BRINGING BABY-FRIENDLY ™ TO NJ: BREASTFEEDING OUTCOMES FOR A STATEWIDE IMPLEMENTATION APPROACH

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Presenter Disclosures

Lori Feldman-Winter, MD, MPH

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- This presentation will not include discussion of pharmaceuticals or devices that have not been approved by the FDA.

Learning Objective

- Identify the association between widespread implementation of the Ten Steps and infant feeding outcomes
  – In association with a statewide coalition

Background

- **0** Baby-Friendly designated hospitals in 2010
- One of the highest rates of supplementation (CDC report card)-38% in 2008
- CDC CPPW-STI funding permitted organization of a statewide coalition
- The first NJ Baby-Friendly Summit convened to raise awareness of mini-grants for a project to help them become designated

Background

- NJ DOH & AAPNJ established project aims: Baby-Friendly designation in at least 2 out of 10 of the selected hospitals
- Coordinated with NJ State Coalition for steps 3 and 10
- Core team developed plan for recruitment and project design
  - First Statewide Summit
  - First learning session
  - One long action period with monthly TA calls
  - Web sharing
  - Site visits

Methods

- Examined all 10 NJ hospitals participating in an intensive, state-supported program to help hospitals attain Baby-Friendly designation
- Rates of any and exclusive breastfeeding using the NJ Electronic Birth Certificate data before (2010) vs. after (2012) project implementation
- Examined healthy and NICU populations
- Hospitals varied in the number and choice of Steps on which they focused
- Assessed the relationship with breastfeeding rates and the number of Steps mastered.

Methods
Steps Mastered & EBC

- Steps mastered assessed by team lead self – appraisal using a survey modified from the Baby-Friendly USA Self-Appraisal tool and in-depth interviews post-intervention
- Pre – (first quarter 2010) vs. post – (first quarter 2012) overall and exclusive breastfeeding using NJ Electronic Birth Certificate (NJ EBC) data
- NJ EBC defines feeding patterns for the 24 hours before hospital discharge for all newborns in NJ

Results
Ten NJ Hospitals

	Hospital									
	A	B	C	D	E	F	G	H	I	J
Number of births discharged home (2010)	1,629	1,514	748	4,132	963	1,755	1,795	2,043	1,386	1,693
Region	Central	Central	North	North	South	South	Central	South	Central	South
Perinatal risk score*	4	1	0	2	4	4	2	3	2	3
Race/ethnicity										
White (non-Hispanic)	34%	71%	79%	53%	21%	29%	41%	31%	70%	37%
Hispanic	28%	18%	11%	14%	44%	31%	32%	45%	12%	31%
Black	33%	4%	2%	24%	28%	32%	13%	23%	17%	21%
Asian/PI/Other	6%	7%	7%	9%	7%	9%	15%	2%	2%	10%

* Perinatal risk score is an index composed of fetal and neonatal deaths, low birthweight, infant mortality, late prenatal care, and teen birth ratio. It was used in the grant review process to identify hospitals serving at-risk populations. Scores range from 0 to 5 and the higher the score, the higher the index value and the more at-risk the population. For additional explanation, please see: http://www.nj.gov/health/fhs/professional/documents/pra_report.pdf

Results

- All 10 hospitals had adopted a global infant feeding policy
- All 10 gave up the practice of giving out formula company discharge packs
- 3 Hospitals received Baby-Friendly designation
- ~ Capital Health
  - ~ Jersey Shore University Medical Center
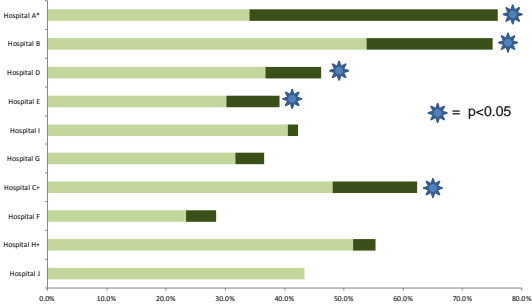 - ~ Centra State

The Baby-friendly Hospital Initiative

Results
Breastfeeding rates before vs. after intervention

	Healthy term infants				NICU infants			
	2010 Q1 (n=4254)	2012 Q1 (n=4169)	% change	P	2010 Q1 (n=1040)	2012 Q1 (n=830)	% change	P
Overall Breastfeeding No (%)	3020 (71.0)	3117 (76.2)	5.4	<0.0001	609 (58.6)	559 (67.3)	8.5	<0.0001
Exclusive Breastfeeding No (%)	1642 (38.6)	2076 (49.4)	10.8	<0.0001	196 (18.8)	182 (22.7)	3.9	0.02

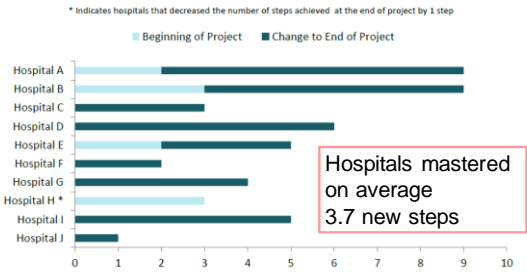Feldman-Winter L., et al. Bringing Baby=Friendly to NJ. In draft. 2013.

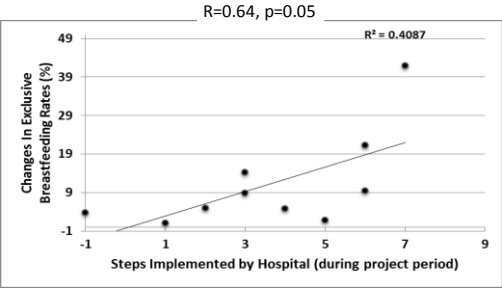# Exclusive Breastfeeding Rates by Steps Achieved, Non-NICU

✳ = p<0.05

Exclusive breastfeeding rates among NICU discharges
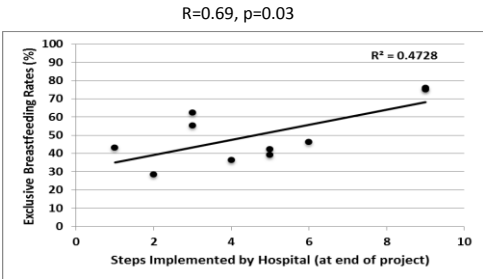## pre and post intervention by hospital

+ indicates level 2 NICU

Number of Steps Mastered During Project Period
ordered by change in % breastfeeding

* Indicates hospitals that decreased the number of steps achieved at the end of project by 1 step

Beginning of Project ■ **Change to End of Project**

Hospitals mastered on average 3.7 new steps

Association between Steps mastered during intervention period and change in exclusive breastfeeding among healthy term newborns, by hospital

R=0.64, p=0.05

$R^2 = 0.4087$

Changes In Exclusive Breastfeeding Rates (%)

Steps Implemented by Hospital (during project period)

Association between total number of Steps in place at the end of the project, and exclusive breastfeeding among healthy infants, by hospital

R=0.69, p=0.03

$R^2 = 0.4728$

Exclusive Breastfeeding Rates (%)

Steps Implemented by Hospital (at end of project)

Limitations

- Only 10 of the 52 delivery hospitals were included in the project
- Hospitals were not randomly selected
- There were no control hospitals
- No comparisons made to other NJ hospitals
- Hospitals self-assessed their status in implementation of the Ten Steps

CONCLUSIONS

- Statewide coalition expedites BFHI designation and progress through 4-D
- Any and exclusive breastfeeding increased among healthy and sick newborns
- Increase in breastfeeding correlated with the number of Steps mastered

"Well done is better than well said."
– Benjamin Franklin

Acknowledgments