed breastmilk
Welcome to the Perinatal Quality Collaborative of North Carolina; a community of organizations, agencies, and individuals committed to making North Carolina the best place to give birth and be born.
Human Milk Initiative(s) Resources

Bibliographies, references, resources, and tools to help you in your work...

Use these links to skip to the relevant section of the extranet -

- Bibliographies
- Webinar Presentations
- Feeding Guidelines
- Other Resources
- Donor Milk
- Shared Resources from Teams

**Human Milk Webinar Presentations:**

February 2013 HM NCCC Webinar: "Breastfeeding Support & Insurance Coverage for Electric Pumps"

February HM Well Webinar: "Skin to Skin and the Warm Chain" by Emily Taylor, MPH

March HM Well Webinar: "Breastfeeding frequency and latch" by Miriam Labbok, MD

March HM NCCC Webinar: “Creating Feeding Guidelines Part 1” by Laurie Dunn, MD

April HM NCCC Webinar: "Creating Feeding Guidelines Part 2" by Laurie Dunn, MD
Human Milk Feeding Guidelines:

1. Guidelines for Enteral Nutrition provided by Forsyth NCCC
2. Feeding Guidelines for less than 750 gms. provided by WakeMed NCCC
3. Feeding Guidelines for 751-1000 gms. provided by WakeMed NCCC
4. Feeding Guidelines for 1001-1250 gms. provided by WakeMed NCCC
5. Trophic Feeding guidelines provided by Mission NCCC
6. Feeding guidelines provided by Mission NCCC
7. Feeding Guidelines provided by Presbyterian NCCC
8. Feeding Orders provided by Presbyterian NCCC
9. Feeding Guidelines for Infants < 1000 grams provided by Duke NCCC
10. Feeding Guidelines for Infants 1001-1250 grams provided by Duke NCCC
11. Feeding Guidelines for Infants 1251-1500 provided by Duke NCCC
12. Feeding Order Set provided by Levine NCCC
13. Feeding Guidelines provided by Levine NCCC
14. Feeding Protocols for Catawba Valley Medical Center

- <800 grams birthweight
- 801-1000 g birthweight
- 1001-1250 g birthweight
- 1251-1500 g birthweight
- 1501-1800 g birthweight
Donor Milk

2. Donor breast milk versus infant formula for preterm infants: systematic review and meta-analysis
3. Donor human milk in preterm infant feeding: evidence and recommendations
4. Formula milk versus donor breast milk for feeding preterm or low birth weight infants (Review)

Shared Resources from Teams

1. Levine HM NCCC data collection sheet
2. Levine staff notice about Human Milk Folder
3. Levine parent pumping letter
4. Poster describing unit initiative for Exclusive Breast Milk for VLBW Infant from Mission Hospital
5. Mom’s Milk Resource Packet from Betty H. Cameron Women’s and Children’s Hospital
6. Badge card for staff to prompt pumping support from Jeff Gordon's Children's Hospital
7. Handout “Progression of feedings at Breast” from Jeff Gordon's Children's Hospital
8. Handout “Transition Bottle to Breast” from Jeff Gordon's Children's Hospital
9. Screen savers to promote breast milk from Duke ICN
10. Parent Handouts “Banked Human Milk” and “Human Milk for Oral Care” from Mission Hospital
11. Parent Brochure to promote Kangaroo Care from Mission Hospital
12. Unit Newsletter about the Human Milk Initiative from Mission Hospital
Maternal Mortality Ratio per 100,000 Live Births, 2005-2014

Breastfeeding and Maternal Mortality

We found that suboptimal breastfeeding in the United States is currently associated with an excess of 3,340 premature maternal and child deaths due to seven different diseases. We found a substantially larger impact of breastfeeding on women's health, compared with infant health, as the majority of excess deaths and direct health costs from suboptimal breastfeeding are related to women's health outcomes. Breastfeeding has historically been viewed as a children's health issue; however, our results suggest that breastfeeding support must be seen as fundamental to all preventive health strategies for women.

Bartick et al. Maternal and Child Nutrition, September 2017
Enabling **optimal breastfeeding** would prevent **2619 maternal deaths** & **721 child deaths** annually in the U.S.

Breastfeeding is a women’s health issue

<table>
<thead>
<tr>
<th>Disease</th>
<th>Cases Prevented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast cancer</td>
<td>5,023</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>12,320</td>
</tr>
<tr>
<td>Hypertension</td>
<td>35,982</td>
</tr>
<tr>
<td>Heart attacks</td>
<td>8,487</td>
</tr>
</tbody>
</table>

... and a children’s health issue

<table>
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<tr>
<td>Leukemia</td>
<td>721</td>
</tr>
<tr>
<td>Ear infections</td>
<td>185</td>
</tr>
<tr>
<td>Crohn’s disease &amp; Ulcerative colitis</td>
<td>601,825</td>
</tr>
<tr>
<td>GI infections</td>
<td>271</td>
</tr>
<tr>
<td>Severe lower respiratory infections</td>
<td>2,558,629</td>
</tr>
<tr>
<td>Childhood obesity</td>
<td>20,900</td>
</tr>
<tr>
<td>Necrotizing Enterocolitis</td>
<td>45,298</td>
</tr>
<tr>
<td></td>
<td>1355</td>
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About the study: We modeled maternal and child health outcomes given current, suboptimal breastfeeding rates, and we compared those outcomes with optimal breastfeeding, defined as 90% of women exclusively breastfeeding each child for six months and continuing to breastfeed for 12 months. Current, suboptimal breastfeeding incurs $3 billion per year in medical costs and $1.2 billion in non-medical costs. The research was funded by the W.K. Kellogg Foundation.

Learn more: Bartick et al 2016  bit.ly/BartickMCN
Breastfeeding and Infant Mortality

Our review provides new insight on the increased risk of neonatal mortality associated with delayed breastfeeding initiation (defined in this review as initiation after the first hour after birth). We demonstrated a clear dose-response relationship; the risk of neonatal mortality increased with increased delay in breastfeeding initiation. Infants who initiated breastfeeding between 2-23 hours after birth had a 33% greater risk of neonatal mortality compared to infants who initiated breastfeeding within an hour of birth. Neonatal mortality risk was more than 100% greater in infants who initiated breastfeeding more than 24 hours after birth.

Smith E, et al. PLOS One. 2017
Compare **TOTAL SCORES** from 2007 through 2015:

- 2007 survey: 61
- 2009 survey: 62
- 2011 survey: 67
- 2013 survey: 75
- 2015 survey: 78

**North Carolina**

CDC National Survey: Maternity Practices in Infant Nutrition & Care

2015 REPORT
<table>
<thead>
<tr>
<th>State</th>
<th>Overall Score</th>
<th>Area of Opportunity</th>
<th>Score</th>
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<tbody>
<tr>
<td>Alabama</td>
<td>72</td>
<td>Hospital D/C care</td>
<td>52</td>
</tr>
<tr>
<td>Alaska</td>
<td>82</td>
<td>Staff training</td>
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<tr>
<td>Delaware</td>
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<td>Staff training</td>
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<td>Washington DC</td>
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<td>L&amp;D care</td>
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<td>Ohio</td>
<td>80</td>
<td>Staff training</td>
<td>69</td>
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<tr>
<td>South Dakota</td>
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<td>Staff training</td>
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<td>Texas</td>
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<td>Vermont</td>
<td>88</td>
<td>Staff training</td>
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</tr>
<tr>
<td>West Virginia</td>
<td>73</td>
<td>Staff training</td>
<td>46</td>
</tr>
</tbody>
</table>
Staff Training

- New staff receive appropriate breastfeeding education
- Current staff receive appropriate breastfeeding education
- Staff received breastfeeding education in the past year
- Competency assessment in breastfeeding and support is at least annual

Which state does each of the elements of staff training well?

What do they do? What education do they provide and how?

What elements of that training are transferable to other institutions?
References


Illinois

Kelly Vrable, MPH
Illinois Department of Public Health - Office of Women's Health and Family Services
Ohio

Ryan C. Everett
Director, Population Health
Ohio Hospital Association
Next Steps and Adjourn

• Please fill out the evaluation for today’s session here:
  https://astho.az1.qualtrics.com/jfe/form/SV_bISIEzIQExWCPvVz

• The next Virtual Learning Sessions are scheduled for:
  • Tuesday, April 10, 2018
  • Thursday, May 24, 2018

Thank You!