



Transforming Perinatal Healthcare through Quality Improvement: What it Takes to Carry Out Successful QI

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I Have No Disclosures.



**Making North Carolina the Best
Place to Give Birth and to Be Born**

Accomplishing the Mission

- Conduct time-limited, hospital based statewide perinatal quality improvement projects
 - Best evidence, reduce variation
 - Partnership with patients and families
 - Resource optimization

At the PQCNC Table

- Patients and Family Members
- Perinatal providers (62 Hospitals)
 - Nurses (Peds, NICU, & OB)
 - Practitioners
 - Midwives
 - Doctors (OB, MFM, Neos, Peds, FP)
 - Hospital Administrators
- Payers (Medicaid, BCBSNC)
- State Legislators
- DPH
- State Hospital Association
- Community Care North Carolina

WHAT IS YOUR
MISSION?

Developing an Initiative

- What is the problem?
 - Who defines the problem needing action?
 - Creating a coalition of the willing
 - Cubby Hole Coaches and Quarterbacks
- The Aim Statement
 - What is the aim?
 - Short and to the point
- How will we know we have achieved the aim?
 - Measureable definition of success

On the Road



Stakeholders



Non-Denominational



JUST DO IT

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CONSISTENCY

IT'S ONLY A VIRTUE IF YOU'RE NOT A SCREWUP.



Culture

The Critical QI Measure?

- Your facility compared against other facilities
 - Risk adjusted model that accounts for case mix
 - Bayesian analysis that eliminates risk of chance creating observed results

Or

- Your facility over time

Data



Data



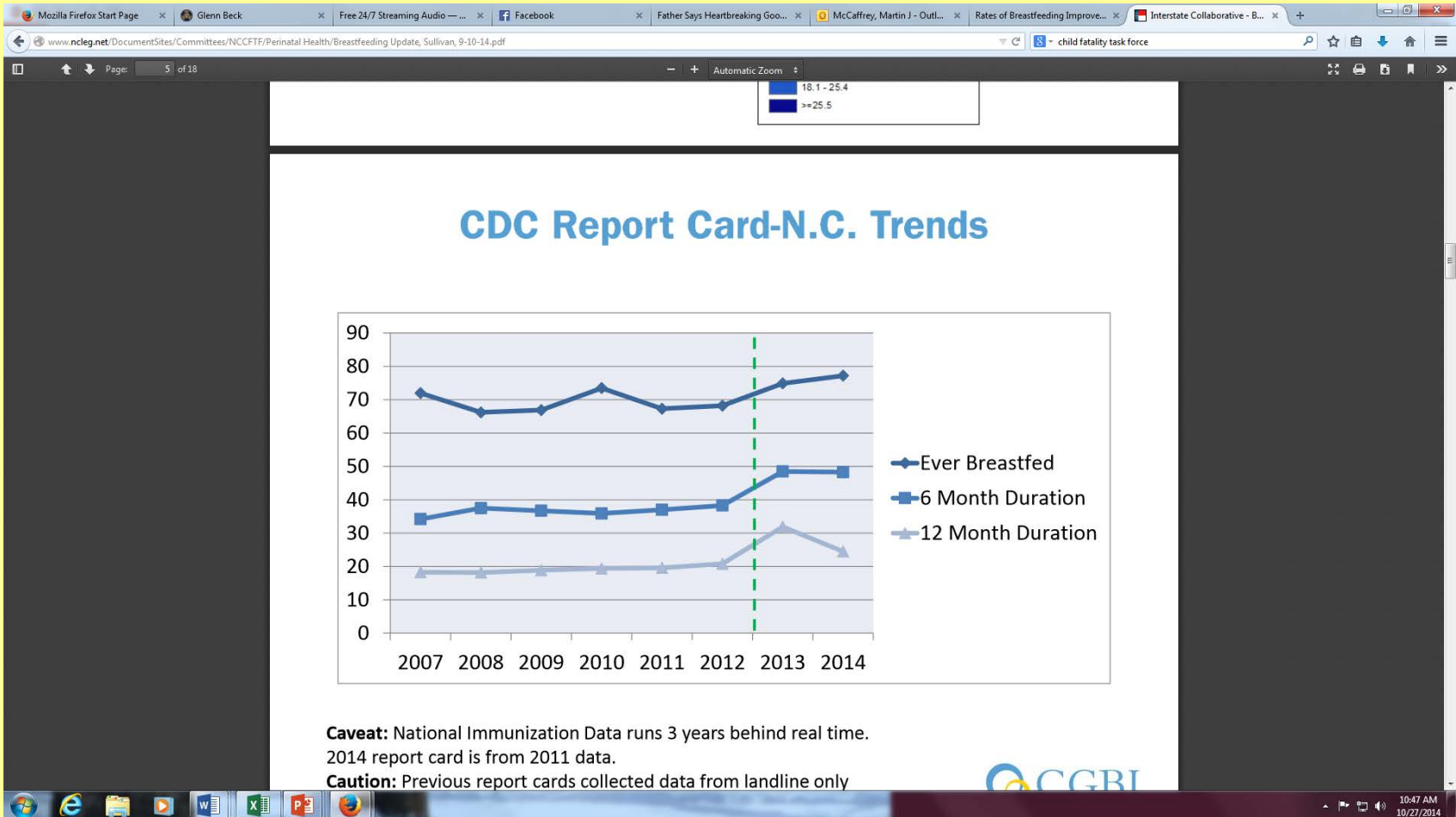
Structuring An Initiative

- Select Initiative
- Expert Panel
 - DPH, CGBI (4 individuals) to larger group of 15
 - Create Action Plan
 - Identify Metrics
- Develop Data Systems
- Invitations to Hospitals

Structuring An Initiative

- Hospitals Create Perinatal Quality Improvement Teams
(Nurse/Doc/Exec/Patient)
- Communication and Formal Collaboration
 - Three Face to Face Learning Sessions
 - Weekly email newsletter
 - Monthly webinars

Breastfeeding in NC



	community, with special attention to underserved groups
A. Support breastfeeding from admission through the first hours of life	Actions:
1. Support optimal feeding intentions and establish maternal expectations for maternity care upon admission	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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
3. Assist baby who indicates readiness to breastfeed in first 60-90 minutes	<ul style="list-style-type: none"> a. Assess infant readiness b. Point out infant feeding cues, educating mother of her infants' inborn competence c. Offer encouragement for feeding according to infant feeding cues, and give support as needed. Support should be mostly hands-off at this time

Innovations

- Skin to skin in DR
- The power of hand expression
- Skin to skin in postpartum
- Increasing Lactation Support
 - Staff education
 - Lactation specialists
- Removing formula
- Reducing separation of mom-baby
- Reducing pacifier use

Data Sheet Phase I

Place infant sticker here
When baby is transferred to
Nursery or Mother – Baby unit

Start and collect information for first patient
admitted for term birth to L&D each shift

Part 1- These questions completed in Labor & Delivery:

1. Estimated gestational age: weeks _____
2. Check one: Singleton Multiple
3. Check one: Vaginal Birth Birth through an abdominal incision
4. Is there documentation that mother was informed between admission and time of this birth about presence of skilled support for breastfeeding?: check one: Yes No
5. Is there documentation that the mother and infant were skin-to-skin (i.e., infant placed unclothed directly on mom's chest/abdomen) immediately after birth or as soon as the mother was responsive? Circle one: Yes No
If no, check best rationale:
 Baby is clinically unstable
 Mother is clinically unstable
 Mother declines, we did not explore/encourage
 Mother declines after encouragement
6. If yes, for approximately how long were the mother and baby uninterrupted after initial placement skin-to-skin in L&D? Circle one: <30 min. 30-60 min. >60 min.
7. Infant's birth Weight in grams _____
8. What is Infant's gender? Female Male
9. Date _____ and Time _____ of birth

Part 2- These measures are completed by mother/baby or nursery staff for each shift after the birth beginning with the shift on which the baby was born (therefore shift 1 will always be a partial shift):

Shift 1- circle one: Day:8 hr Evening:8 hr Night:8 hr Day:12 hr Night:12 hr

1. Documented breastfeeding support this shift: No Yes or 100% Formula fed
If yes mark all that apply: Comfort Position Latch
 Effective milk transfer Other
2. Number of times mom and baby are skin-to-skin for a minimum of one hour during this shift:
 0 1 2 or more
3. Hours mom and baby separated (mom and baby not in same room) during this shift:
 0 1-59 minutes 60-120 minutes more than 2 hours
4. Did you provide a pacifier for this baby on this shift? Yes No

If baby was 100% formula fed this shift skip questions #5, #6, and #7 and resume data collection on the next shift.

5. Was supplement documented (anything fed to the baby instead of or in addition to nursing at the breast) during this shift? mark all that apply: No- None documented Yes, mother's expressed milk Yes, donor milk Yes, formula Yes, glucose water Yes, water
6. Answer this question only if supplement given: clinical indications for supplement /mark all that apply:
 None documented Asymptomatic hypoglycemia documented by laboratory blood glucose measurement Hyperbilirubinemia Infant weight loss of 8-10% Other
 Maternal indications (including but not limited to maternal illness resulting in separation of infant and mother, maternal medications contraindicated in breastfeeding, maternal HIV)
7. Did baby feed with a bottle on this shift? Yes No

Shift 2- circle one: Day:8 hr Evening:8 hr Night:8 hr Day:12 hr Night:12 hr

1. Documented breastfeeding support this shift: No Yes or 100% Formula fed
If yes mark all that apply: Comfort Position Latch
 Effective milk transfer Other
2. Number of times mom and baby are skin-to-skin for a minimum of one hour during this shift:
 0 1 2 or more
3. Hours mom and baby separated (mom and baby not in same room) during this shift:
 0 1-59 minutes 60-120 minutes more than 2 hours
4. Did you provide a pacifier for this baby on this shift? Yes No

If baby was 100% formula fed this shift skip questions #5, #6, and #7 and resume data collection on the next shift.

5. Documented supplement (anything fed to the baby instead of or in addition to nursing at the breast) during this shift? mark all that apply: No- None documented Yes, mother's expressed milk Yes, donor milk Yes, formula Yes, glucose water Yes, water
6. Answer this question only if supplement given: clinical indications for supplement /mark all that apply:
 None documented Asymptomatic hypoglycemia documented by laboratory blood glucose measurement Hyperbilirubinemia Infant weight loss of 8-10% Other
 Maternal indications (including but not limited to maternal illness resulting in separation of infant and mother, maternal medications contraindicated in breastfeeding, maternal HIV)
7. Did baby feed with a bottle on this shift? Yes No

Shift 3- circle one: Day:8 hr Evening:8 hr Night:8 hr Day:12 hr Night:12 hr

1. Documented breastfeeding support this shift: No Yes or 100% Formula fed
If yes mark all that apply: Comfort Position Latch
 Effective milk transfer Other
2. Number of times mom and baby are skin-to-skin for a minimum of one hour during this shift:
 0 1 2 or more
3. Hours mom and baby separated (mom and baby not in same room) during this shift:
 0 1-59 minutes 60-120 minutes more than 2 hours
4. Did you provide a pacifier for this baby on this shift? Yes No

If baby was 100% formula fed this shift skip questions #5, #6, and #7 and resume data collection on the next shift.

5. Documented supplement (anything fed to the baby instead of or in addition to nursing at the breast) during this shift? mark all that apply: No- None documented Yes, mother's expressed milk Yes, donor milk Yes, formula Yes, glucose water Yes, water
6. Answer this question only if supplement given: clinical indications for supplement /mark all that apply:
 None documented Asymptomatic hypoglycemia documented by laboratory blood glucose measurement Hyperbilirubinemia Infant weight loss of 8-10% Other
 Maternal indications (including but not limited to maternal illness resulting in separation of infant and mother, maternal medications contraindicated in breastfeeding, maternal HIV)
7. Did baby feed with a bottle on this shift? Yes No

Data Sheet Phase II/III



PQCNC Exclusive Human Milk Mother Baby Record

FINAL

Mother's intention to feed (circle): Breastfeeding/Human Milk Formula Combo
 Birth weight (grams): _____ Gestational age at birth: _____
 Admission date & time: _____ Discharge date & time: _____
 Type of Delivery (circle): Vaginal CS
 Mother's Ethnicity (circle all that apply): African-American Asian Caucasian Spanish/Hispanic/Latina
 Payor (circle): Medicaid Blue Cross Blue Shield/State Health Plan Other
 Infant skin to skin after delivery? (circle): Yes No

Date														
Shift	7a-7p	7p-7a	7a-7p	7p-7a	7a-7p	7p-7a	7a-7p	7p-7a	7a-7p	7p-7a	7a-7p	7p-7a	7a-7p	7p-7a
On my shift infant received: <i>(mark all that apply)</i>														
• Breastfeeding														
• Human milk														
• Formula														
• Other														
Were any of four breastfeeding support elements offered? <i>(X' all that apply)</i>														
• Comfort														
• Latch														
• Positioning														
• Transfer of Milk														
Was the infant separated from mom for more than 1 hour? <i>(Y/N)</i>														
Was the infant skin to skin with mom? <i>(Y/N)</i>														
Did mom demonstrate hand expression? <i>(Y/N)</i>														
Did the infant use a pacifier during this shift? <i>(Mark with 'X' below)</i>														
• No														
• Yes – painful procedure														
• Yes – mother's preference														

Patient Label:

Comments:

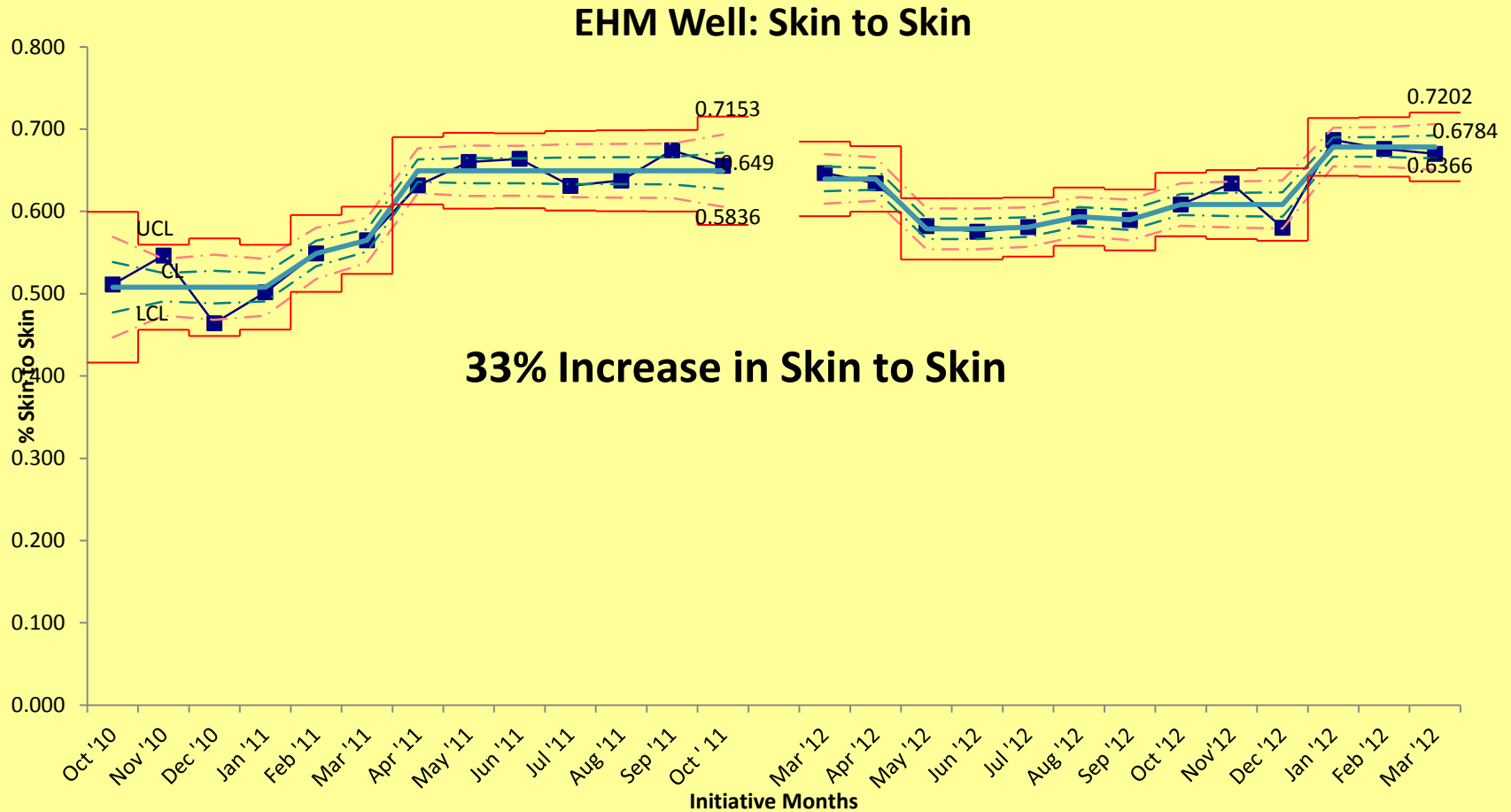
Recruitment

- Letters to hospital executive and clinical leaders
- Site visits to 6 centers to discuss project
- Request to dedicate a team that included physician/nurse/executive leader and consideration of family member
- Recruited

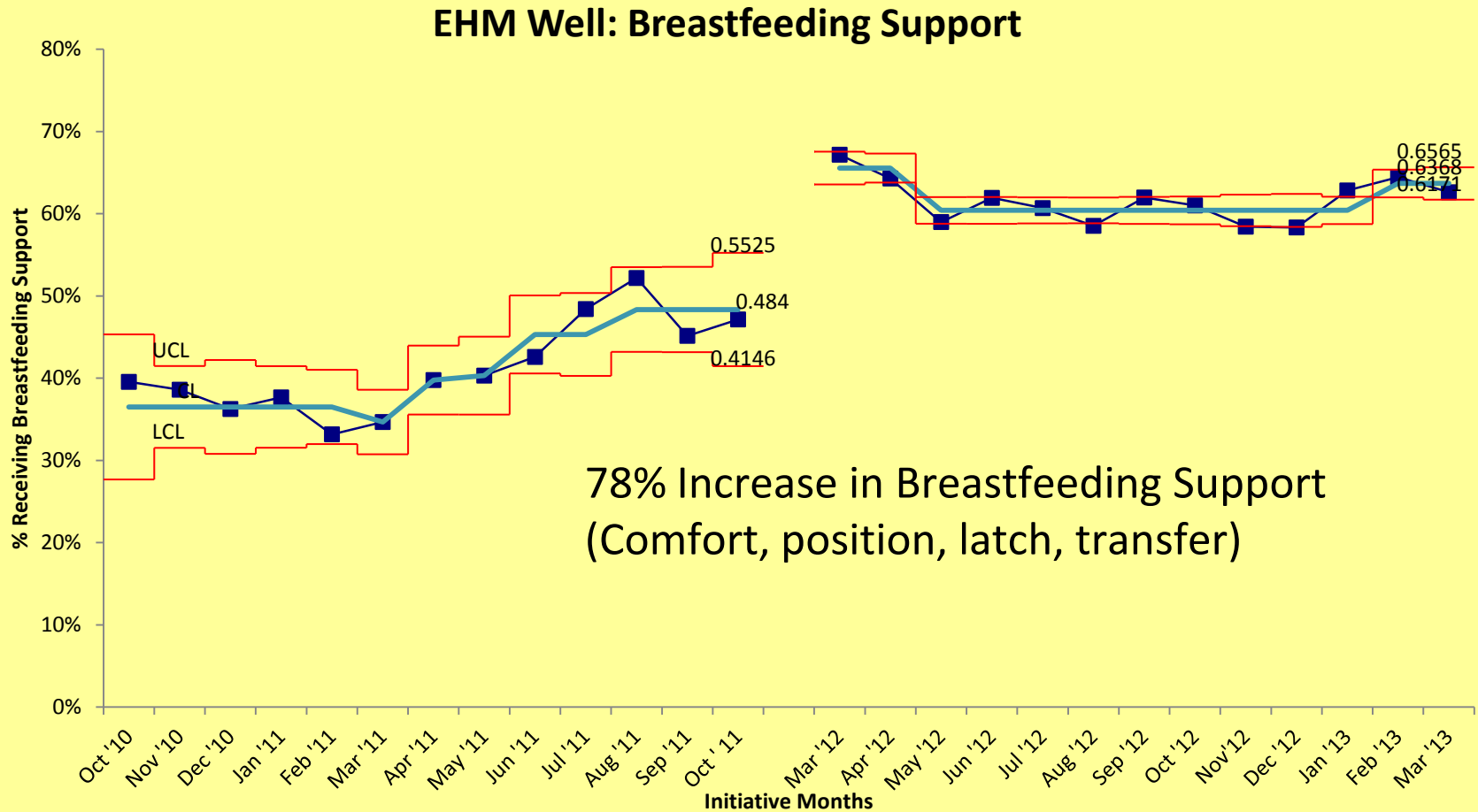
Exclusive Human Milk for Well Babies (EMH Well) Initiative

- October 2010 – March 2013
- Aim: Increase exclusive breastfeeding rates by 50%
- 20 hospitals participated 2010-2013

EHM Well: Skin to Skin in L&D

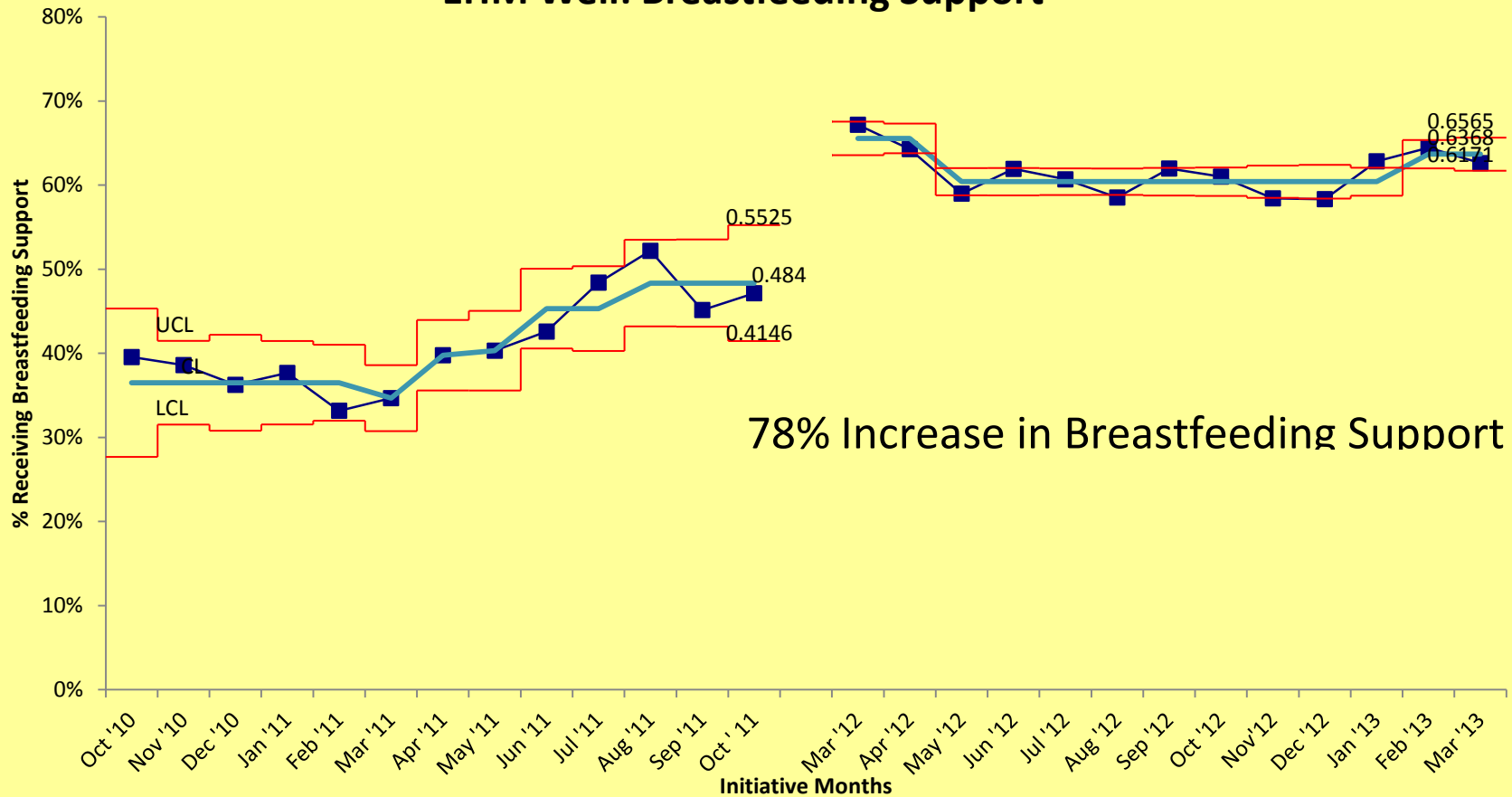


EHM Well: Breastfeeding Support



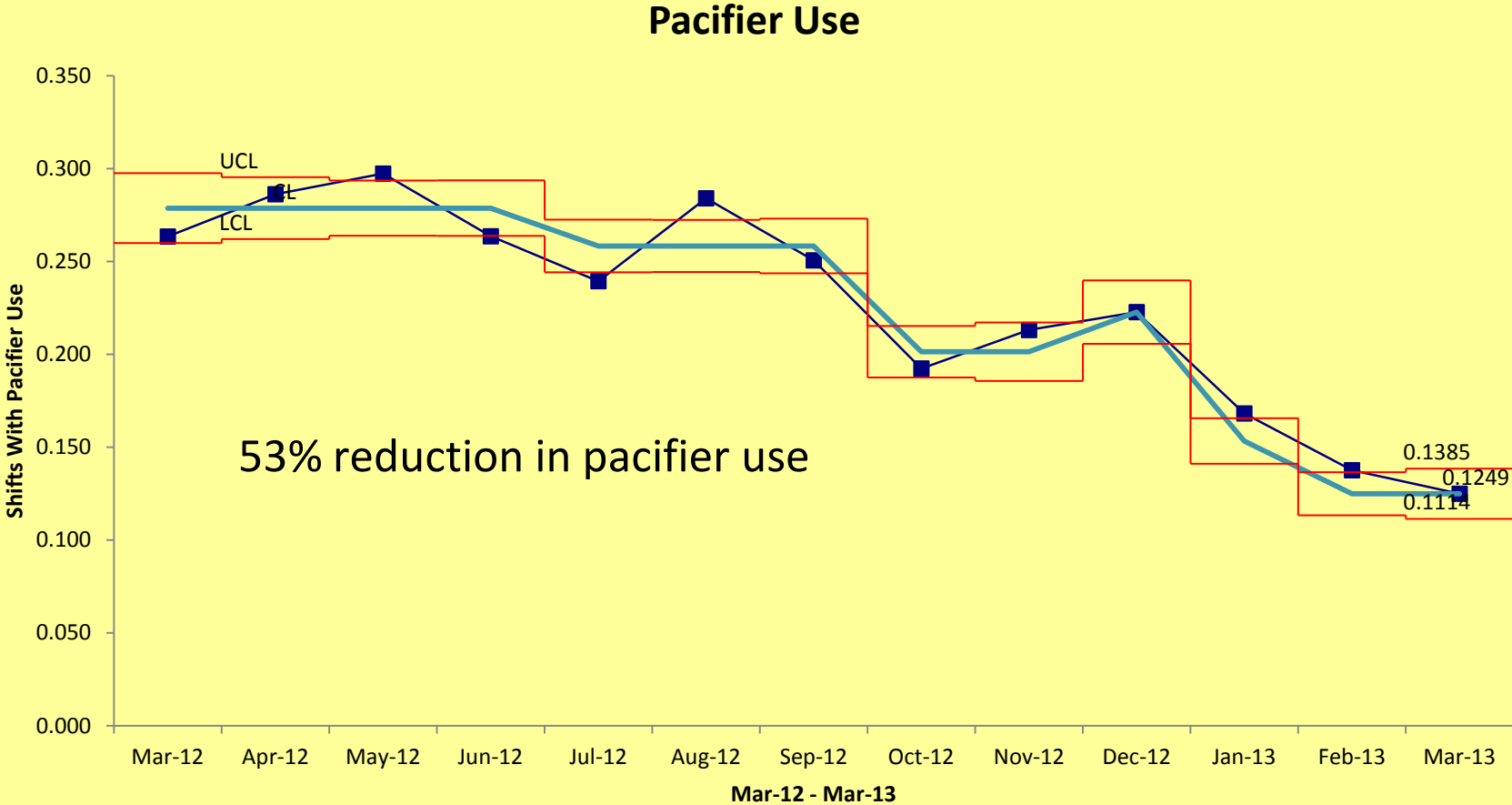
EHM Well: Breastfeeding Support

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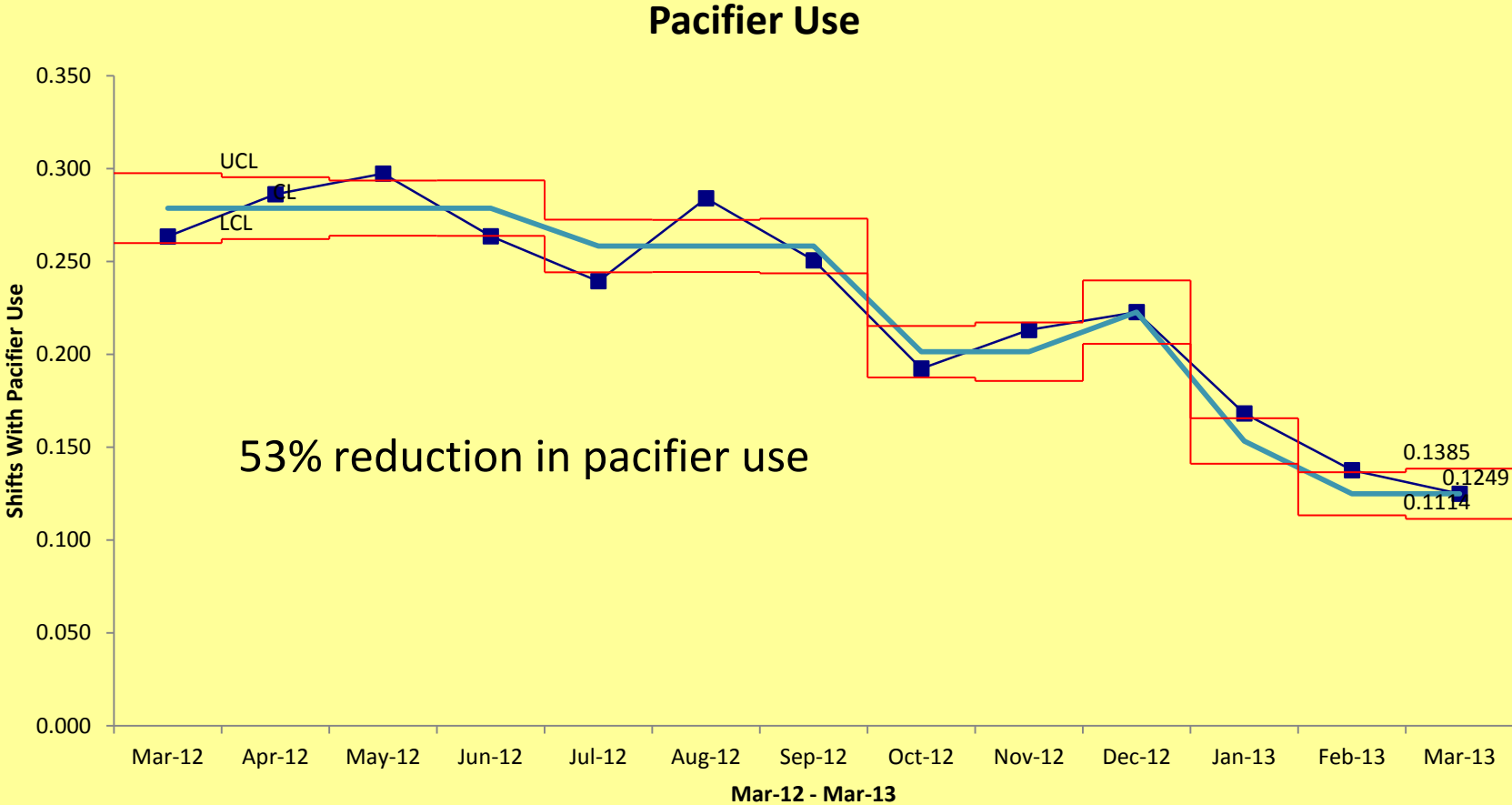


78% Increase in Breastfeeding Support

EHM Well: Pacifier Use



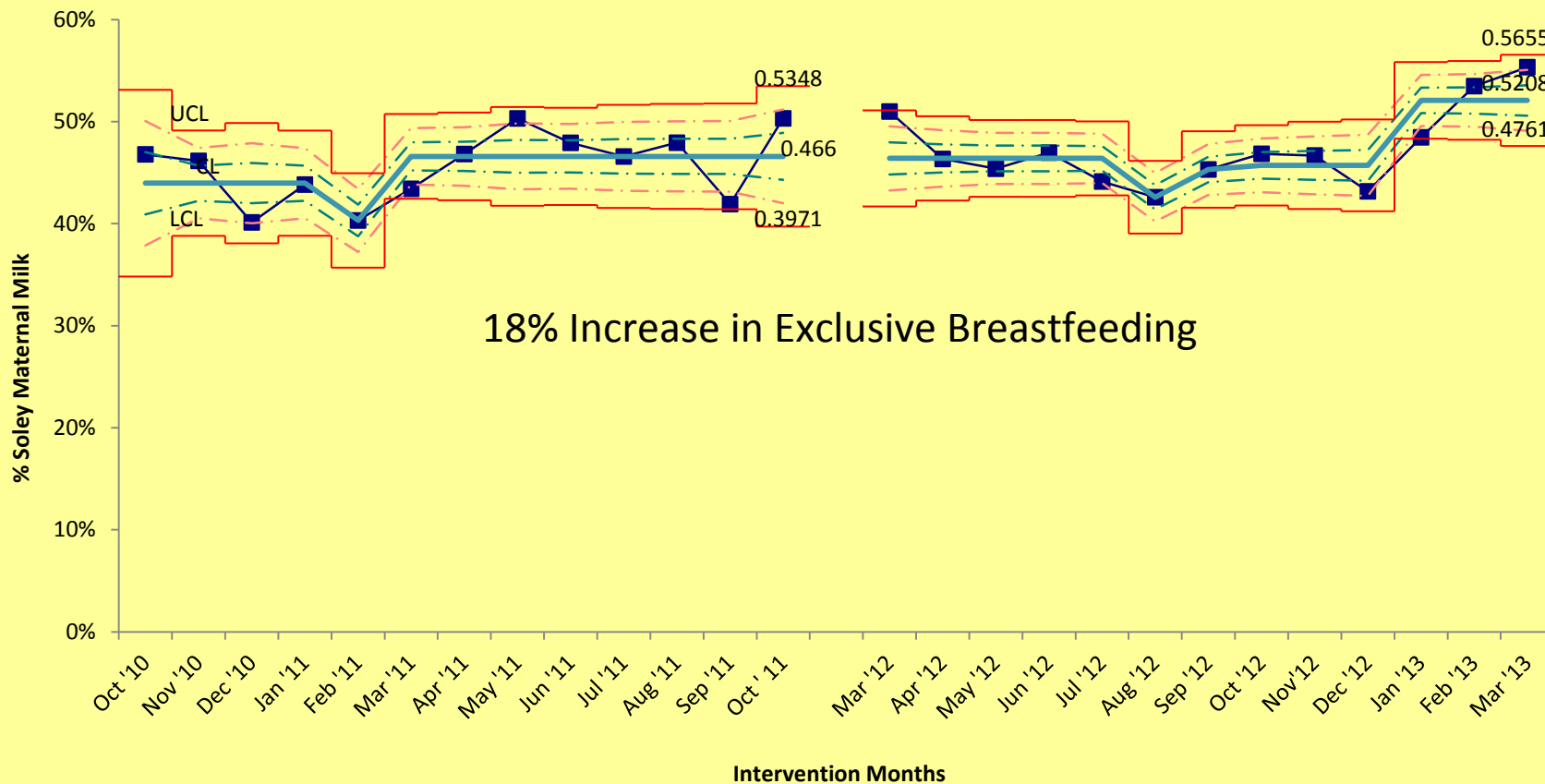
EHM Well: Pacifier Use



EHM Well: Exclusive Maternal Milk

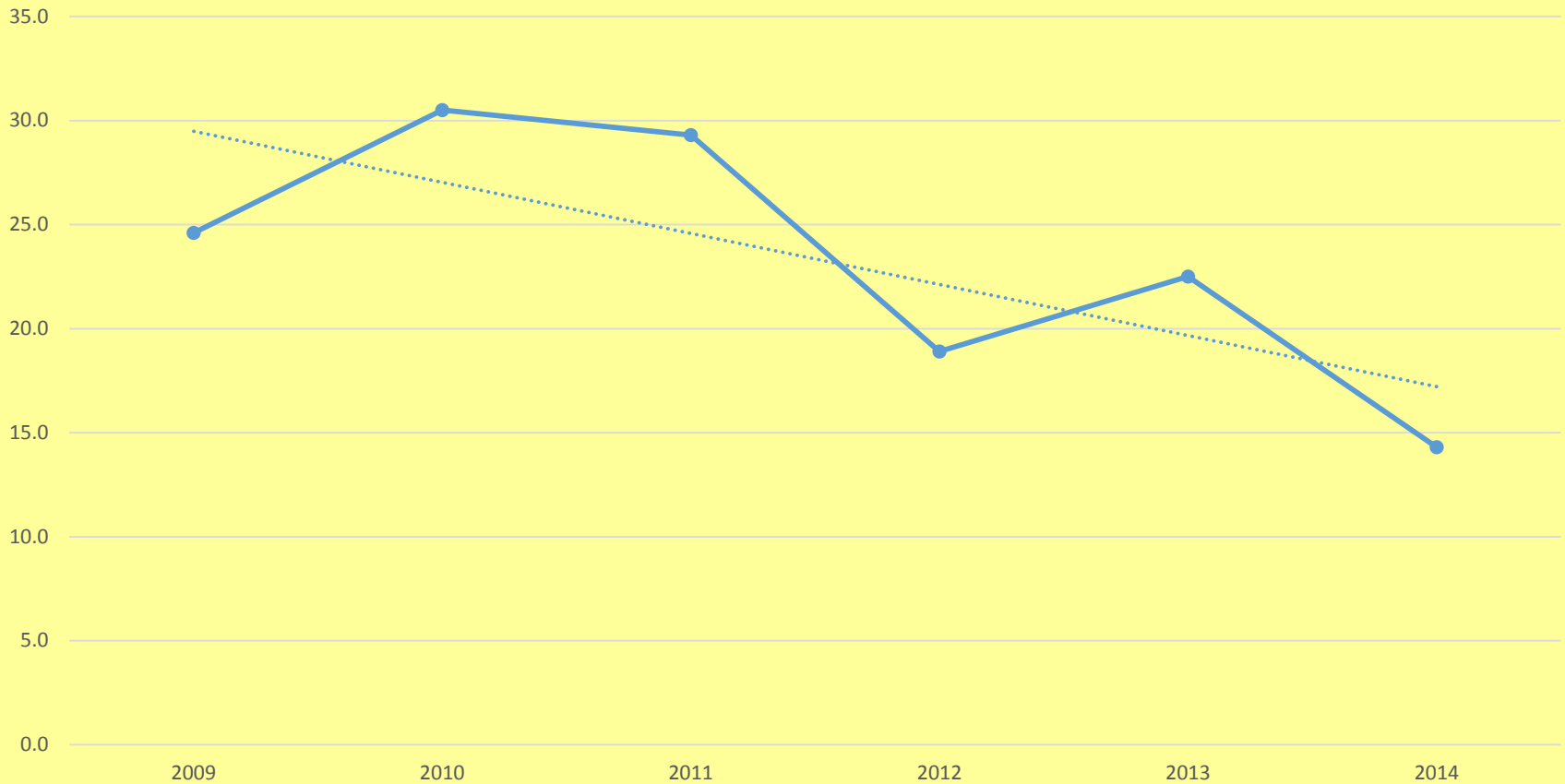
All

EHM Well: Exclusive Breastfeeding



Breastfed Infants Receiving Formula Before Two Days

% Breastfed Infants in NC Receiving Formula Before 2 Days



Teamwork



“Alone we can do so little, together we can do so much.”

Helen Keller