

# Pilot Project in Obstetrical Outcomes Data Collection and Quality Analysis: Initial Report

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**M a s s a c h u s e t t s**  
**Perinatal Quality Collaborative**

# MPQC Goal

- Spread the use of best practices in obstetrical care
- Provide a resource for quality improvement to hospitals practicing obstetrics

# The Outcomes Pilot Project Idea

- Provide semi-annual, “real time”, outcomes analysis with comparison information within the state
  - Run tables for individual hospitals
  - Benchmarking data for community and tertiary care centers
- Utilize point of care and/or electronic charting data base information and minimize billing and coding data

# Regions



# Central Region



# Southeast Region



- Central Region: 7 hospitals approached
- Southeast Region: 6 hospitals approached

# Project Discussion with Hospitals

- Phone conference or visit in person
- Meeting with CMO, quality officers, labor and delivery managers, department chairs
- Data sharing agreements provided to all hospitals



# Recruitment Statistics

- Of 13 Hospitals approached for data
- 7 provided complete data (54%)
- 2 provided incomplete data (15%)
- 4 provided no data (31%)

# Reasons

## Provided Data

- Wanted benchmarking capability
- Wanted to collaborate within the state
- Desired to enhance their quality improvement processes

## Did Not Provide Data

- Staff turnover
- Technically not ready to report data on a monthly basis
- Did not want their data shared with other institutions

# Data Collection

- May 2013 – August 2013\*
- Excel spreadsheets utilized to report data on standardized reporting sheets
- Blinded analysis done by UMASS Quality analysis group
- \*reporting has continued through Oct 2013 and will continue indefinitely

# Basics

- 8 Centers analyzed
- 7272 Deliveries Reported

# Cohort Rates

- Vaginal Delivery: 67.1%
- Operative Delivery: 4%
- Primary Cesarean: 17.1%
- Preterm Delivery Rate: 9.9%

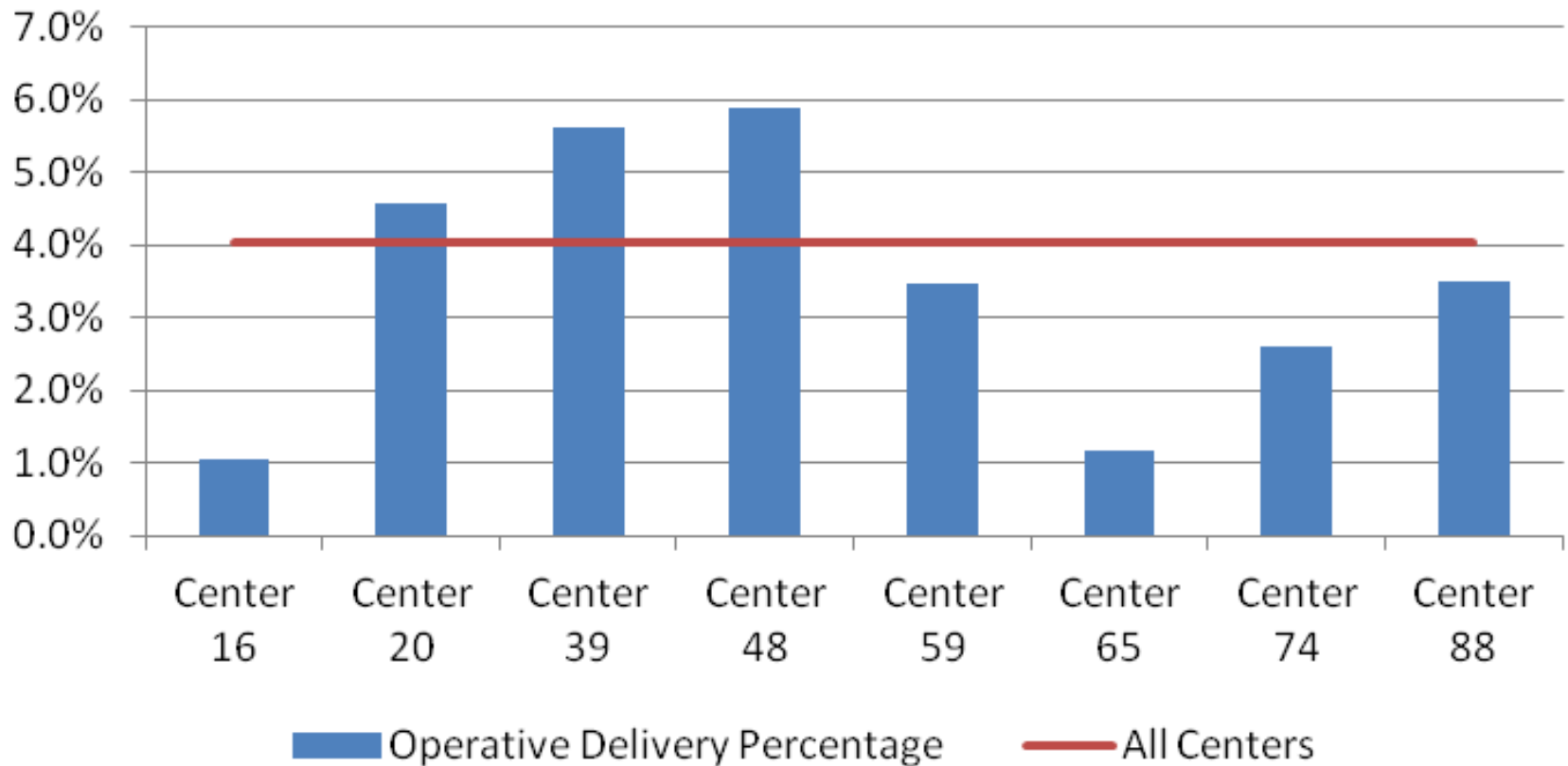
# Cohort Rates

- Maternal Transfusion: 0.98%
- Maternal ICU Admit: 0.38%
- Term NICU Admit: 5.6%
- Brachial Plexus Injury: 0.12%

# Baseline Statistics Reported - Denominators

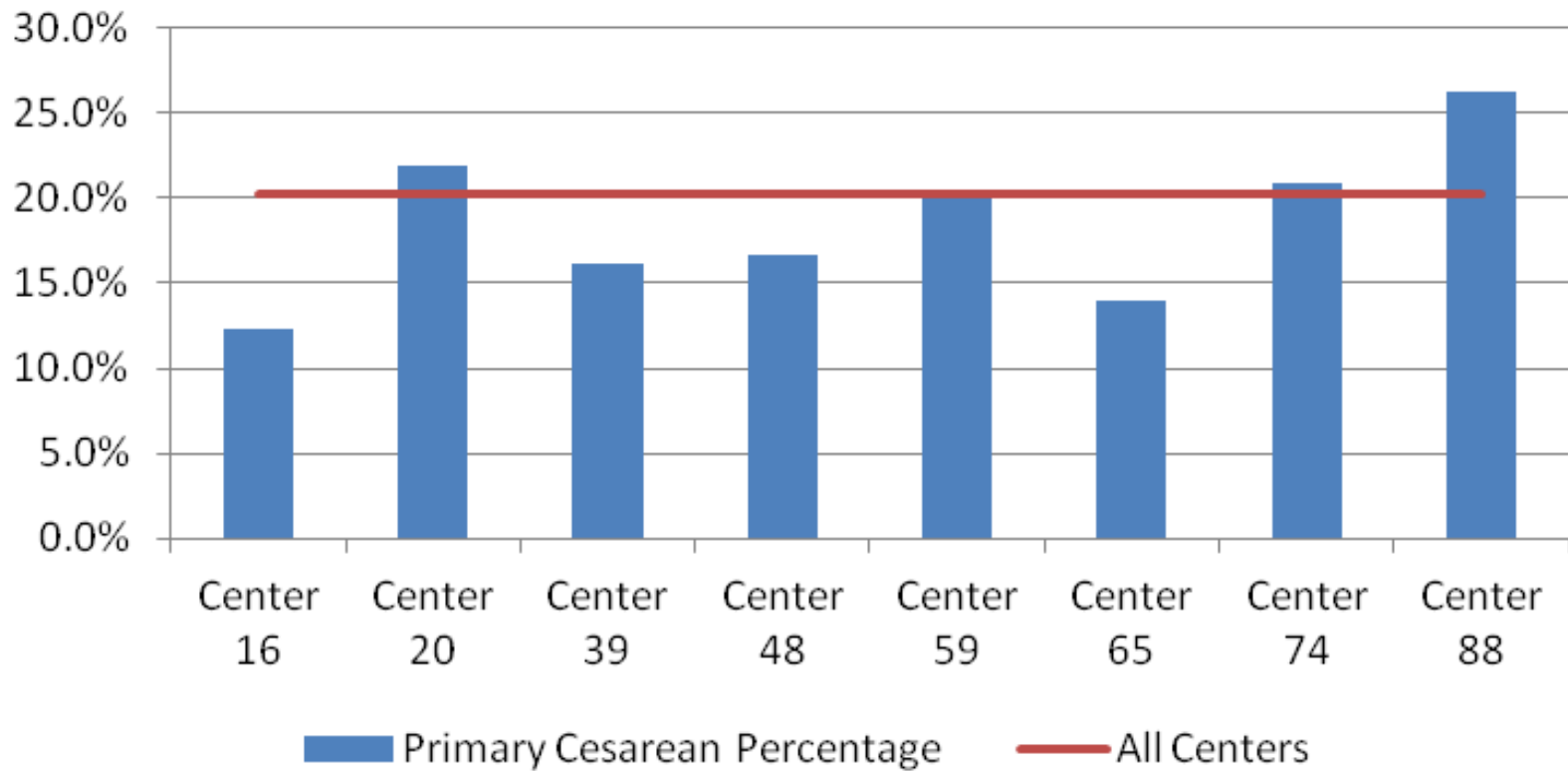
- NSVD
- VBAC
- Operative Vaginal Delivery
- Primary Cesarean Delivery
- Repeat Cesarean Delivery
  
- -Term and Preterm Deliveries

# Operative Delivery Percentage

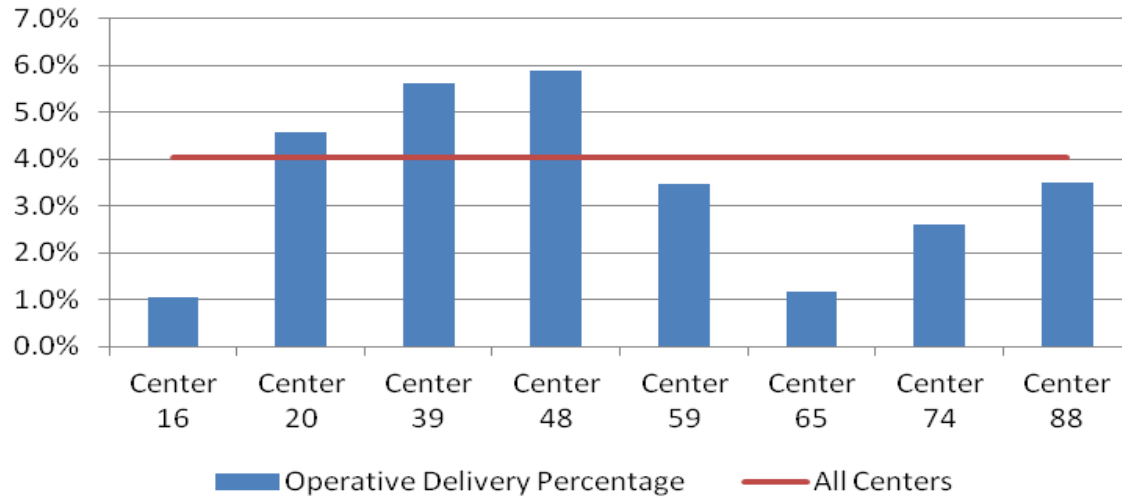




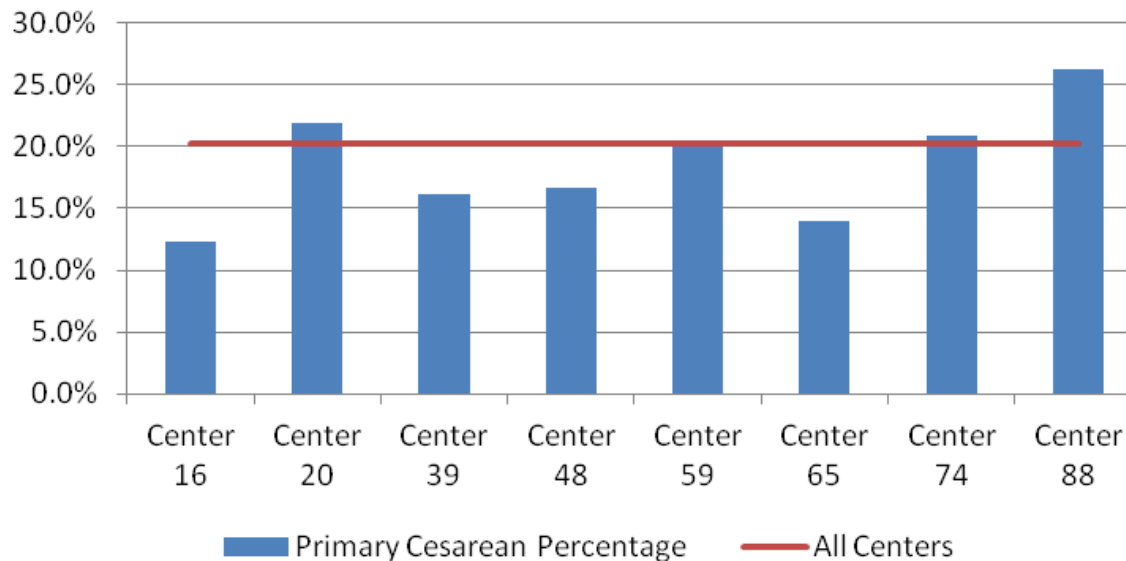
# Primary Cesarean Percentage



## Operative Delivery Percentage



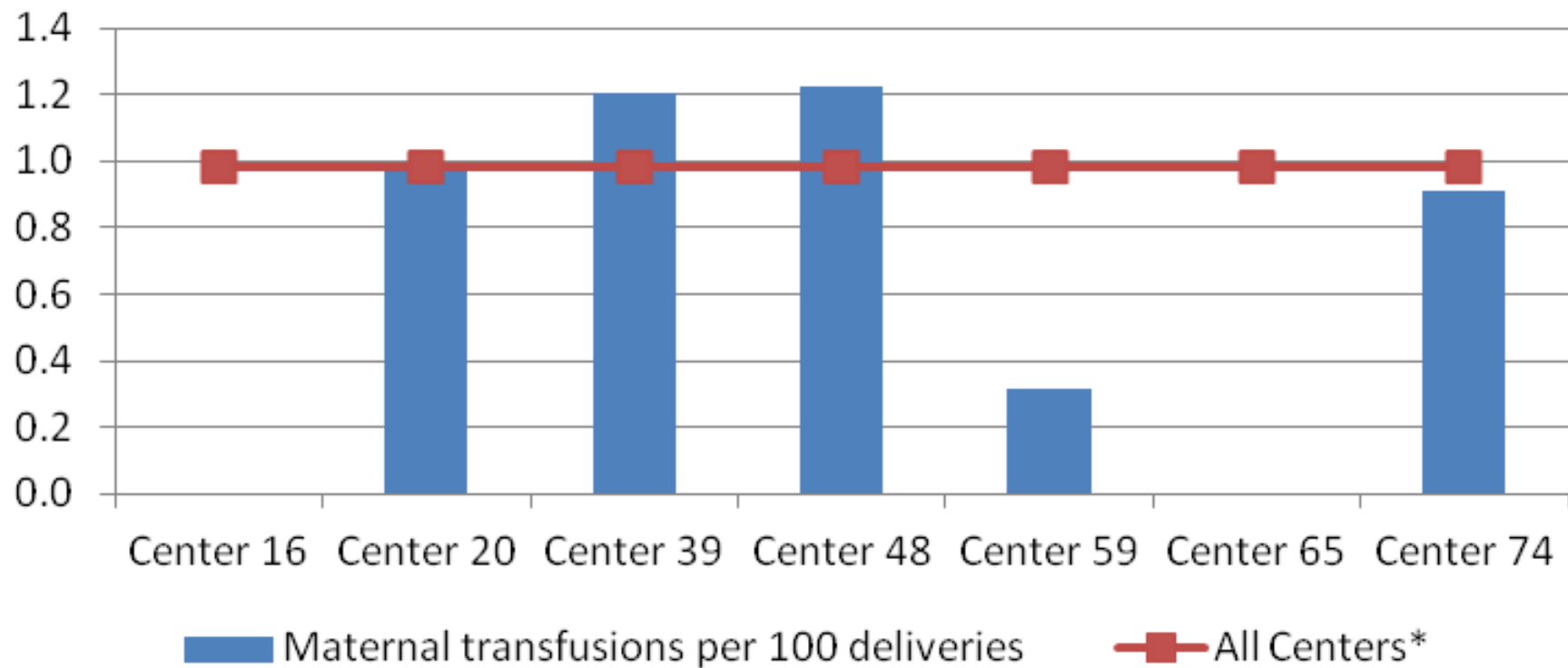
## Primary Cesarean Percentage



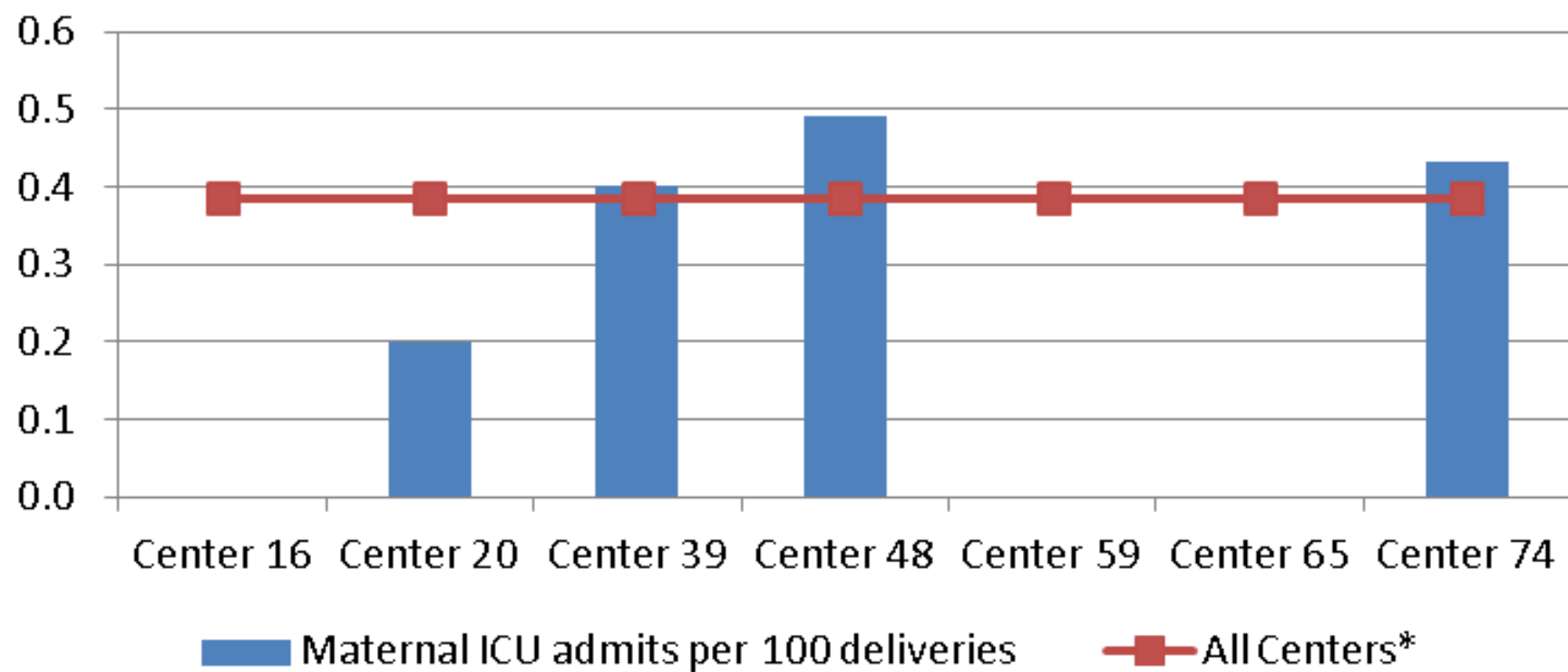
# Outcomes Reported - Numerators

- Term NICU Admission
- 5 minute APGAR less than 7
- Arterial Cord ph <7.0
- Maternal Transfusion of Blood Products
- Maternal CCU/SICU Admission
- 3<sup>rd</sup> and 4<sup>th</sup> degree lacerations
- Brachial Plexus Injury

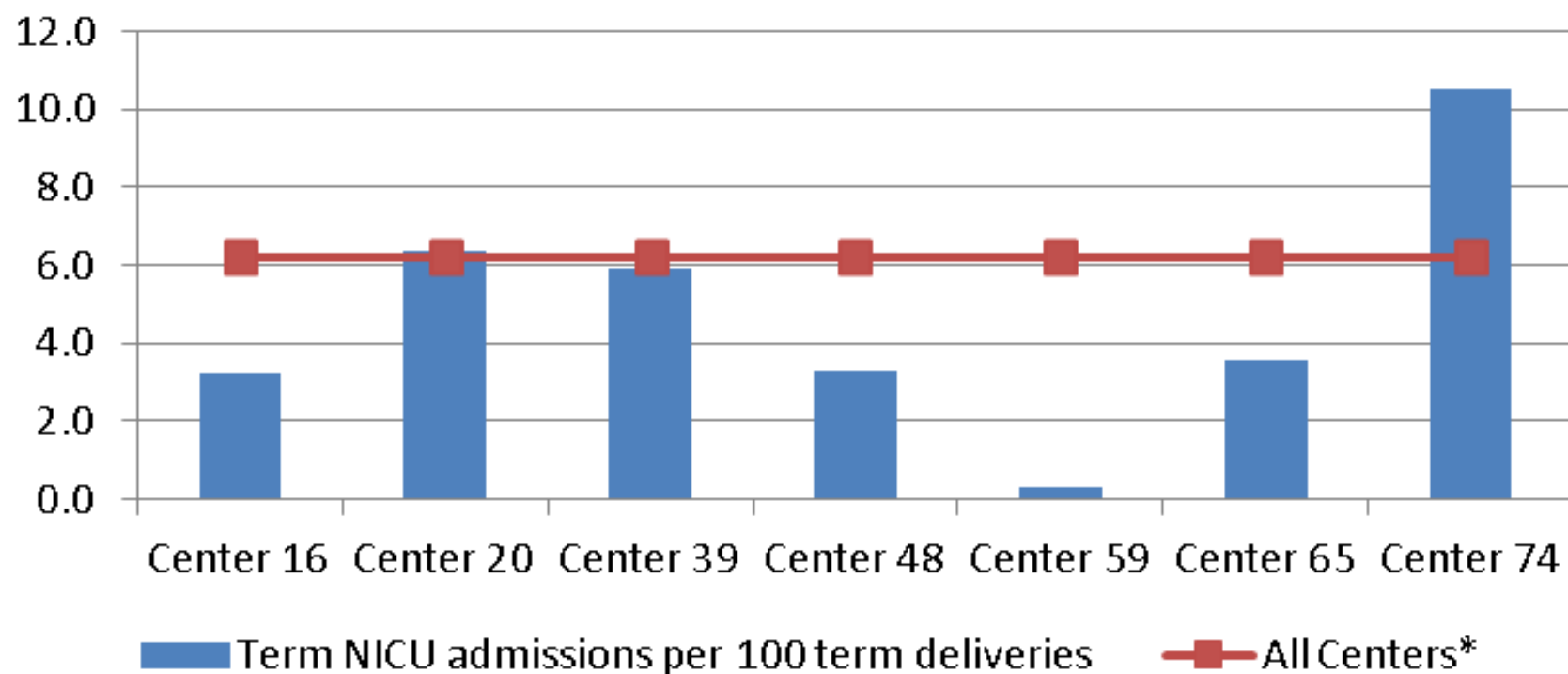
## Maternal transfusions per 100 deliveries



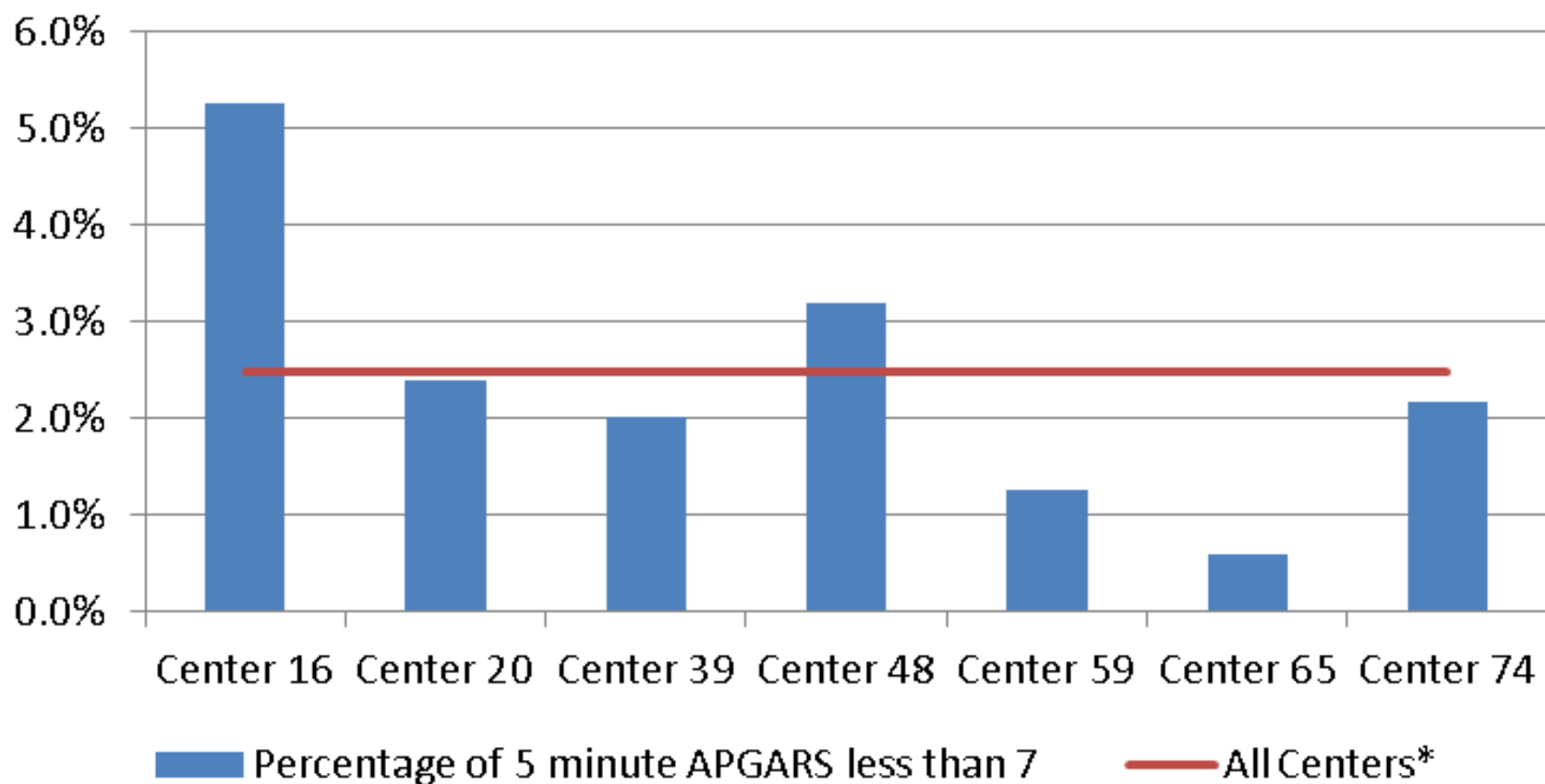
## Maternal ICU admits per 100 deliveries



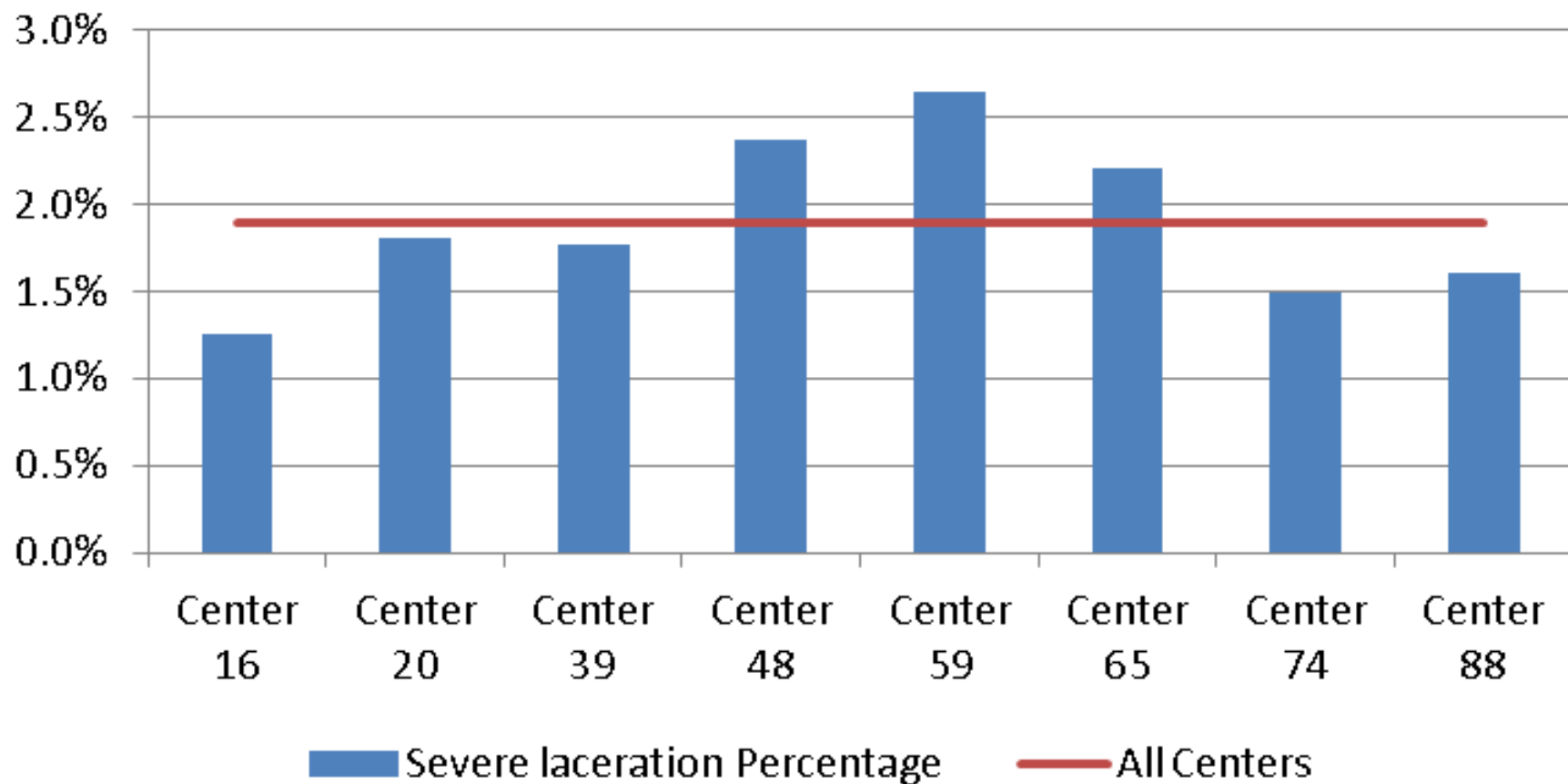
## Term NICU admissions per 100 term deliveries



## Percentage of 5 minute APGARs less than 7

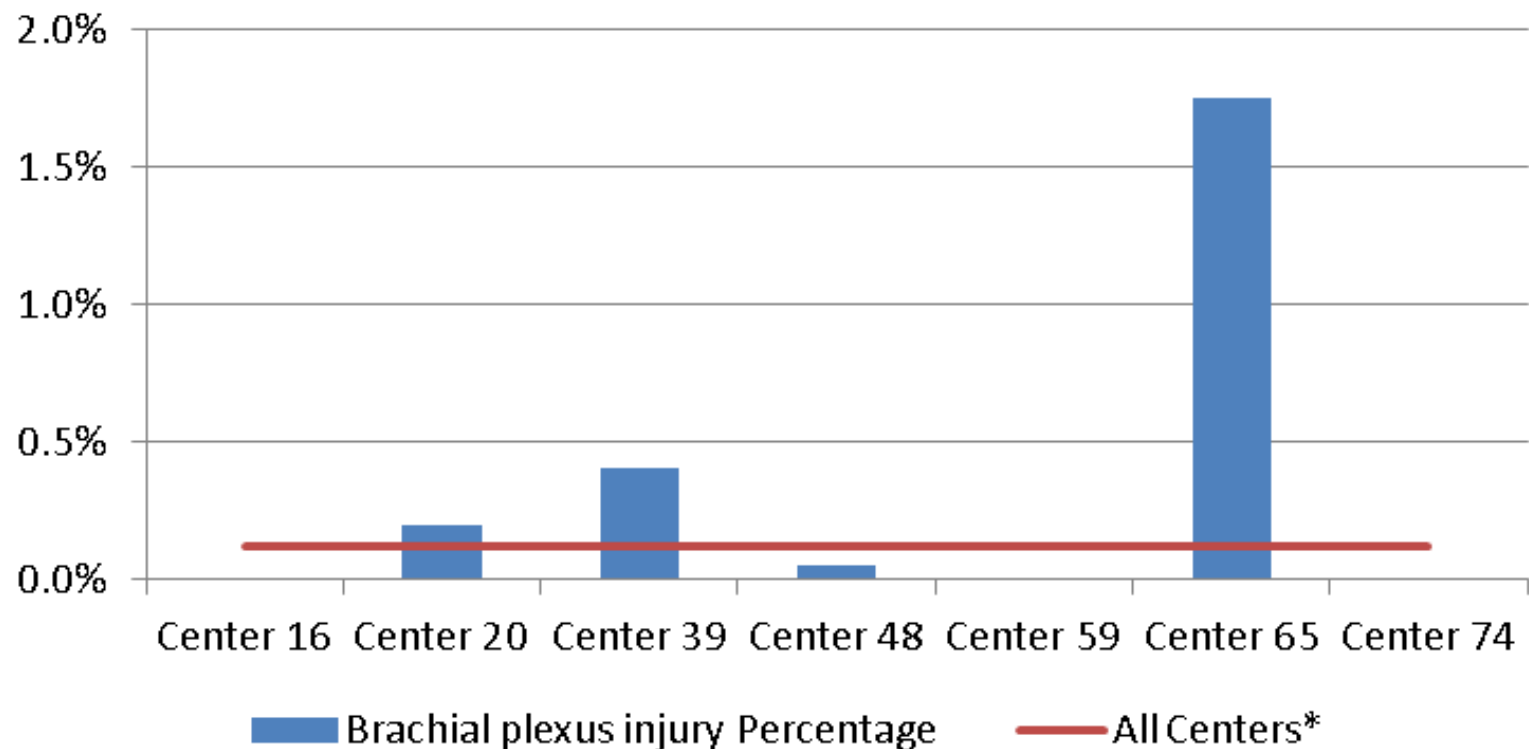


## Severe Laceration Percentage





## Brachial Plexus Injury Percentage



# Future Data

- Add Run Tables at 12-18 months of data collection for individual hospitals
- Possibly expand outcomes collected
  - Input from member hospitals

# Aim

- Not a research study
- Gather data for future quality variance analysis to be used by individual hospitals to target and follow quality improvement projects
- A service provided to member hospitals to help them with continuous improvement work

# Future Goals

- Expand to remainder of the state – start collecting May 2014 with new sites
- Expand to utilize RedCap Data Base
  - Increased ease, anonymity and security

# Want to Join?

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