



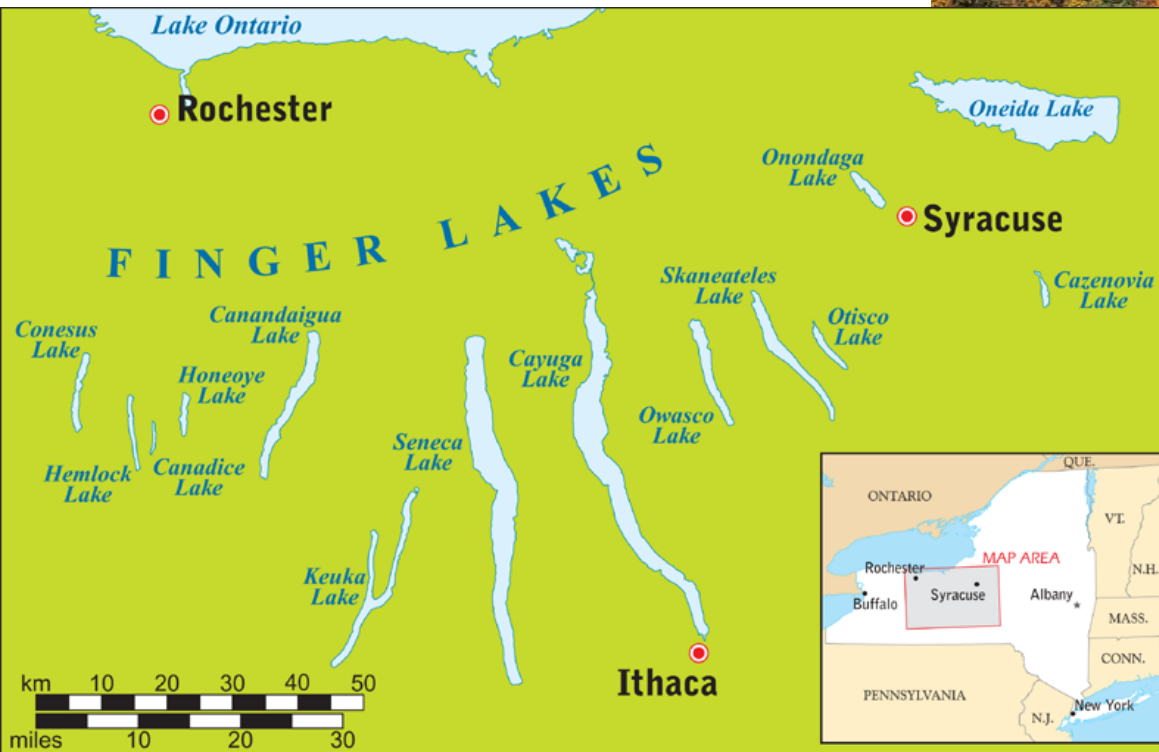
# New York State Department of Health Breastfeeding Survey

## Hospital Practices in Support of Breastfeeding: Finger Lakes Region Perinatal Hospitals

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March 31, 2011



# Finger Lakes Region



# Outline

- Background
- Methods
- Results
- Conclusions
- Summary



# Introduction

- Breastfeeding provides many health benefits
  - For infant:
    - Reduced risk for acute otitis media
    - Reduced risk of hospitalization due to lower respiratory tract infections
    - Reduced risk for type II diabetes
  - For mother:
    - Reduced risk for breast/ovarian cancer
    - Quicker return to pre-pregnancy weight



# Hospital Practices and the Impact of Breast Feeding.

- Health benefits of breast feeding include savings in health care expenditures
  - Prudent to assess breastfeeding practices of hospitals/hospital professionals
- Hospital practices impact breastfeeding initiation and success
- Study objectives:
  - Examine current NYS practices
  - Identify areas in need of improvement
  - Compare the Finger Lakes Region to the rest of New York State



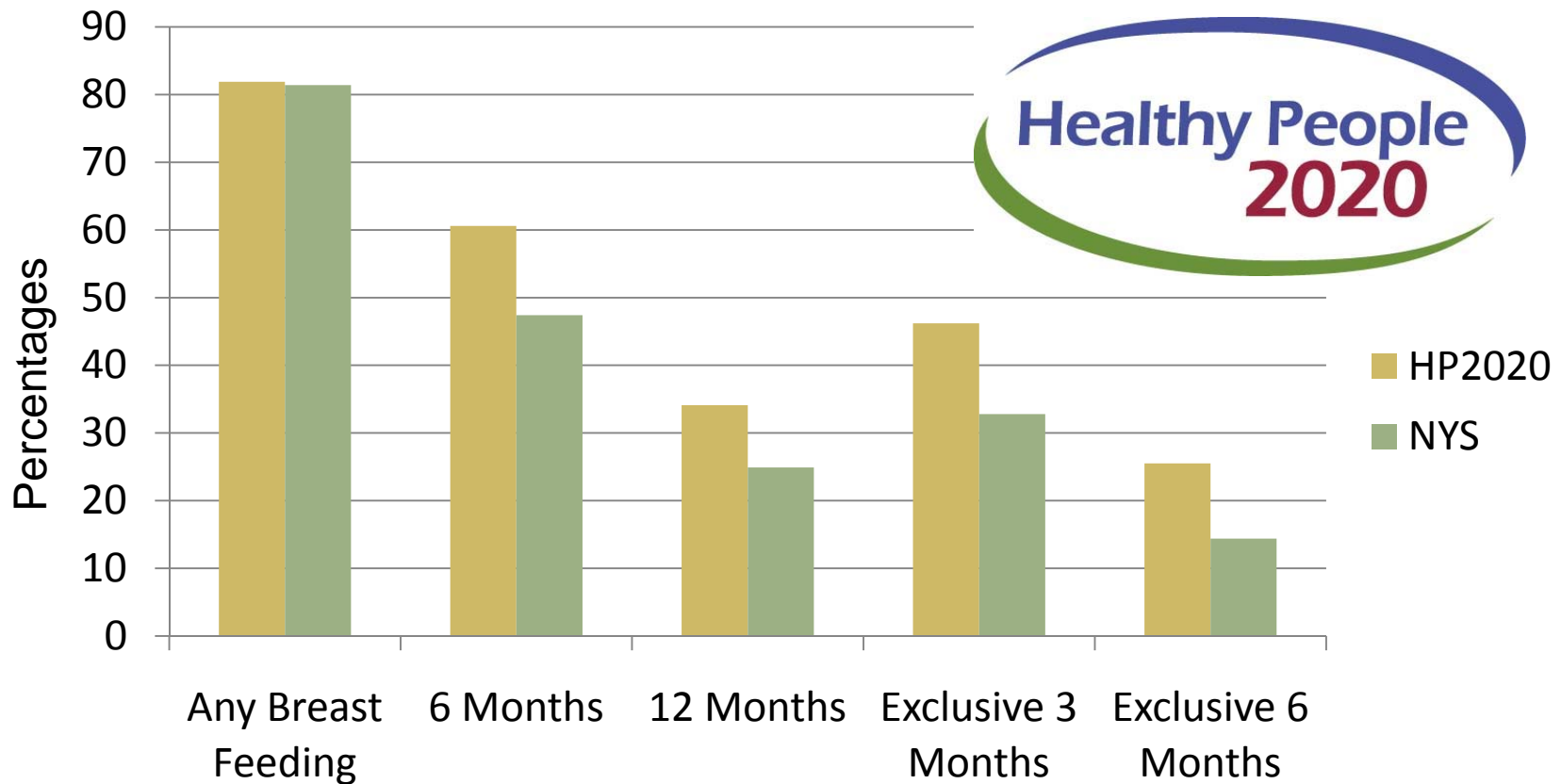
# Practices that Impact Breastfeeding

- Practices documented to *interfere* with breastfeeding initiating and success:
  - Supplementing with formula or water
  - Giving the baby a pacifier

- Practices documented to *aid* breastfeeding initiation and success:
  - Telling mothers about breastfeeding support
  - Skin-to-skin contact with mother
  - Rooming-in
  - Giving breast milk exclusively during hospital stay



# Healthy People 2020 Goals: Proportion of Breast Fed Infants



Centers for Disease Control and Prevention, National Center for Health Statistics, National Immunization Survey 2007.  
<http://www.cdc.gov/breastfeeding/data/reportcard2.htm>



# The Baby-Friendly Hospital Initiative

- The BFHI promotes, protects, and supports breastfeeding through The Ten Steps to Successful Breastfeeding for hospitals, as outlined by UNICEF/WHO. The steps for the United States are:
  1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
  2. Train all health care staff in skills necessary to implement this policy.
  3. Help mothers initiate breastfeeding within one hour of birth
  4. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
  5. Inform all pregnant women about the benefits and management of breastfeeding.





# The Baby-Friendly Hospital Initiative

6. Give newborn infants no food or drink other than breastmilk, unless *medically* indicated.
7. Practice “rooming in”-- allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

- There are currently four hospitals in New York State with the Baby-Friendly designation.
- One of these three is located in the Finger Lakes Region (Rochester General Hospital).



# Outline

- Background
- **Methods**
- Results
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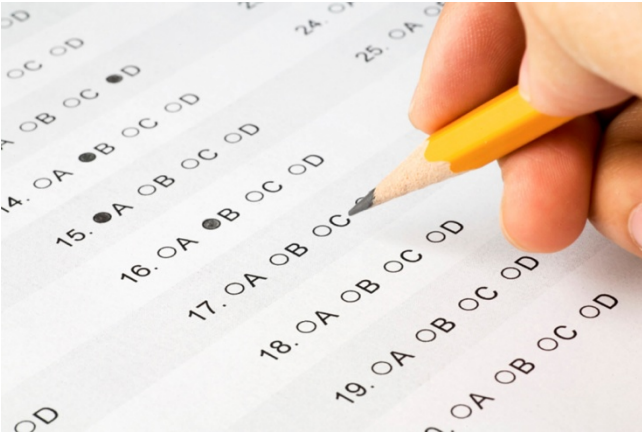


# Survey Population

- Surveys about breastfeeding practices distributed electronically to 138 NYS hospitals that provide maternity services
- Surveys completed by one of the following:
  - Nurse
  - Lactation consultant
  - Administrator
  - Midwife
  - Other maternity department representative



# Development of Survey Tool

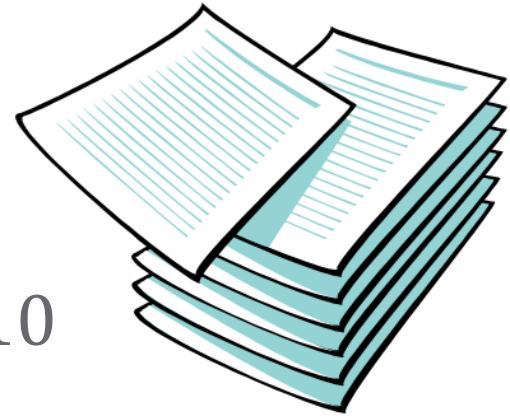


- Survey tool developed from:
  - 2003 NYSDOH Breastfeeding Survey
  - 2005 NYCDHMH survey
- 66 questions organized into 10 groups
- Approval by supervising pediatricians and the DOH Institutional Review Board



# Data Collection/Analysis

- Contact established at each hospital
- Surveys emailed to contacts 11/5/2009 with instructions for survey return
- Outstanding hospitals routinely contacted to ensure response
- All 138 surveys received by 1/11/2010
- 13 Finger Lakes regional birthing hospitals
- Analyzed using SAS and qualitative methods



# Outline

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# Hospital Characteristics

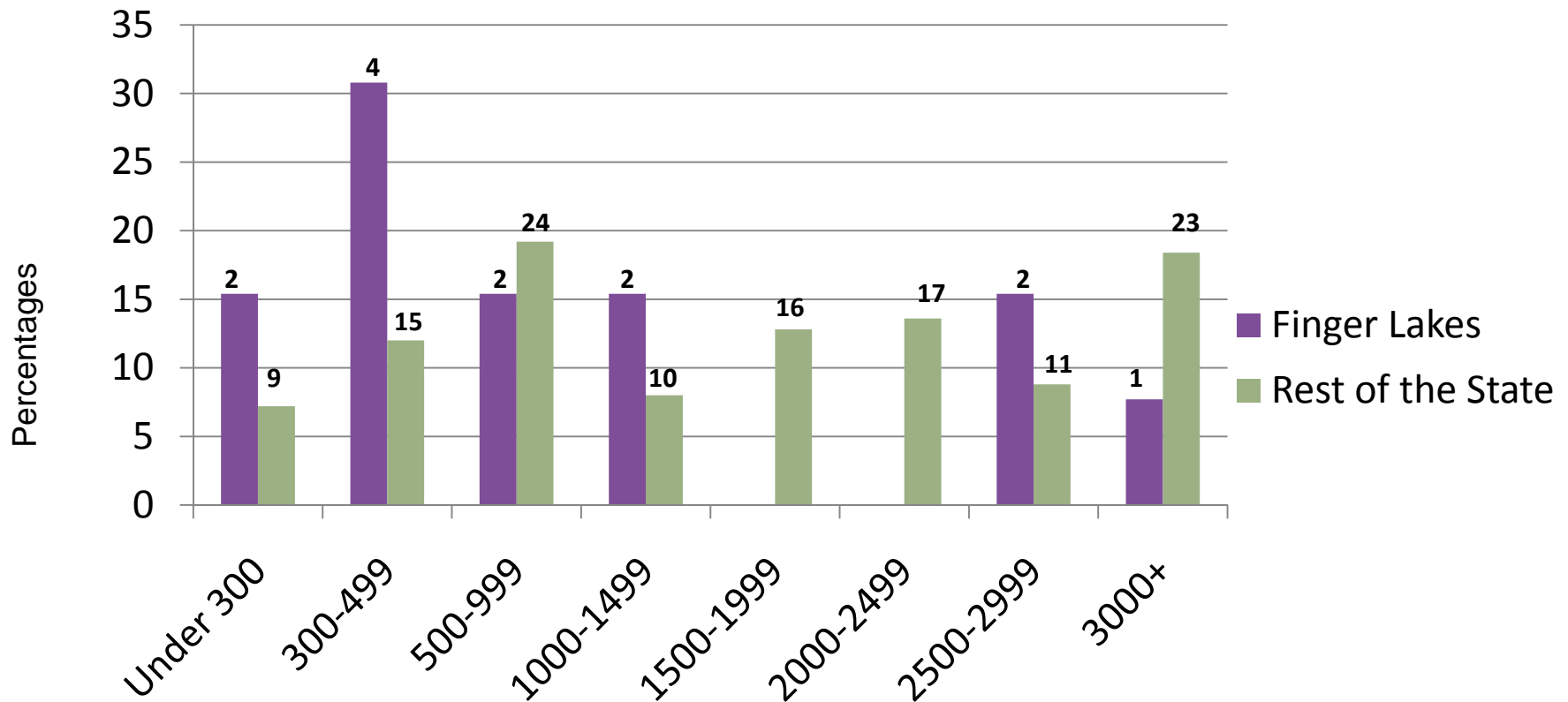
- The 138 hospitals were categorized based on NYSDOH classification, annual number of deliveries, type of facility, and region
  - Finger Lakes Region has **13 birthing hospitals**
  - Rest of New York State has **125 birthing hospitals**

NYSDOH Classification <sup>1</sup>	Finger Lakes Region N (%)	Rest of State N (%)	Total N(%)
<b>Basic Care (Level I)</b>	10 (76.9%)	49 (39.2%)	59 (42.8%)
<b>Specialty Care (Level II)</b>	1 (7.7%)	24 (19.2%)	25 (18.1%)
<b>Subspecialty Care (Level III)</b>	1 (7.7%)	35 (28.0%)	36 (26.1%)
<b>Regional Perinatal Center</b>	1 (7.7%)	17 (13.6%)	18 (13.0%)



# Hospital Characteristics: Numbers of Deliveries

## The Number of Deliveries Per Year



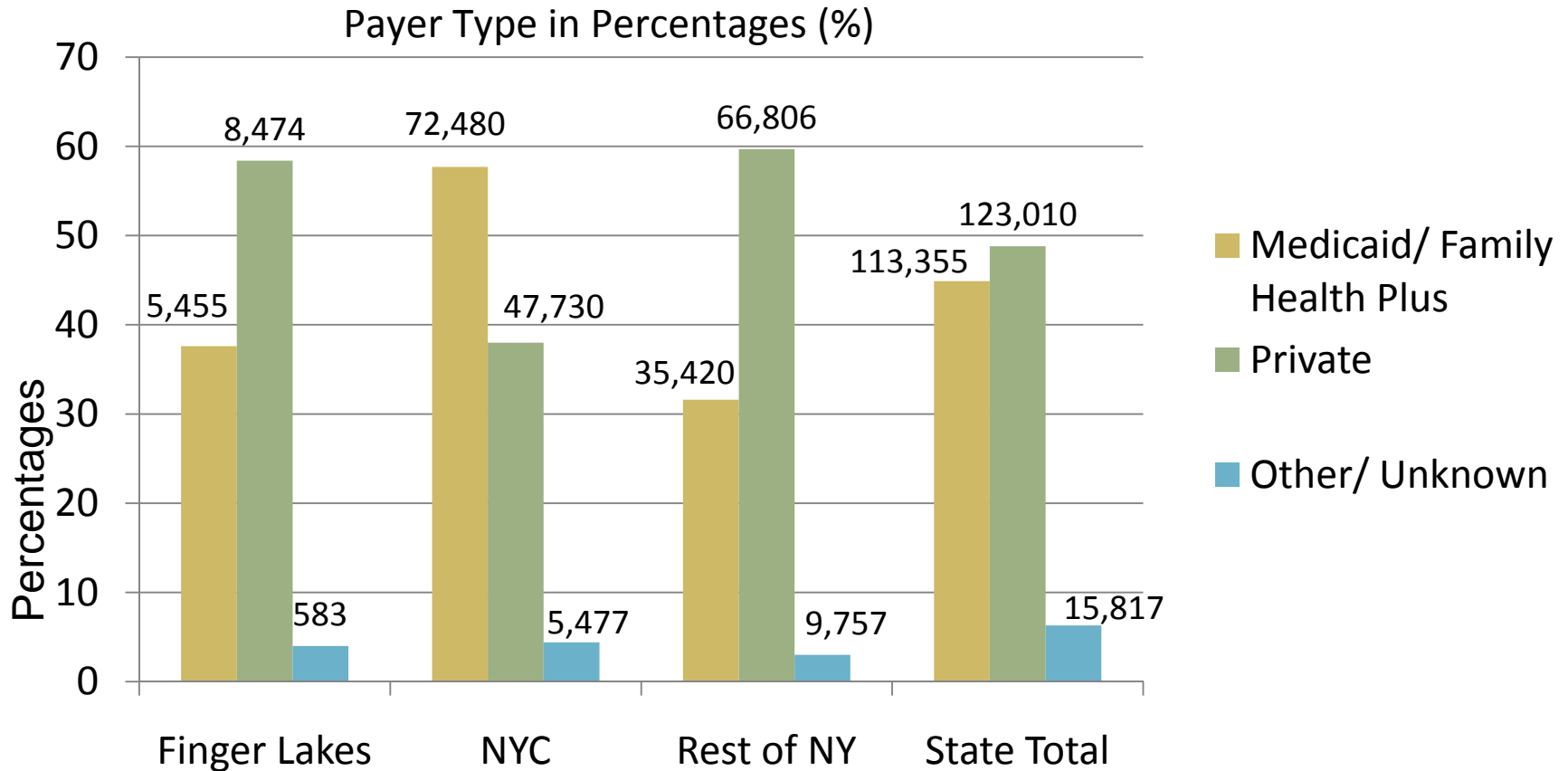


# Hospital Characteristics: Type of Facility

Type of Facility	Finger Lakes Region N (%)	Rest of the State
Private Non-profit	8 (61.5%)	78 (62.4%)
Public Hospital	3 (23.1%)	26 (20.8%)
Private For Profit	1 (7.7%)	7 (5.6%)
Birthing Center	0 (0%)	1 (0.8%)
Other	0 (0%)	11 (8.8%)
No Answer	1 (7.7%)	2 (1.6%)



# Births by Type of Payer



Rates of Medicaid and Private health insurance are statically significant different between the Finger Lakes Region and NYC  $p > .0001$



# Births by Primary Payer: Medicaid/ Family Health Plus

- The majority 7/13 (53.4%) of Finger Lakes hospitals had MA/FHP as the primary payer in 41-60% of births.
- Only two (2) Finger Lakes hospitals (15.4%) had MA/FHP as the primary payer rates above 60%
  - Compared to NYC hospitals 26/41 (63.4%)
  - Rest of the State 12/85 (14.1%)



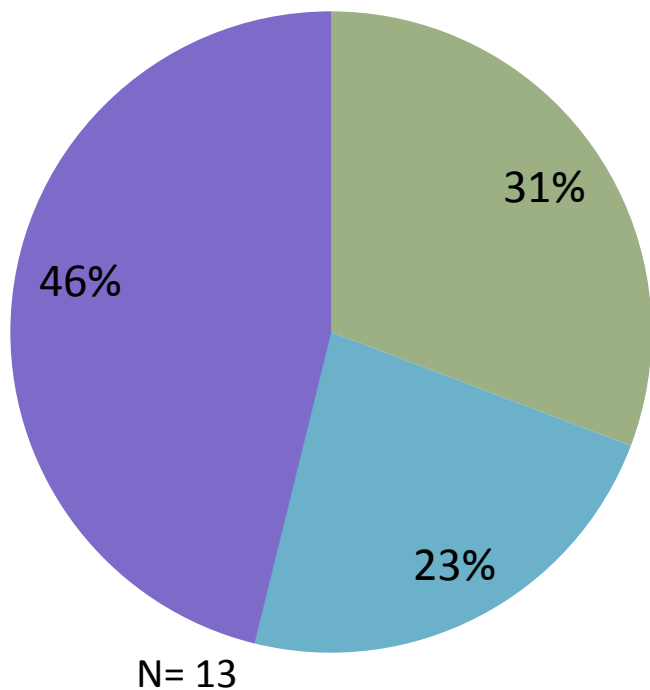
# Births by Primary Payer: Private Insurance.

- The majority 6/13 (46.2%) of Finger Lakes hospitals had Private Insurance as the primary payer in 41-60% of births
- Four (4) Finger Lakes hospitals (30.8%) had private insurance as the primary payer in 60% or more of births
  - Compared to NYC hospitals 7/41 (17.0%)
  - Rest of the State 33/85 (38.8%)

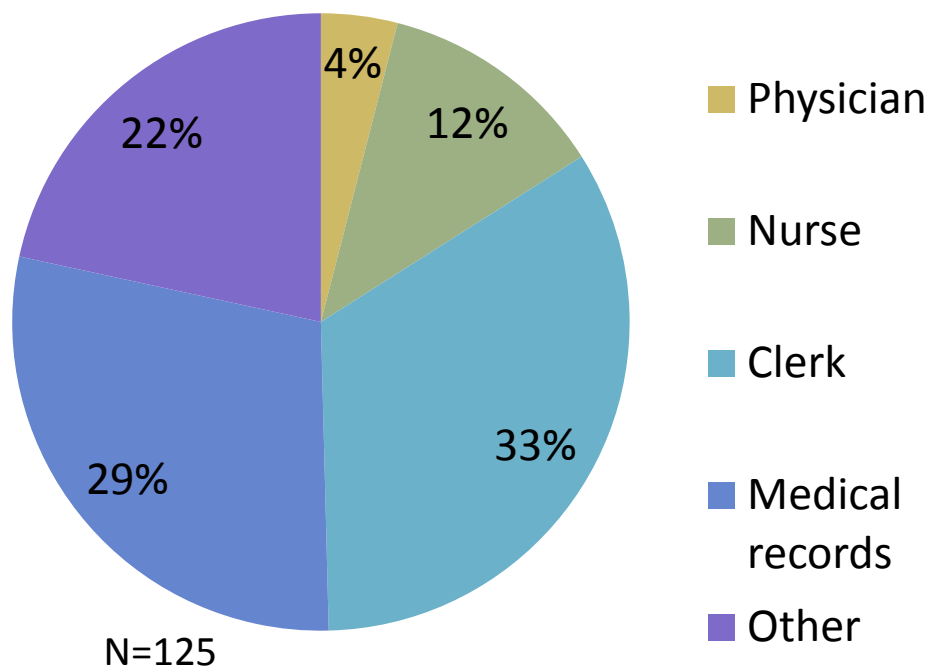


# Who Records Infant Feeding on the Birth certificate?

## Finger Lakes



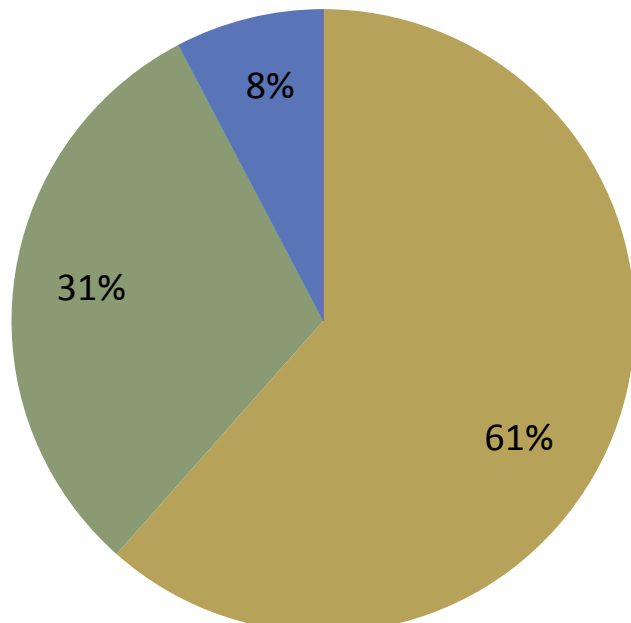
## Rest of the State



The regional difference is statistically significant:  $p = 0.038$

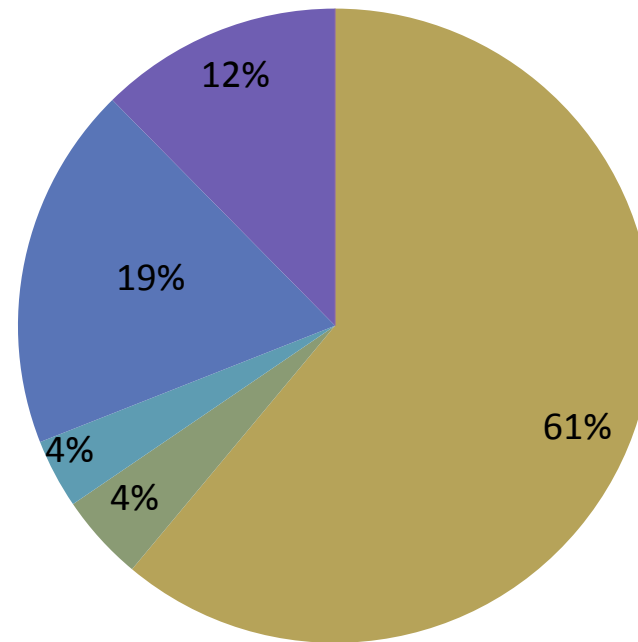
# Time Period for Reporting Infant Feeding Information

## Finger Lakes



N= 13

## Rest of the State



N=125

- Since Birth
- 72 Hours After Birth
- Last Day of Hospital Stay
- Since 12am on date of discharge
- Don't Know/Blank

The regional difference is statistically significant:  $p = 0.0102$

# Baby Friendly Hospital Initiative

- **Step one (1)**- Have a written breastfeeding policy that is routinely communicated to all health care staff.
- **Step two (2)**- Train all health care staff in skills necessary to implement this policy.



# Written Breast Feeding Policy

- 13/13 (100%) Finger Lakes hospitals have a written breast feeding policy
- 124/125 (99.2%) of other NYS hospitals have one

Is staff trained on the policy?	Finger Lakes Region n/N (%)	Rest of the State n/N (%)
Yes, both nurses and physicians	4/13 (30.8%)	46/124* (37.1%)
Yes, nurses only	8/13 (61.5%)	54/124(37.1%)
Yes, physicians only	0/13 (15.4%)	1/124(0.8%)
No	1/13 (7.7%)	4/124 (18.5%)

\*n= 124 since one hospital did not have a written breast feeding policy





# Obstetric Staff Lactation Training

OB Staff	Finger Lakes Region n/N (%)	Rest of State n/N (%)
Physician Training	2/13 (15.4%)	62/125 (49.6%)
Nurse Training	13/13 (100%)	125/125 (100%)

- There is a statistically significant difference between physician training in the Finger Lakes versus the rest of the state ( $p < 0.0001$ )



# Obstetric Staff Training: Nurses

Breast Feeding Training for Nurses	Finger Lakes Region n/N (%)	Rest of the State n/N (%)
Bedside	12/13 (92.3%)	111/125 (88.8%)
In-class	9/13 (69.2%)	97/125(77.6%)
Online	2/13 (15.4%)	17/125(13.64%)
Other	4/13 (30.8%)	38/30.4 (56.8%)

-100% of hospitals provided some form of lactation training training for their nurses



# Obstetric Staff Training: Physicians

Breast Feeding Training for Physicians	Finger Lakes Region n/N (%)	Rest of the State n/N (%)
Bedside	1/13 (7.7%)	12/125 (9.6%)
Residency	2/13 (15.4%)	35/125 (28.0%)
In-class	0/13 (0%)	20/125(16.0%)
Online	2/13 (15.4%)	17/125(13.64%)
Not Available	11/13 (84.6%)*	63/125 (50.4%)*

-Both Finger Lakes hospitals who provided physicians with lactation training did so during residency

-Only one Finger Lakes hospital trained their physicians at the bedside 1/2 (50%)

\* The regional difference in physician training is statistically significant:  $p = .0186$



# Breastfeeding Structure & Support

- 10/13 (76.9%) Finger Lakes Regional hospitals have a designated lactation coordinator; meanwhile:
- 114/125 (84.8%) of the rest of NY hospitals have a designated lactation coordinator
- Lactation coordinators are available to mothers most often M-F 7am-3pm.



# Breastfeeding Structure & Support, continued

- All 13 Finger Lakes hospitals always have someone available to provide lactation assistance to the mother
- 116/125 (92.8%) of the remaining NY State birthing hospitals indicated this



# Baby Friendly Hospital Initiative

- **Step three (3)**- Inform all pregnant women about the benefits and management of breastfeeding.



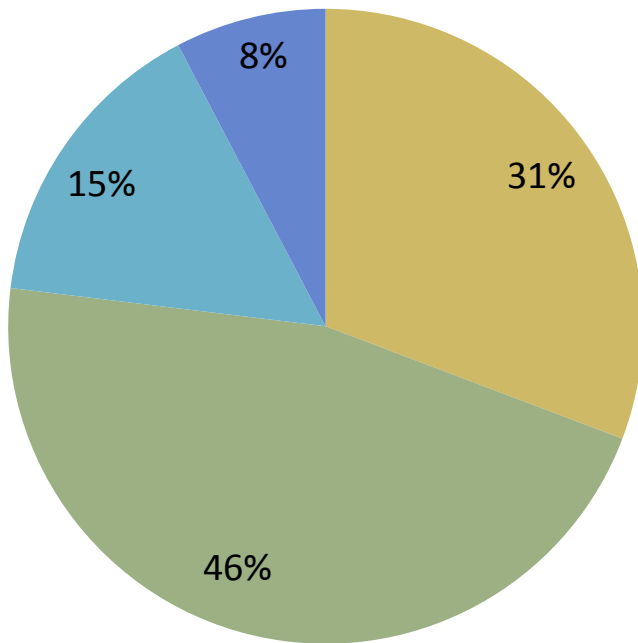
# Breastfeeding Education Topics

Topic	Finger Lakes N (%)	Rest of State N (%)	Topic	Finger Lakes N (%)	Rest of State N (%)
Common concerns and/or questions	13 (100%)	122 (97.6%)	Strategies to sustain breastfeeding	12 (92.3%)	111 (88.8%)
Benefits for the baby	13 (100%)	121 (96.8%)	Nutritional needs for the mother	11 (84.6%)	120(96.0%)
Positioning and latch	13 (100%)	120 (96.0%)	Role of the partner	11 (84.6%)	96 (76.8%)
Benefits for the mother	13 (100%)	119 (95.2%)	Birth control	7 (53.9%)	76 (60.8%)
Prevent common problems in the first few weeks	13 (100%)	113 (90.4)	HIV	4 (30.8%)	52 (41.6%)
Advice to help a mother return to school or work	13 (100%)	107 (85.6%)	Other	0 (0%)	16 (12.8)
Signs that nursing is going well	12 (92.3%)	123 (98.4%)			



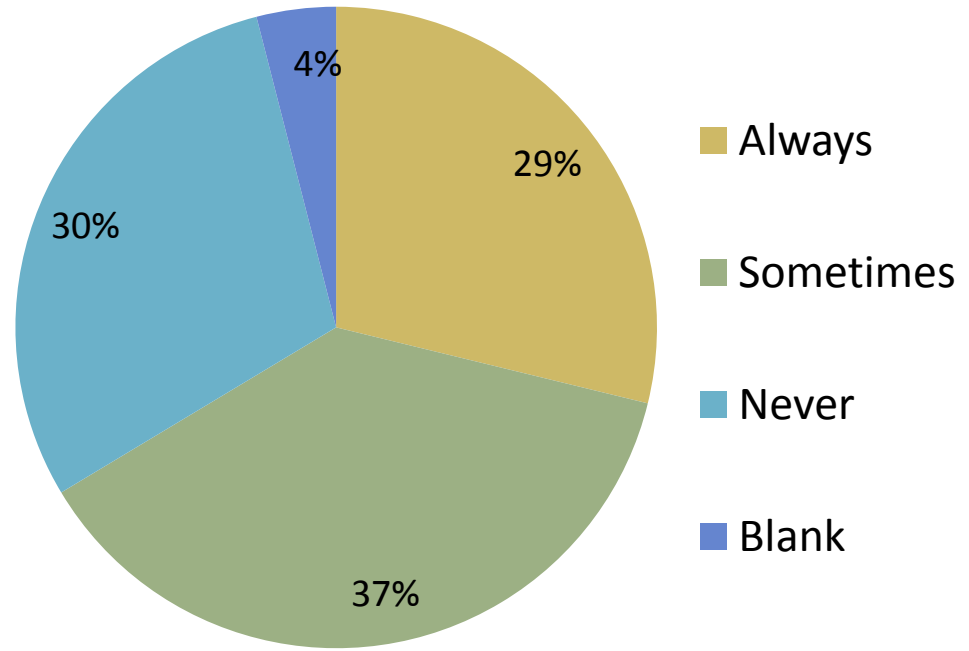
# Are Mothers Advised on How Long Breast Feeding Sessions Should Last?

## Finger Lakes Hospitals



N=13

## Rest of the State



N=125



# Visual Aids

- Do you show breastfeeding mothers videos or visual aids?
  - 11/13 (84.6%) of Finger Lakes hospitals do
  - 116/125 (92.8%) of the Rest of the State do

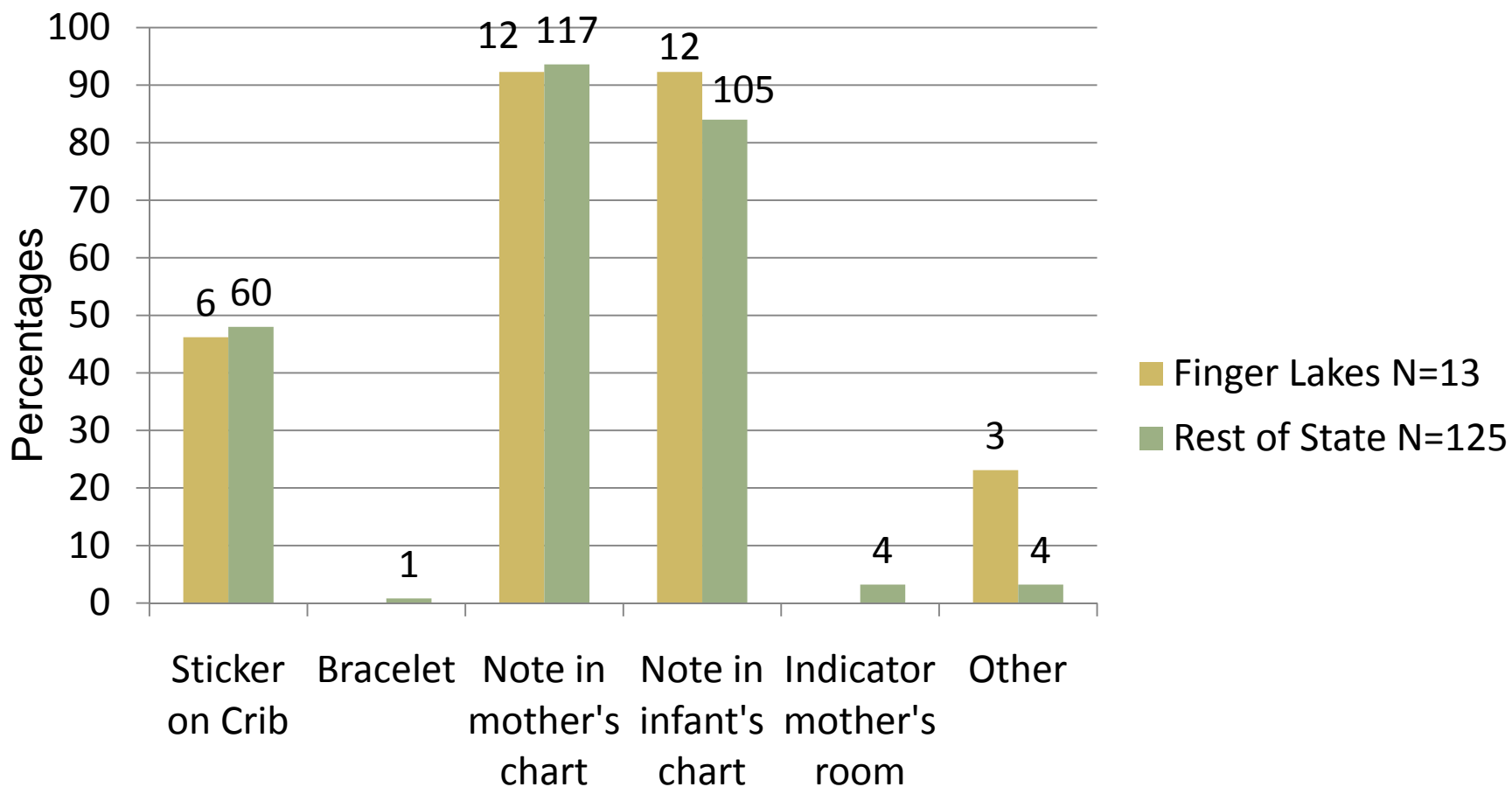


# Information Initiatives

- One (1) of the Finger Lakes hospitals provide breastfeeding classes during the postpartum stay.
  - Compare 43/125 (34.4%) Rest of State
- Five (5) Finger Lakes hospitals have a prenatal care clinic/ outpatient unit.
  - Of those (80%) inform the women of the benefits to breast feeding
- In the rest of the state 82/125 (65.6%) have a prenatal clinic / outpatient unit
  - Of those 79/82 (95.5%) discuss benefits.

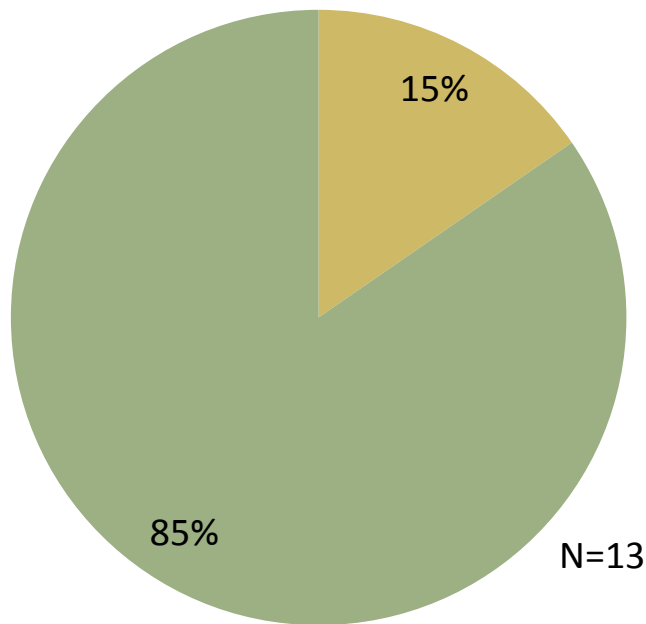


# Identification of Breast Feeding Mothers



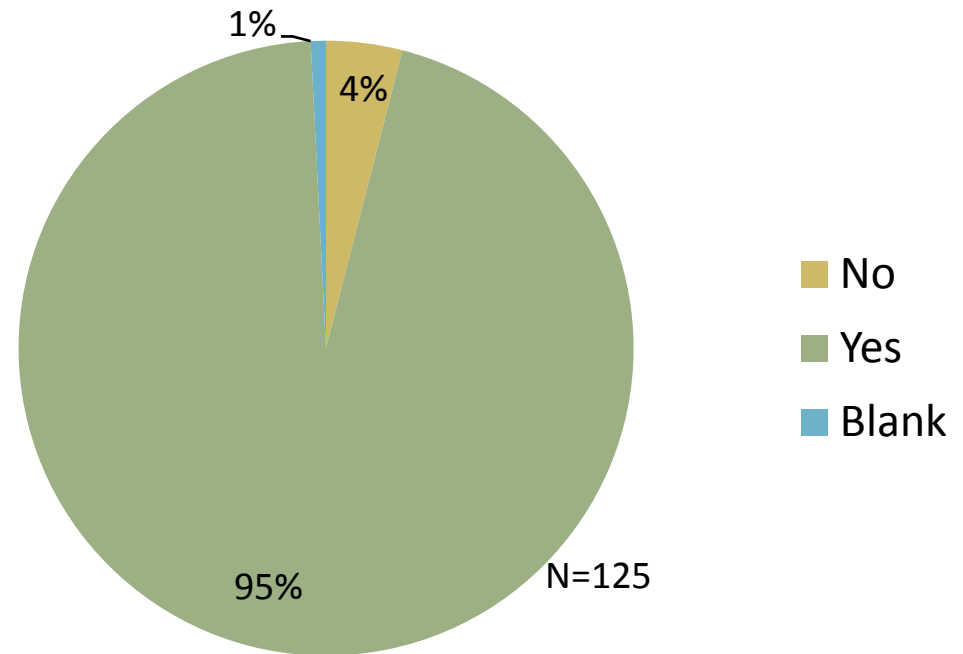
# Hospital-Based Childbirth Education Classes

## Finger Lakes



-11/11 (100%) of childbirth education classes include a segment on breastfeeding

## Rest of the State



-111/120 (89.5%) of childbirth education classes include a segment on breastfeeding

# Baby Friendly Hospital Initiative

- **Step four (4)**- Help mothers initiate breastfeeding within one hour of birth

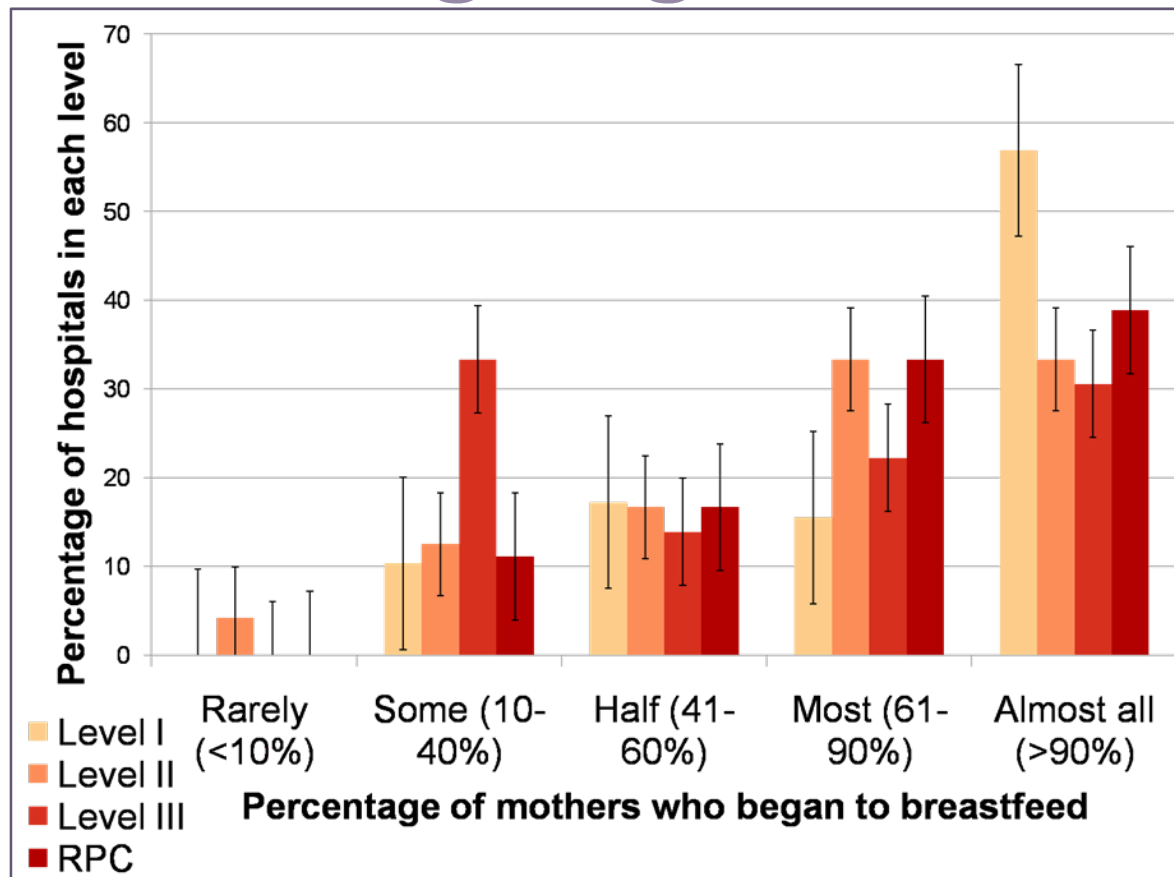


# Policy for Mother to Hold Baby Within ½-hour After Birth

- All **13** of the Finger Lakes Regional hospitals have a policy allowing for a mother to hold the baby within **30 minutes** of birth
  - Compare to 120/124 (96.8%) of the rest of NY hospitals
  - 100% of hospitals who have this policy encourage women to breastfeed during this early period of contact



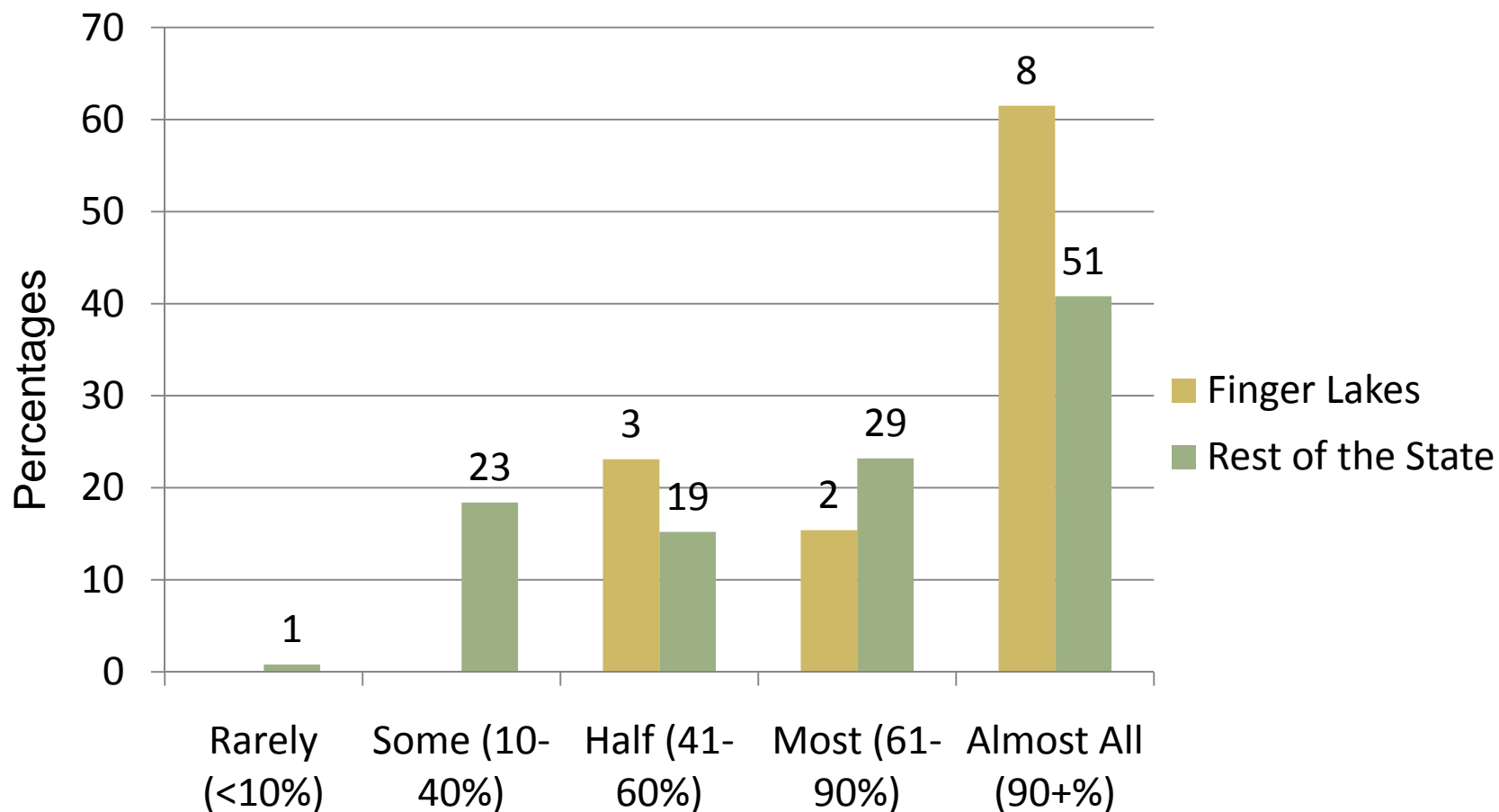
# Immediate Postpartum Breastfeeding–Vaginal Deliveries



Percentage of mothers who had a vaginal delivery without complications and began to breastfeed in the delivery room by perinatal designation.



# Immediate Postpartum Breastfeeding- Vaginal Deliveries



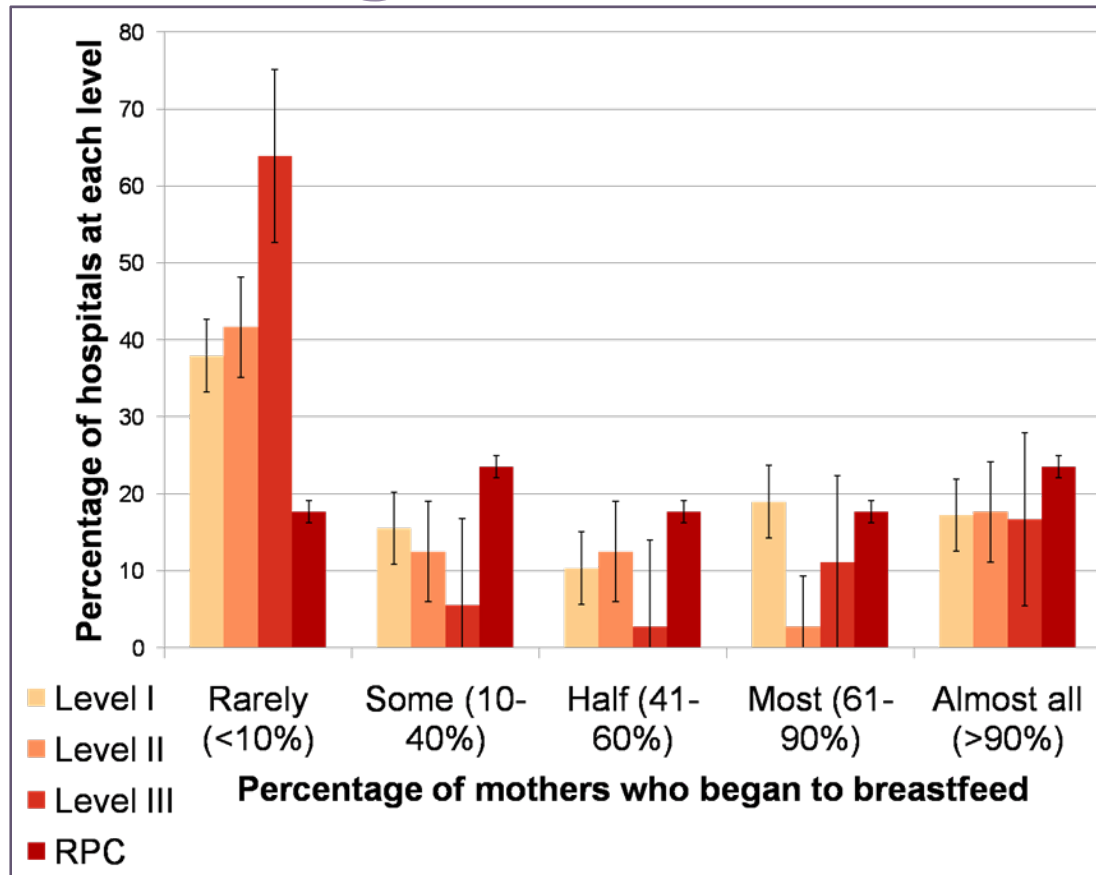


# Immediate Postpartum Breastfeeding– Vaginal Deliveries in Finger Lakes

- 8/13 (61.5%) of Finger Lakes hospitals report that 90+% of mothers begin to breast feed in the delivery room
  - Compare 51/125 (40.8%) rest of the State
- None of the Finger Lakes hospitals have breast feeding rates below 40 % of the time,
  - 24/125 (19.2%) rest of the state



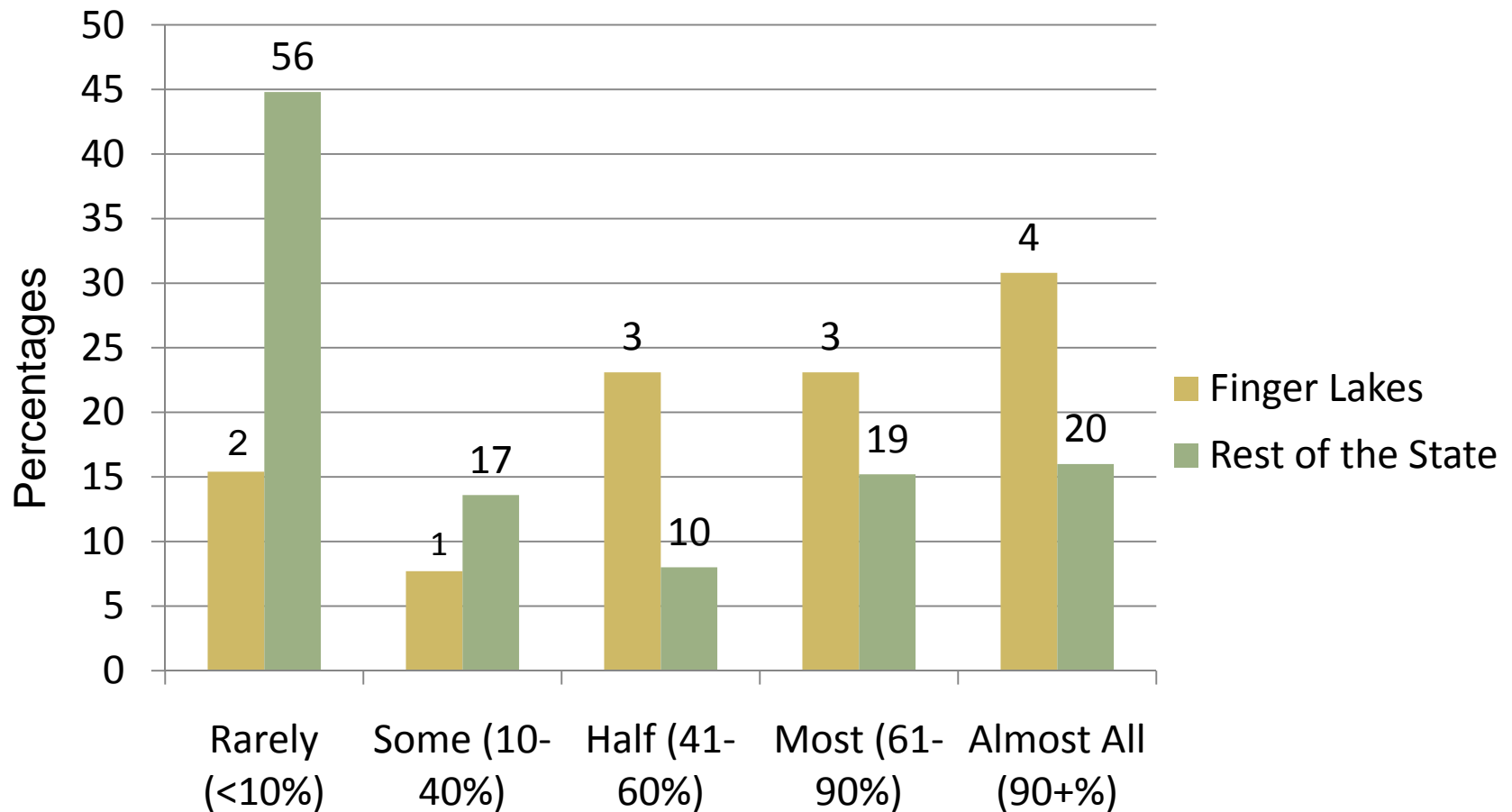
# Immediate Postpartum Breastfeeding–Cesarean Deliveries



Percentage of mothers who had a cesarean delivery without complications and began to breastfeed in the recovery room by perinatal designation.



# Immediate Postpartum Breastfeeding- Cesarean Deliveries



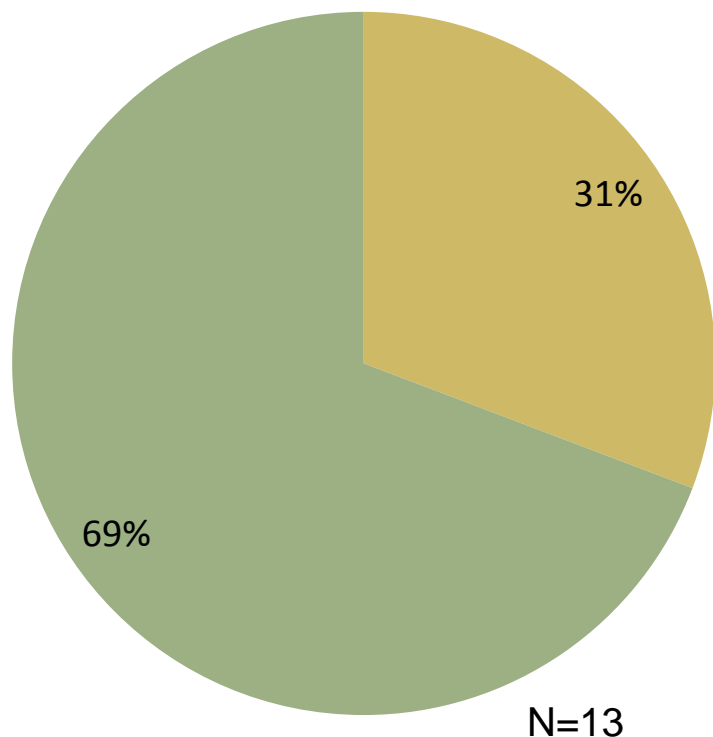
# Baby Friendly Hospital Initiative

- **Step five (5)**- Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.

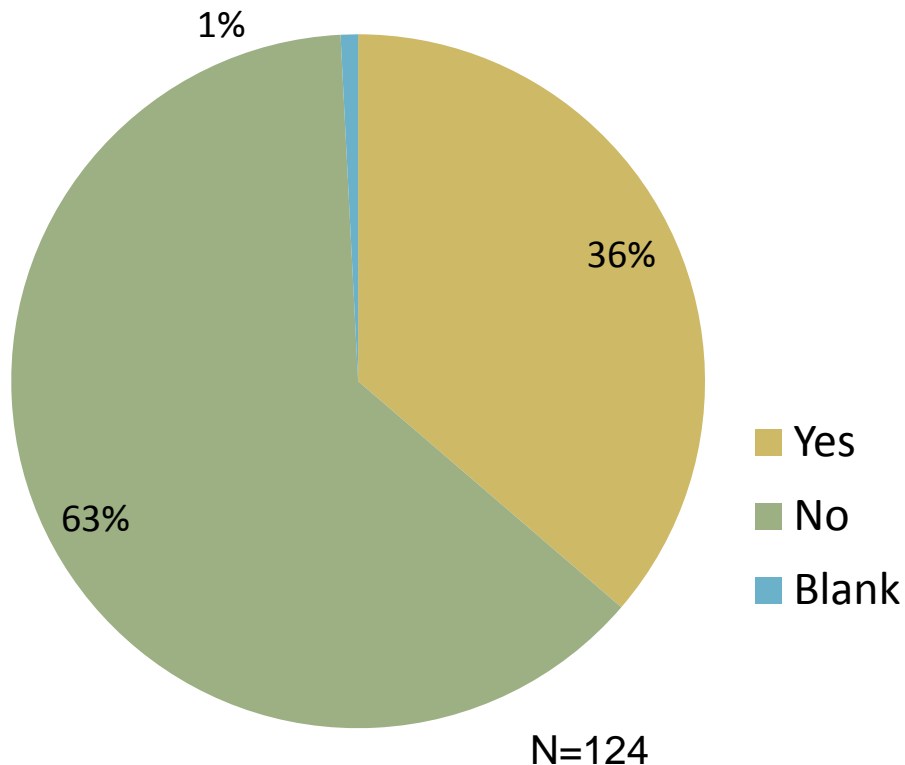


# Is There a Separate Breast Feeding Policy for Sick/ Premature Infants?

## Finger Lakes



## Rest of the State



[One hospital did not require a response]

# Observation for Breastfeeding Effectiveness

- Hospitals were asked how often the mother and baby are observed for breastfeeding effectiveness

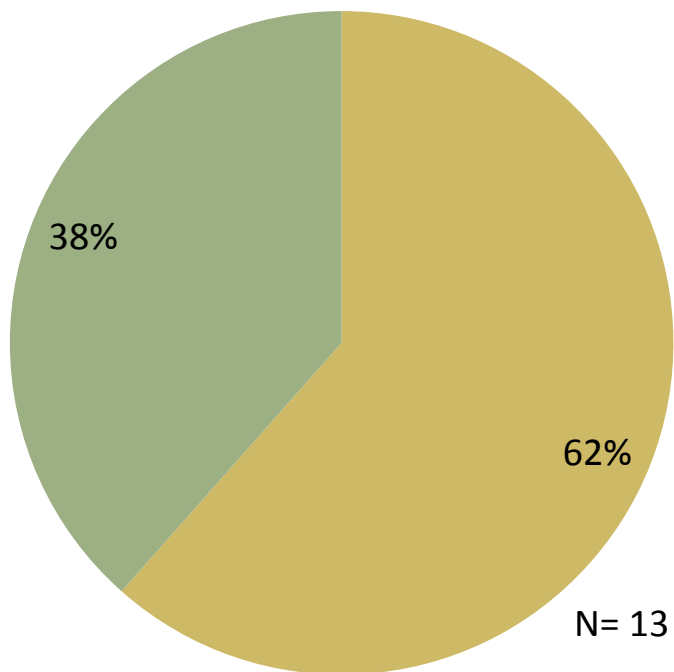
## Observation for Breastfeeding Effectiveness

Time/Frequency of Breastfeeding Observation	Finger Lakes Region n/N (%)	Rest of the State n/N (%)
Once on every shift	11/13 (84.6%)	99/125 (79.2%)
At the initial feeding	5/13 (38.5%)	82/125(65.6%)
At the mother's request	6/13 (46.0%)	78/125(62.4%)
At the discretion of the nursing staff	6/13 (46.2%)	71/125 (56.8%)
Before discharge	4/13 (30.8%)	51/125 (40.8%)

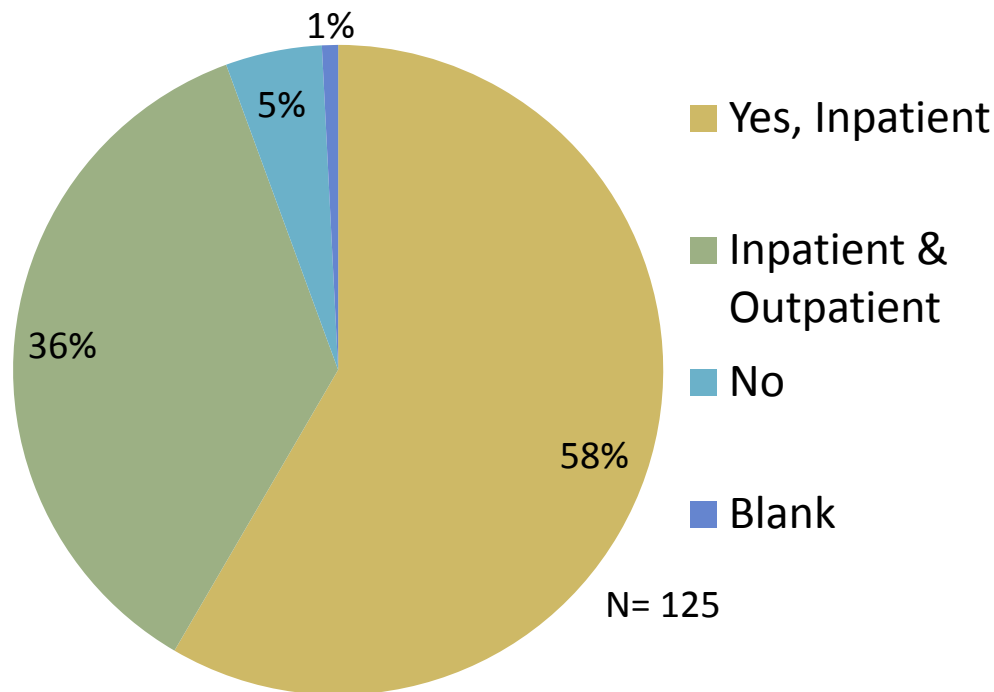


# Hospital Provision of Breast Pumps to Breast Feeding Mothers

## Finger Lakes



## Rest of the State

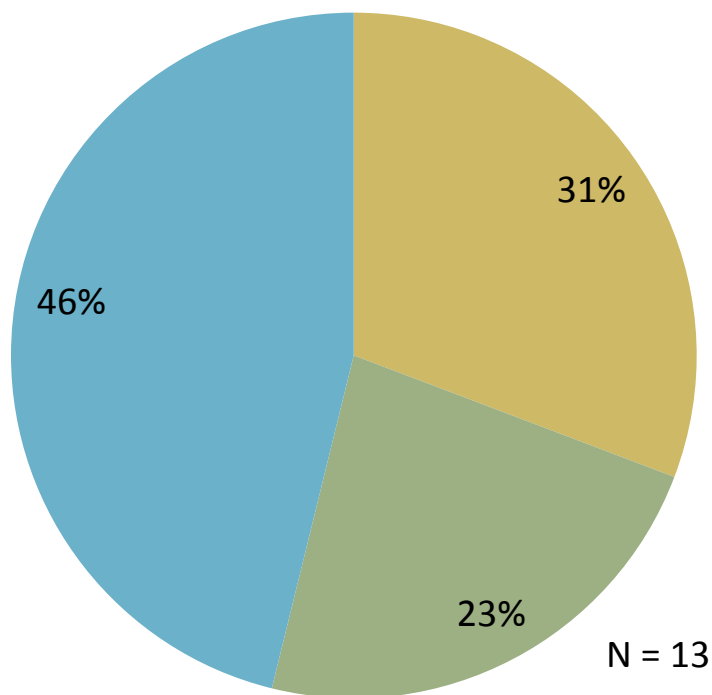


•100% of the Finger Lakes hospital make pumps available to breast feeding mothers

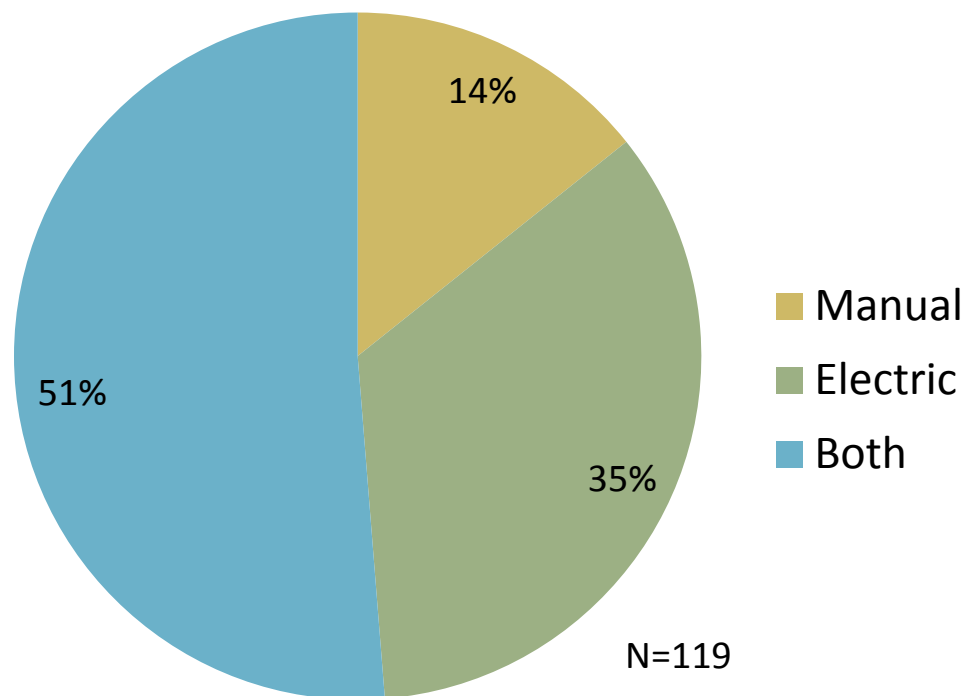


# Types of Breast Pumps Provided to Breast Feeding Mothers

## Finger Lakes



## Rest of the State



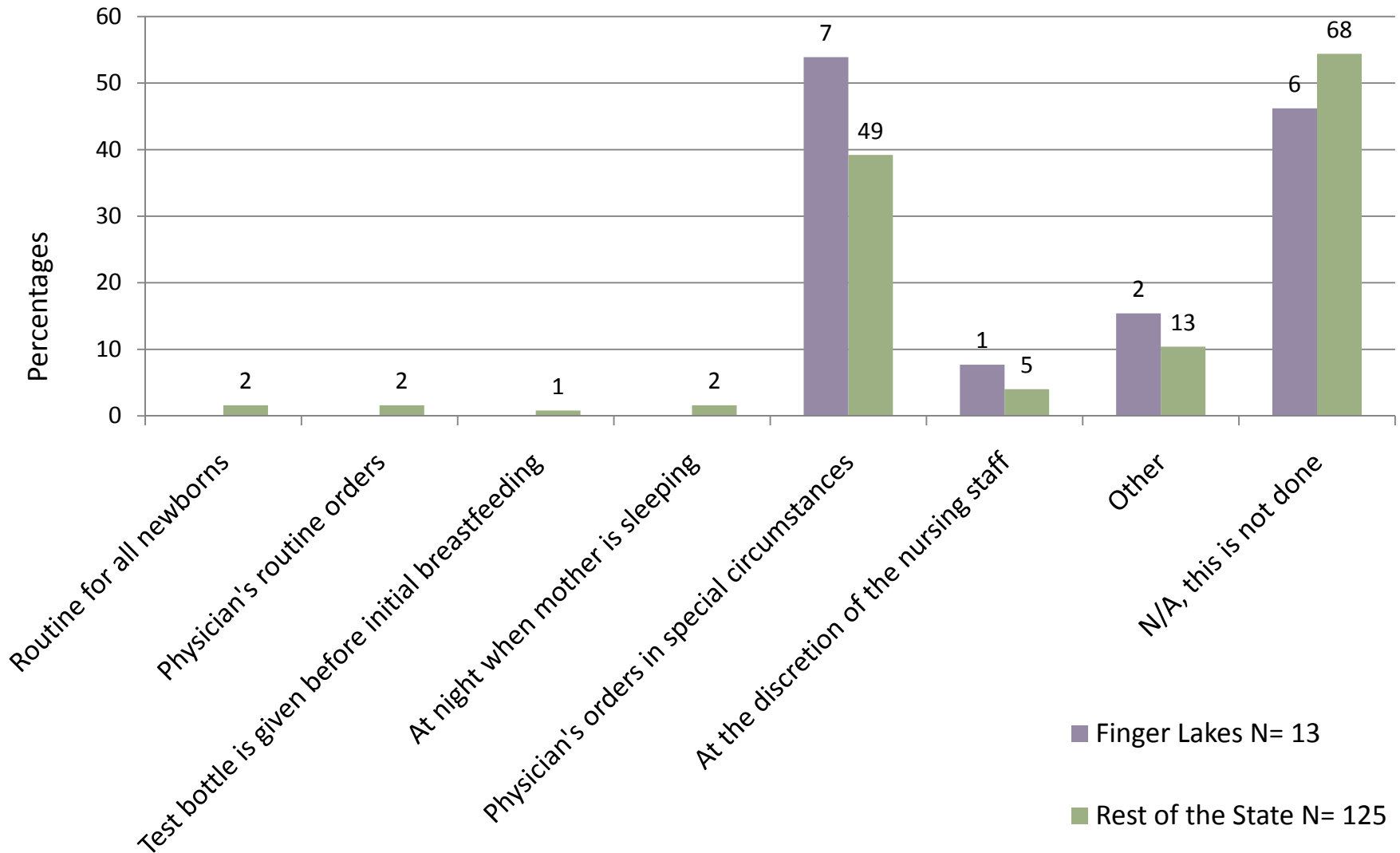


# Baby Friendly Hospital Initiative

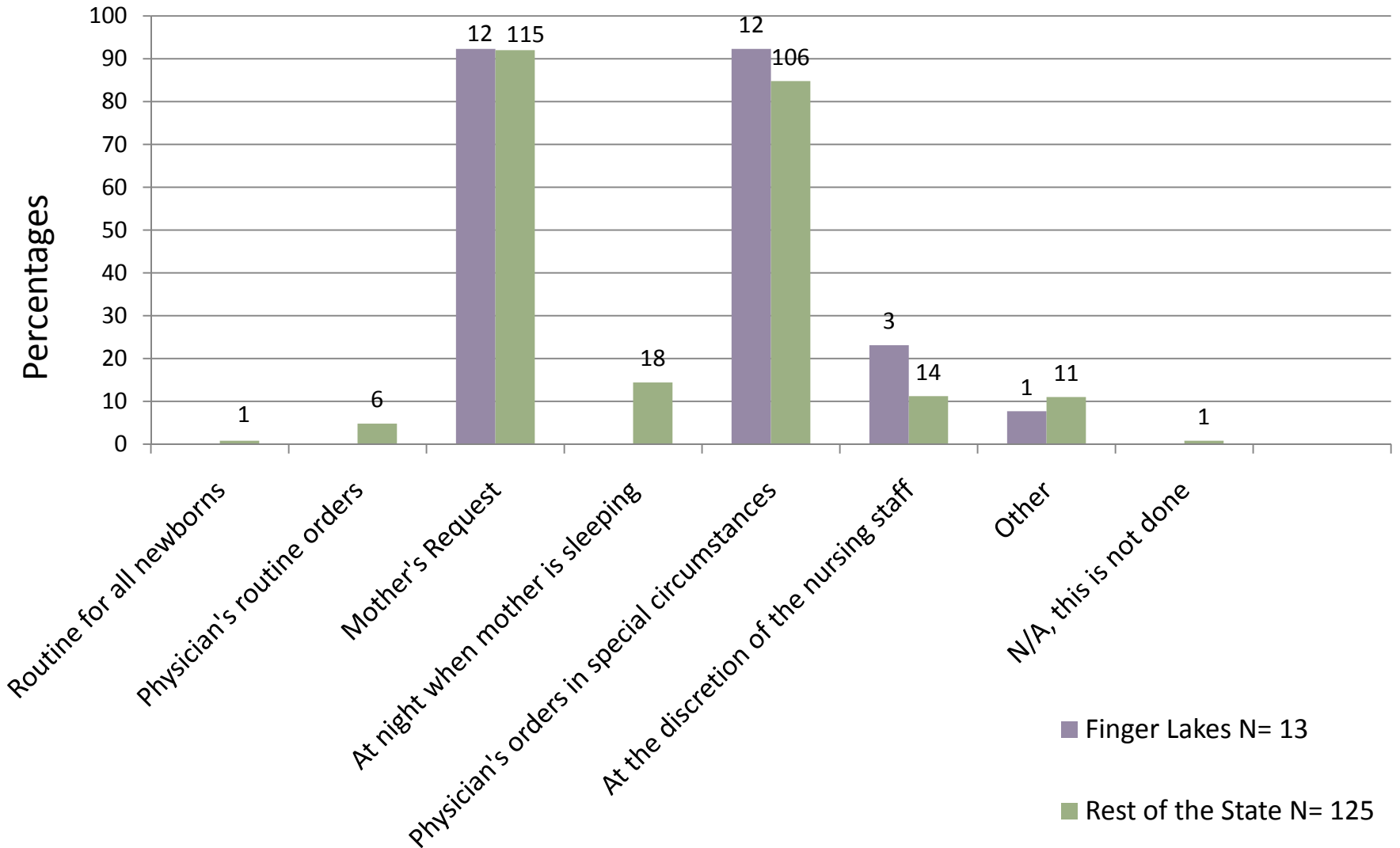
- **Step six (6)**- Give newborn infants no food or drink other than breast milk, unless *medically* indicated.



# Reasons for Giving Water or Glucose Water



# Formula Supplementation



# Formula Representatives

- 9/13 (69.2%) of Finger Lakes hospitals allow formula representatives to visit staff
  - Rest of State 88/125 (70.4%)
- All but **one** Finger Lakes hospitals **accept** free infant formula (12/13- 92.3%)
  - Rest of State 113/125 (90.4%)



# Test Bottles Routinely Given to Breast Feeding Infants

- None (0) of the Finger Lakes hospitals routinely give a breast feeding baby a “test bottle”.
- Of the hospitals in the Rest of the State only 3/125 (2.4%) follow this practice.

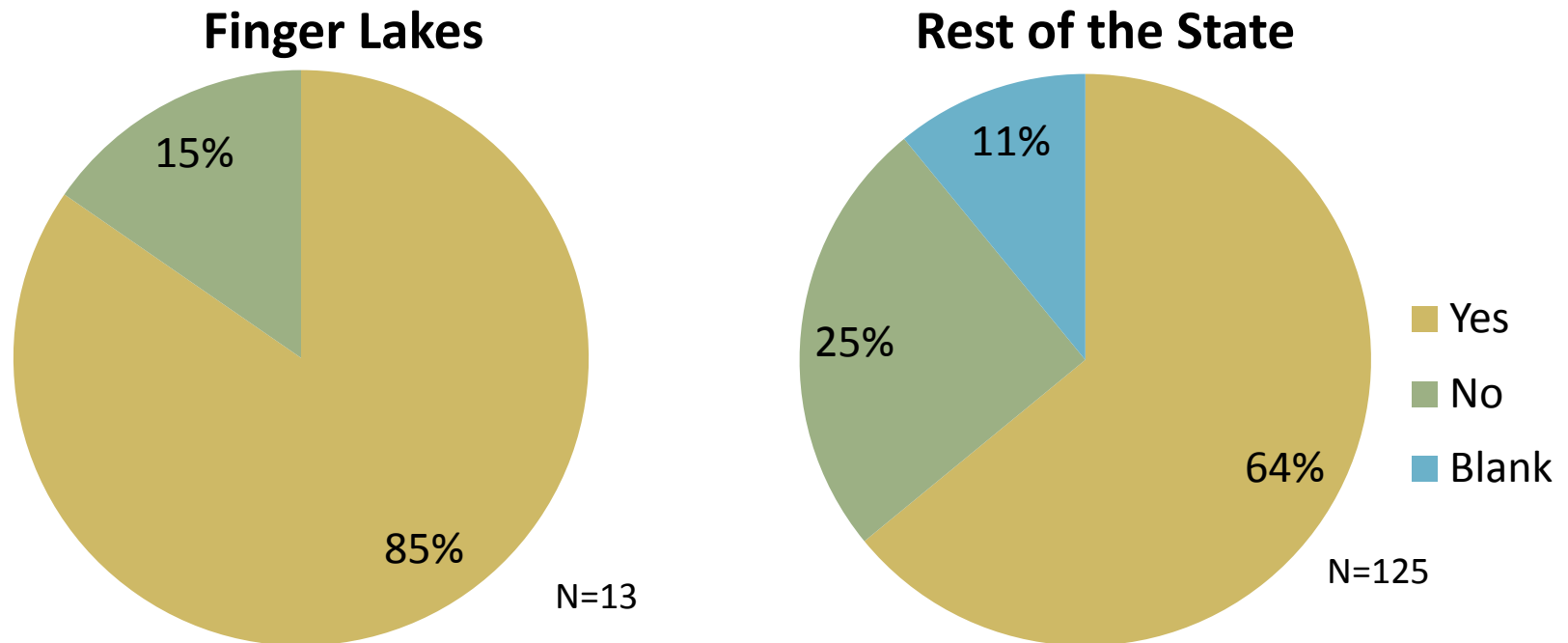


# Baby Friendly Hospital Initiative

- **Step seven (7)**- Practice “rooming in”-- allow mothers and infants to remain together 24 hours a day.

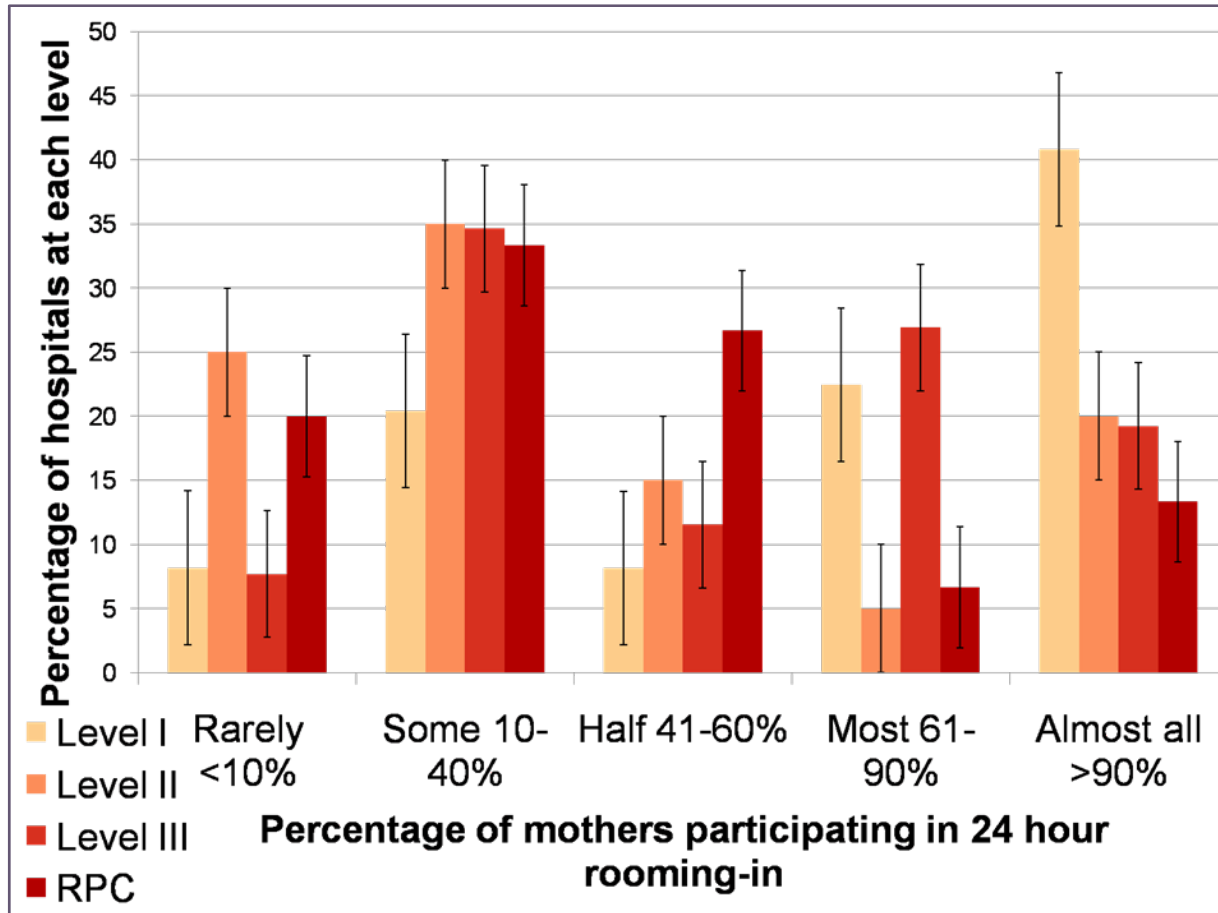


# Does the Hospital Have a Written Procedure for “Rooming In”



- Rooming in is allowed in ALL rooms used by postpartum women at all 13 Finger Lakes hospitals.
- Comparatively 115/125 (92%) of the hospitals in the rest of the state allow ALL postpartum women to participate in rooming in

# Rooming-in Policies

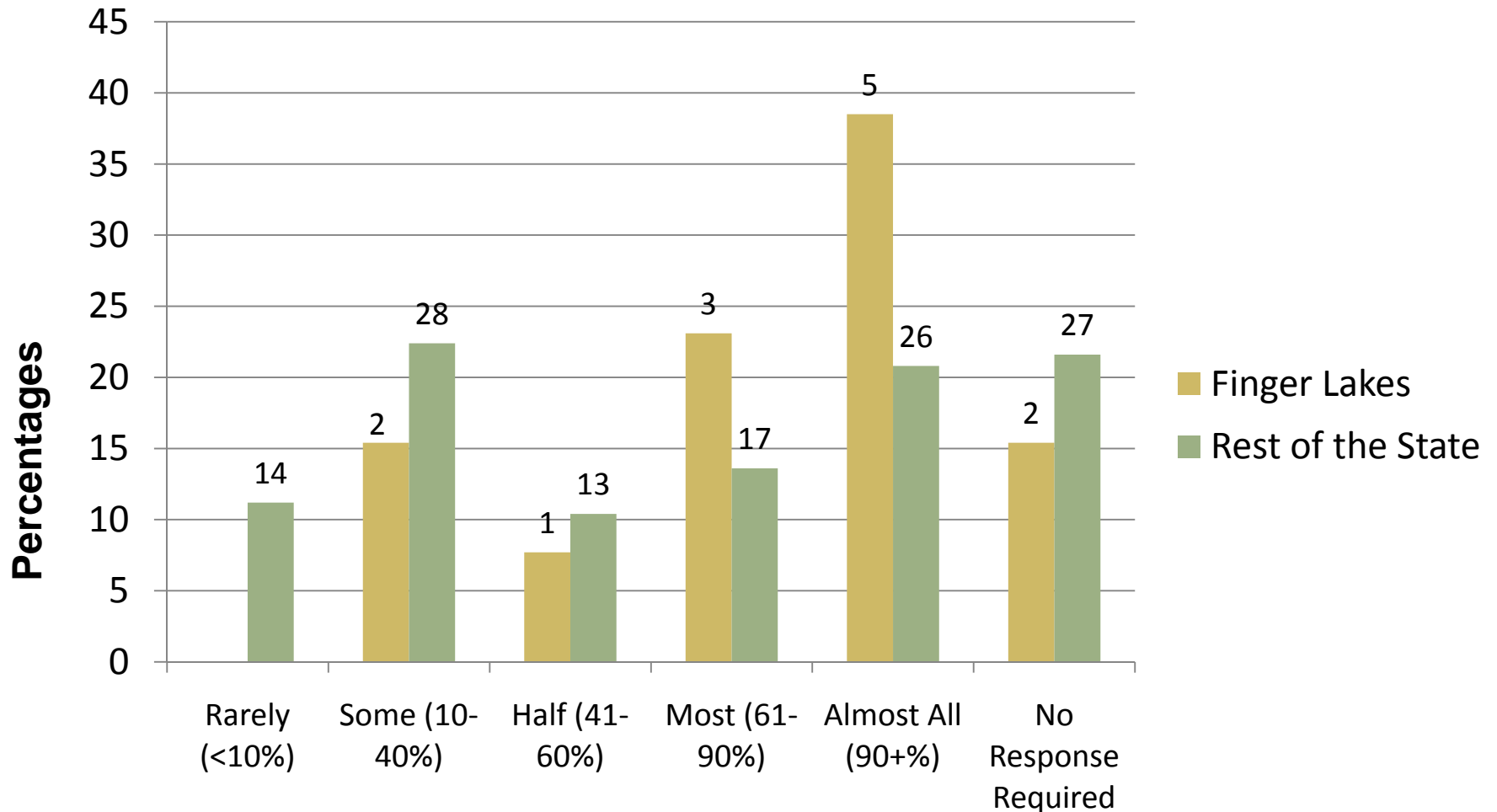


Estimate of the percentage of mothers participating in 24-hour rooming-in at each level of perinatal designation by the percentage of hospitals at that designation.





# Rooming-In Rates by Region



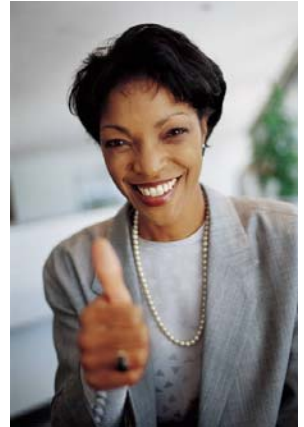
# Baby Friendly Hospital Initiative

- **Step eight (8)**- Encourage breastfeeding on demand.



# Unrestricted Breastfeeding

- 100% of the Finger Lakes hospitals breast feeding policies encourage breast feeding on demand; compared to 120/124 (96.8%)
- 100% of the Finger Lakes hospitals allow for the mother to request the infant to be brought to her to breastfeed anytime day or night; compared to 122/124 (98.4%)

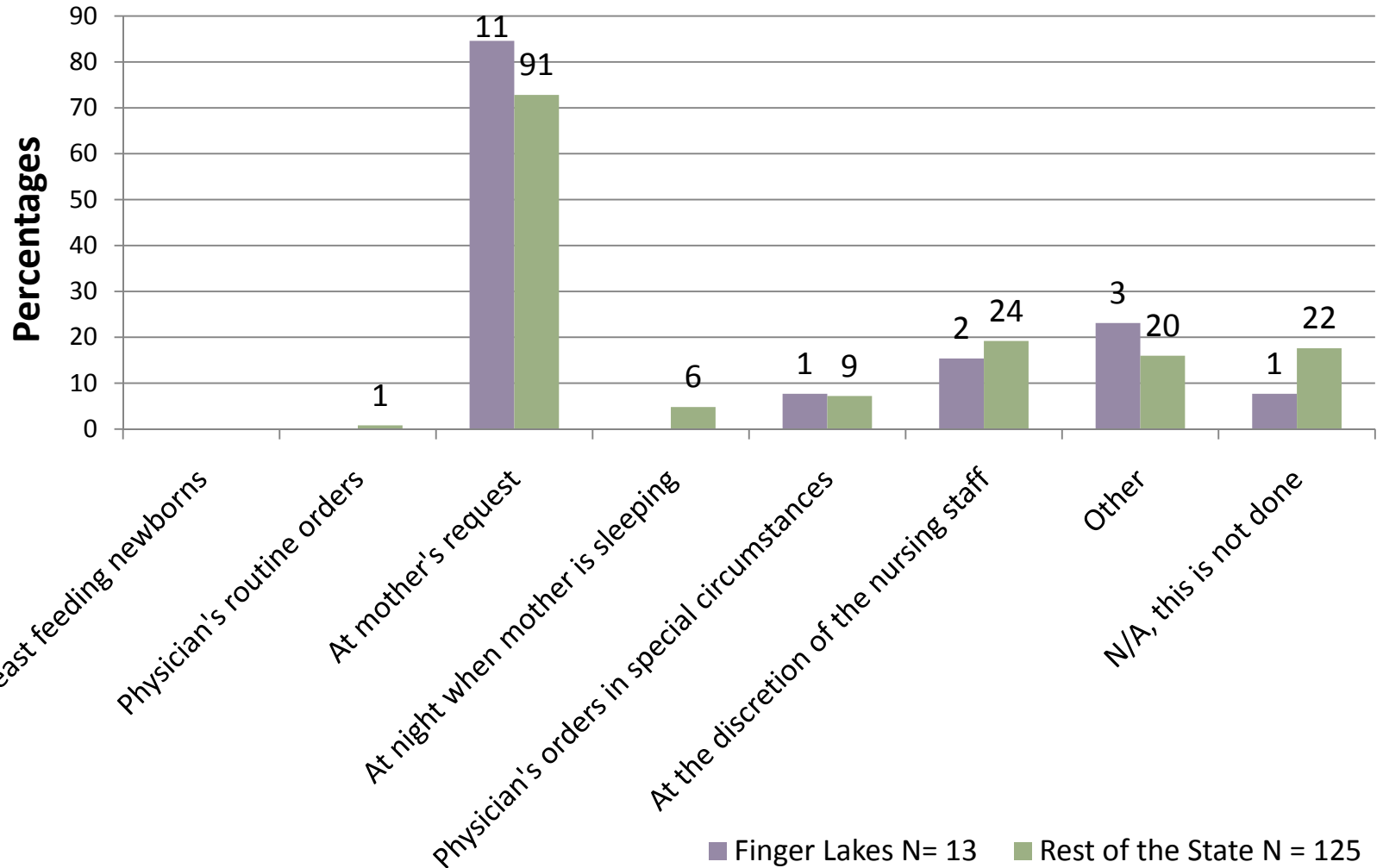


# Baby Friendly Hospital Initiative

- **Step nine (9)**- Give no pacifiers or artificial nipples to breastfeeding infants.



# Pacifier Use



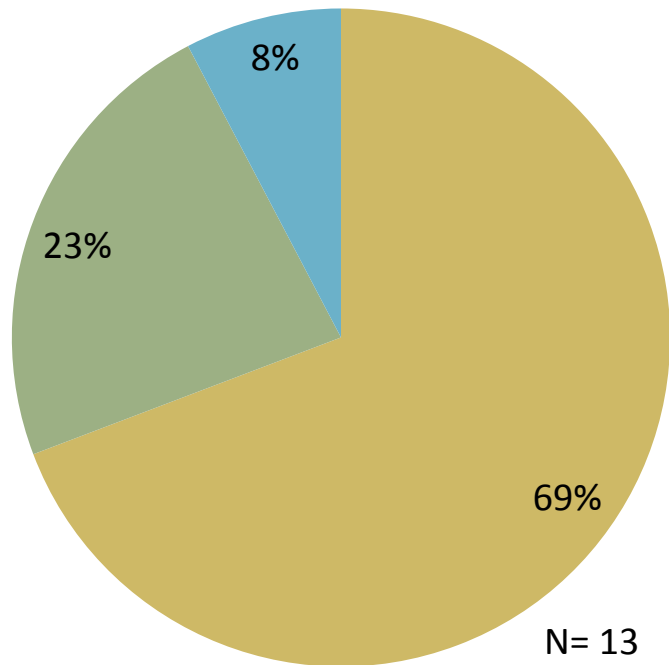
# Baby Friendly Hospital Initiative

- **Step ten (10)**- Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

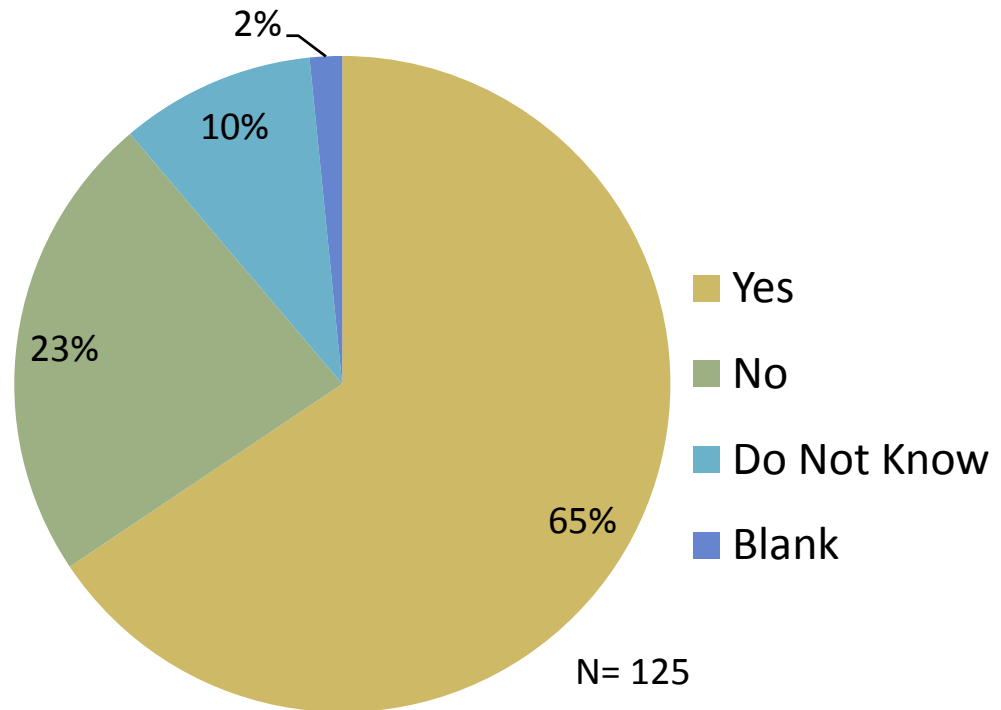


# Consideration of Implementing Baby Friendly Protocols

## Finger Lakes Region



## Rest of the State



- A major deterrent from implementation is the associated costs. 2/9 (22.2%) Finger Lakes versus 29/91(31.9%) statewide

# Provision of Materials from Formula Companies

*Get your sample now!*



Formula company materials	Finger Lakes Region n/N (%)	Rest of the State n/N (%)
Yes, with formula	2/13 (15.4%)	40/125 (32.0%)
Yes, without formula	6/13 (46.2%)	42/125(33.6%)
Both types	1/13 (7.7%)	7/125(5.6%)
No	4/13 (30.8%)	34/125 (27.2%)

(2 refused)





# Breastfeeding Assistance Offered

## Types of Assistance Offered to Breastfeeding Mothers at Discharge

Support Measure	Finger Lakes Region n (%)	Rest of the State n (%)	Support Measure	Finger Lakes Region n (%)	Rest of the State n (%)
24-hour phone number	12 (92.3%)	100 (80.0%)	Hospital-based support group	2 (15.4%)	54 (43.2%)
Public health nurse home visit	5 (38.5%)	51 (40.8%)	WIC referral	12 (92.3%)	104 (83.2%)
Postpartum follow-up visit	5 (38.5%)	51 (40.8%)	Community-based support group	8 (61.5%)	74 (59.2%)
Lactation consultant referral	7 (53.9%)	86 (68.8%)	Other	2 (15.4%)	17 (13.6%)



# Familial Barriers to Breastfeeding

## Familial Issues Which Create a Barrier to Successful Establishment of Breastfeeding

Rank*	Barrier	Finger Lakes N (%)	Rest of State N (%)
1	Mom not receptive to breastfeeding	10 (76.9%)	80 (64.0%)
2	Culture of the family and mother	9 (69.2%)	93 (74.4%)
2	Inadequate prenatal education	8 (61.5%)	65 (52.0%)
2	Family is not receptive to breastfeeding	8 (61.5%)	59 (47.2%)
5	Family unprepared for breastfeeding	8 (61.5%)	58 (46.4%)
6	Mom unprepared for breastfeeding	7 (53.9%)	70 (56.0%)
7	Mom does not like rooming-in	4 (30.8%)	54 (43.2%)
8	Family does not like rooming-in	2 (15.4%)	34 (27.2%)
9	Mom has no access to lactation coordinator	1 (7.7%)	10 (8.0%)

\* Rank is decided upon Finger Lakes responses



# Hospital Barriers to Breastfeeding

## Barriers to Successful Establishment of Breastfeeding for Hospitals Providing Maternity Services in New York State

Rank*	Barrier	Finger Lakes N (%)	Rest of State N (%)
1	Mixed messages from different professional staff members	7 (53.9%)	92 (73.6%)
2	Lack of financial resources/support	7 (53.9%)	42 (33.6%)
3	Time restraints for lactation coordinators	4 (30.8%)	62 (49.6%)
3	Lack of training in support of breastfeeding	4 (30.8%)	37 (29.6%)
5	No coordinator present	3 (23.1%)	17 (13.6%)
5	Staff turnover	3 (23.1%)	9 (7.2%)
7	Incomplete records	0 (0%)	2 (1.6%)
7	Mother's HIV status unknown at time of delivery	0 (0%)	2 (1.6%)

\* Rank is decided upon Finger Lakes responses



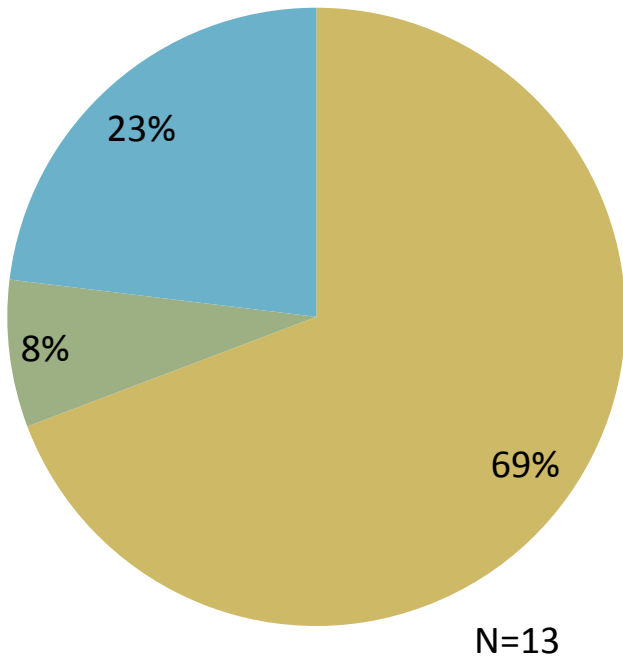
# Breast Feeding Resources After Discharge

- All 13 Finger Lakes region hospitals provide discharge instructions regarding breastfeeding
  - 9/13 (69.2%) provide mothers with a 24 hour lactation assistance telephone number
- 115/125 (92.0%) of the Rest of the State hospitals provide discharge instructions on breast feeding
  - 92/116 (79.3%) provide mothers with a 24 hour lactation assistance telephone number

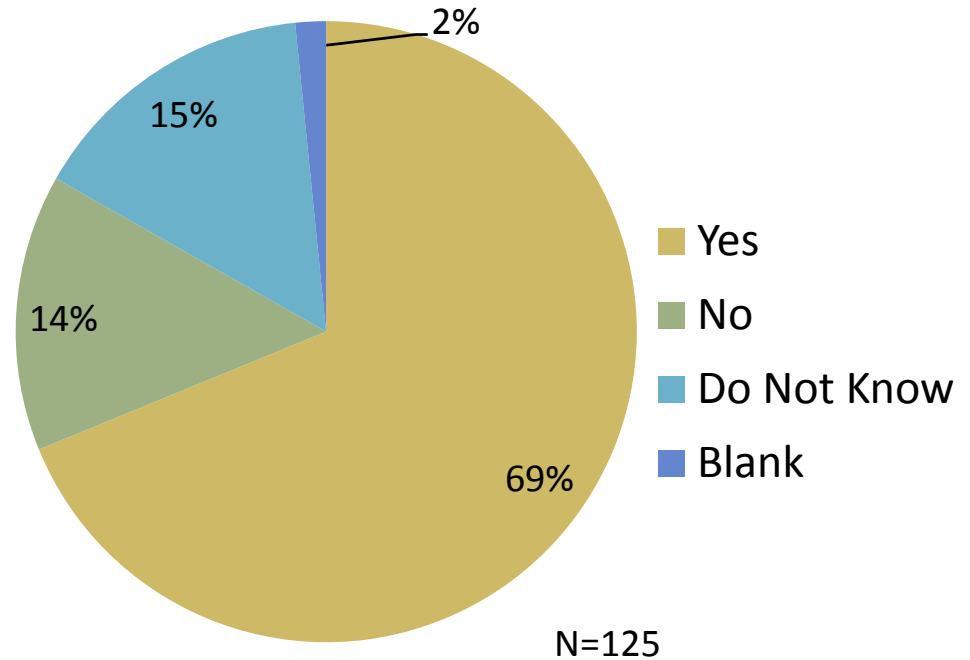


# Community Based Breast Feeding Support

## Finger Lakes



## Rest of the State



In the Finger Lakes region top breast feeding resources are:

- La Leche League 6/9 (66.7%) and
- WIC 4/9 (44.4%)

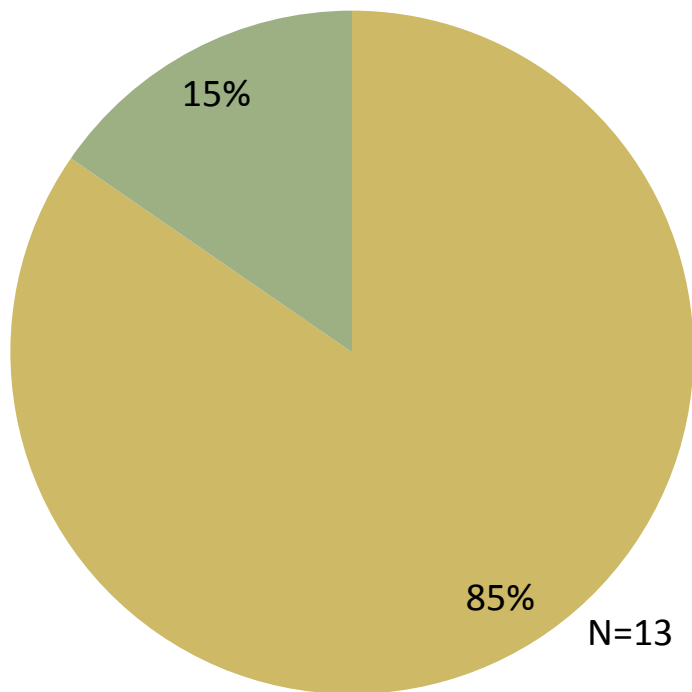


# OTHER QUESTIONS FROM NYS BREASTFEEDING SURVEY

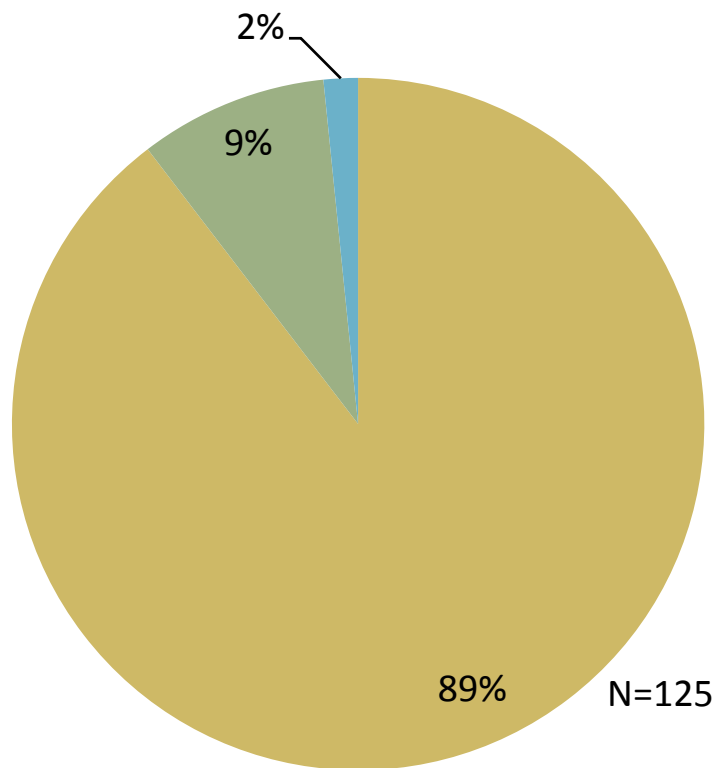


# Is Breast Feeding Assessment Noted on Maternity Care Plans?

## Finger Lakes

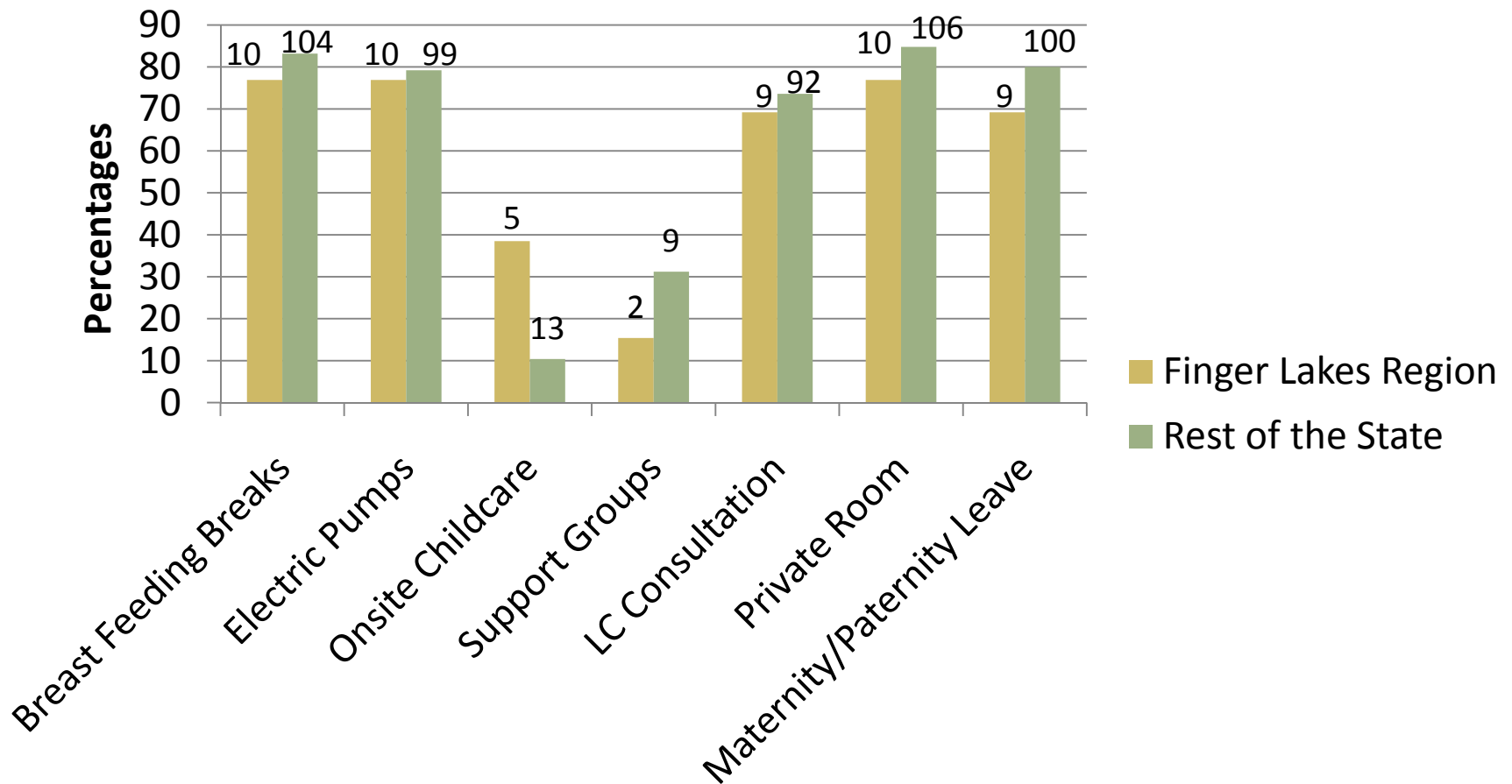


## Rest of the State



- Yes
- No
- Blank

# Benefits to Hospital Staff Members Who are Breastfeeding





# Outline

- Background
- Methods
- Results
- Conclusions
- Summary



# Conclusions of Regional Variations

- The Finger Lakes hospitals were on par with the rest of the State on the majority of breast feeding policies and outcomes
- Statistically significant regional differences in which hospital personnel records infant feeding information and the reporting period
  - Finger Lakes mainly a nurse reports feeding information
  - Finger Lakes reporting period is immediately afterbirth



# Conclusions of Regional Variations

- There were statistically fewer Finger Lakes hospitals who offered breastfeeding training to pediatric and OB physicians (15.4% v 49.6%)
- However there were statistically more Finger Lakes hospitals who offered onsite childcare for hospital personnel (38.5% vs 10.4%)



# Conclusions



- >40% of Level I perinatal centers keep mother and infant together throughout the hospital stay
- <1.5% of the hospitals in NYS routinely give formula, pacifiers, or glucose water to a breastfeeding infant
- The most reported barrier to breastfeeding amongst the staff was “mixed messages from different professional staff”

# Conclusions

- Hospitals are providing Breastfeeding training to nurses at a much higher rate than physicians
- Medicaid/ Family Health Plus is the primary payer for 44% of all births in NYS
- Not all prenatal clinics discuss the benefits of breastfeeding with their patients



# Conclusions

- Less women initiate breast feeding immediately after a cesarean section than after a vaginal birth.
- All hospitals allow a mother to hold her child within 30 minutes of giving birth
- Only 35 percent of Finger Lakes hospitals reported that the majority (90+%) of women participated in rooming-in.



# Conclusions

- To address barriers to breastfeeding, training should be considered for obstetric staff across NYS
  - These should address cultural barriers to breastfeeding
- NYS practicing obstetricians should incorporate a breastfeeding segment into prenatal visits
- The availability of community-based breastfeeding support groups needs to be conveyed to all new mothers



# Outline

- Background
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# Summary



- Survey revealed multiple barriers to breastfeeding success
- Break down barriers through:
  - Prenatal education for patients & families
  - Training programs for obstetric staff
- Subsequent investigations are needed to explore maternal incentives for prenatal class participation

# Thank You

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