

Obstetrical Outcomes Data Collection and Quality Analysis: 2014 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 Project Idea

- Big Centers can afford NPIC
- Small Centers can't afford NIPC
- Provide usable quality data to all state maternity hospitals

Regions



Representation

- Southeast Region: 5 centers
- Central Region: 4 centers
- Western Region: 3 centers
- Northeast Region: 1 center
- Boston Region: 0 centers

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 15 Hospitals approached for data
- 11 provided complete data (74%)
- 2 provided incomplete data (13%)
 - “Oh so close”
- 2 provided no data (13%)

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

- January 2014 – September 2014
- Excel spreadsheets utilized to report data on standardized reporting sheets
- Blinded analysis done by UMASS Quality analysis group

Basics

- 13 Centers analyzed
- 14447 Deliveries Reported
 - (2013 7243 deliveries reported)
- Approximately 27% of the states deliveries over the time period

Baseline Statistics Reported - Denominators

- NSVD
- VBAC
- Operative Vaginal Delivery
- Primary Cesarean Delivery
- Repeat Cesarean Delivery

- -Term and Preterm Deliveries

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
- 3rd and 4th degree lacerations
- Brachial Plexus Injury

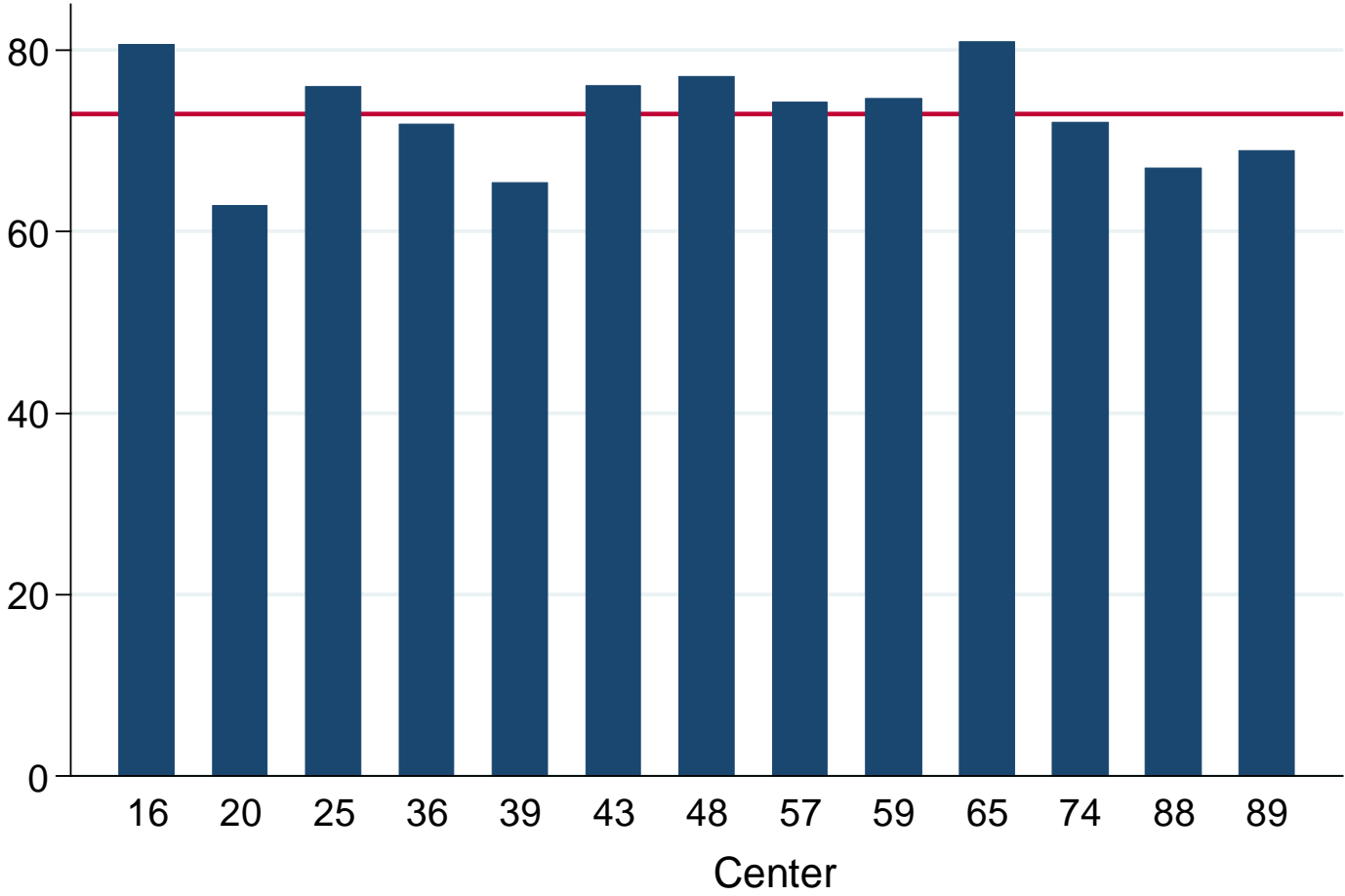
Cohort Rates

- Vaginal Delivery: 72.8%
- Operative Delivery: 3.58%
- Primary Cesarean: 20.05%
- Preterm Delivery Rate: 16.63%
- VBAC Rate: 1.96%

Cohort Rates

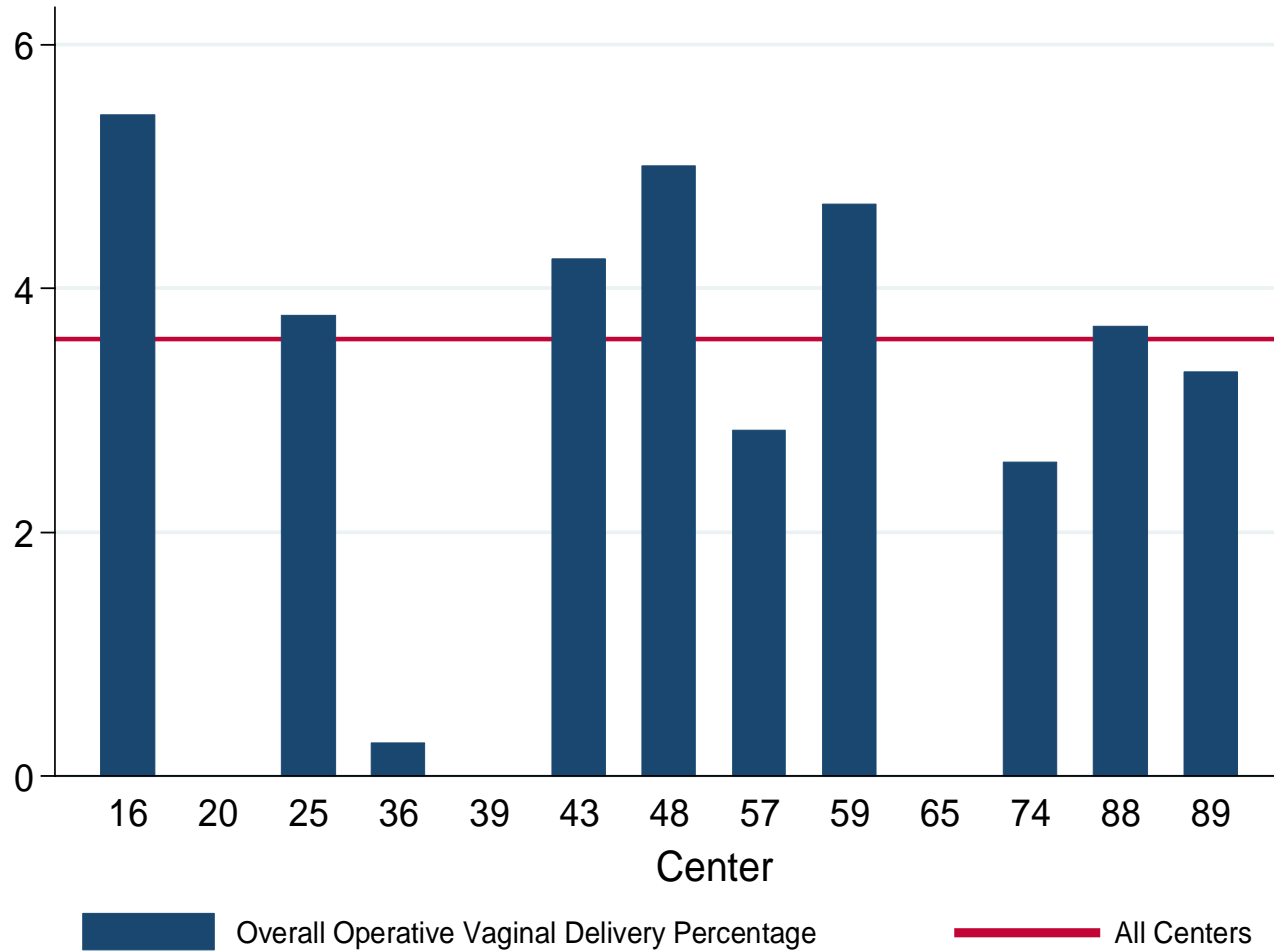
- Maternal Transfusion: 1.23%
- Maternal ICU Admit: 0.23%
- Term NICU Admit: 3.16%
- Brachial Plexus Injury: 0.12%

Overall Vaginal Delivery Percentage

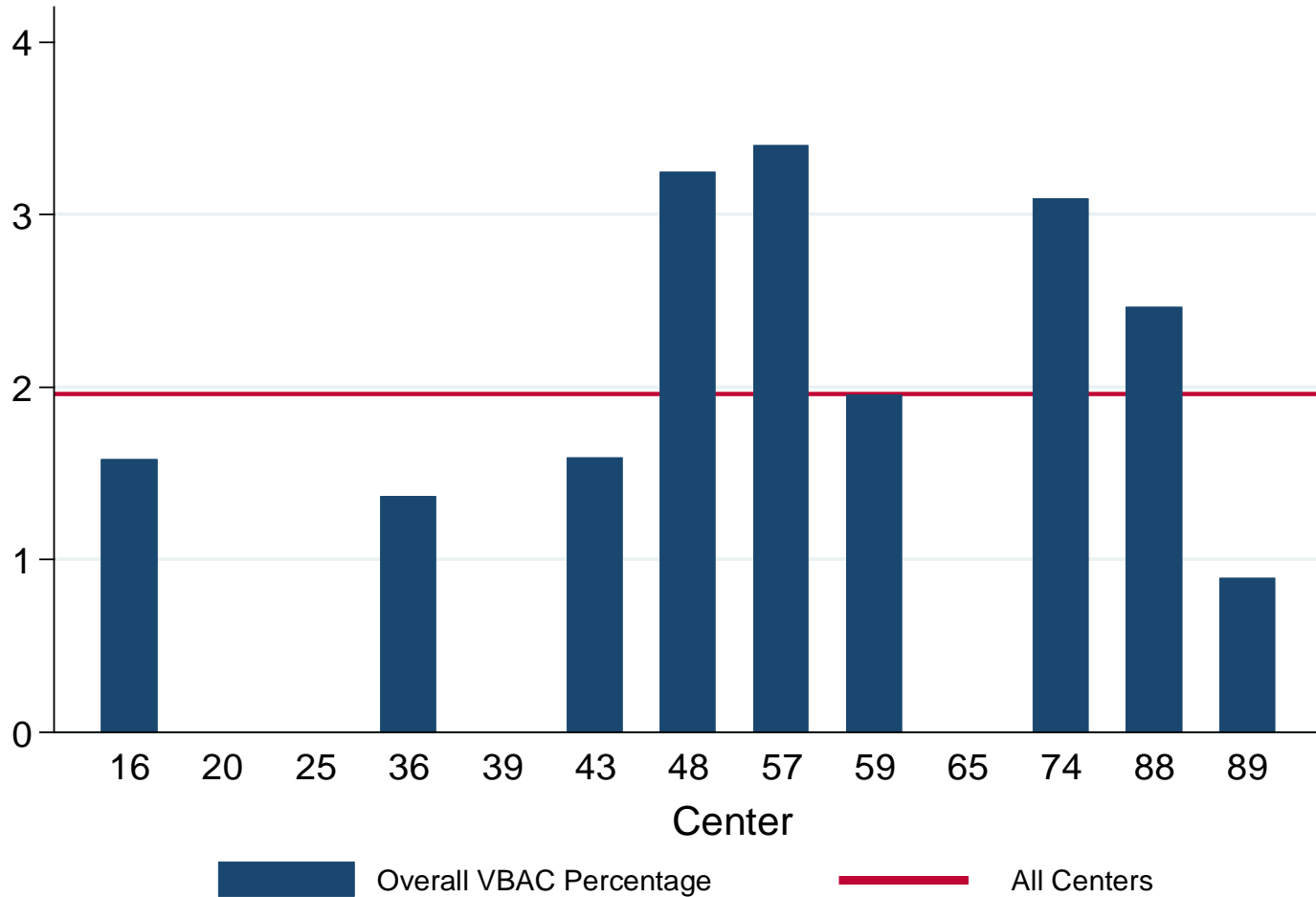


Overall Vaginal Delivery Percentage All Centers

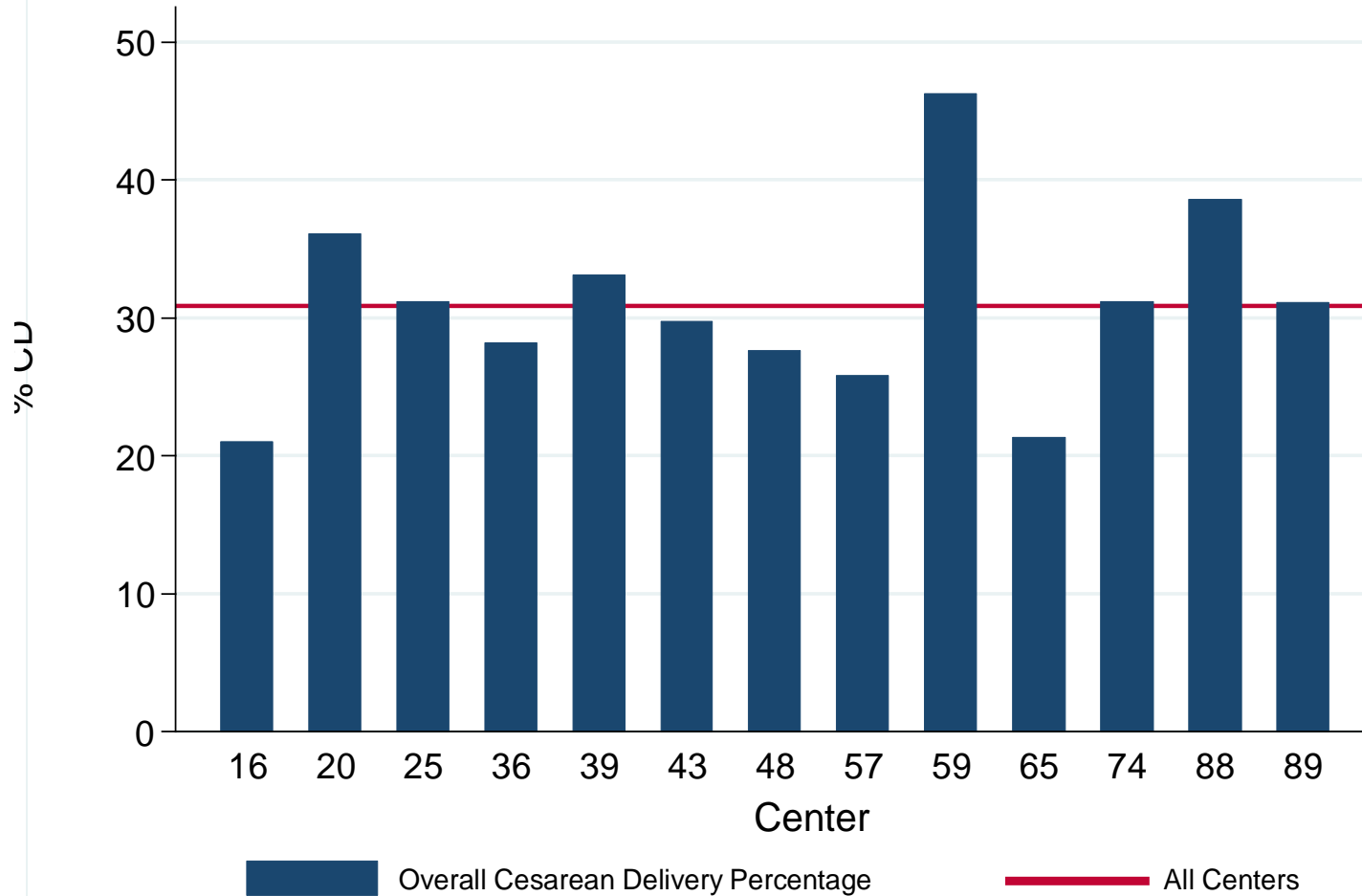
Overall Operative Vaginal Delivery



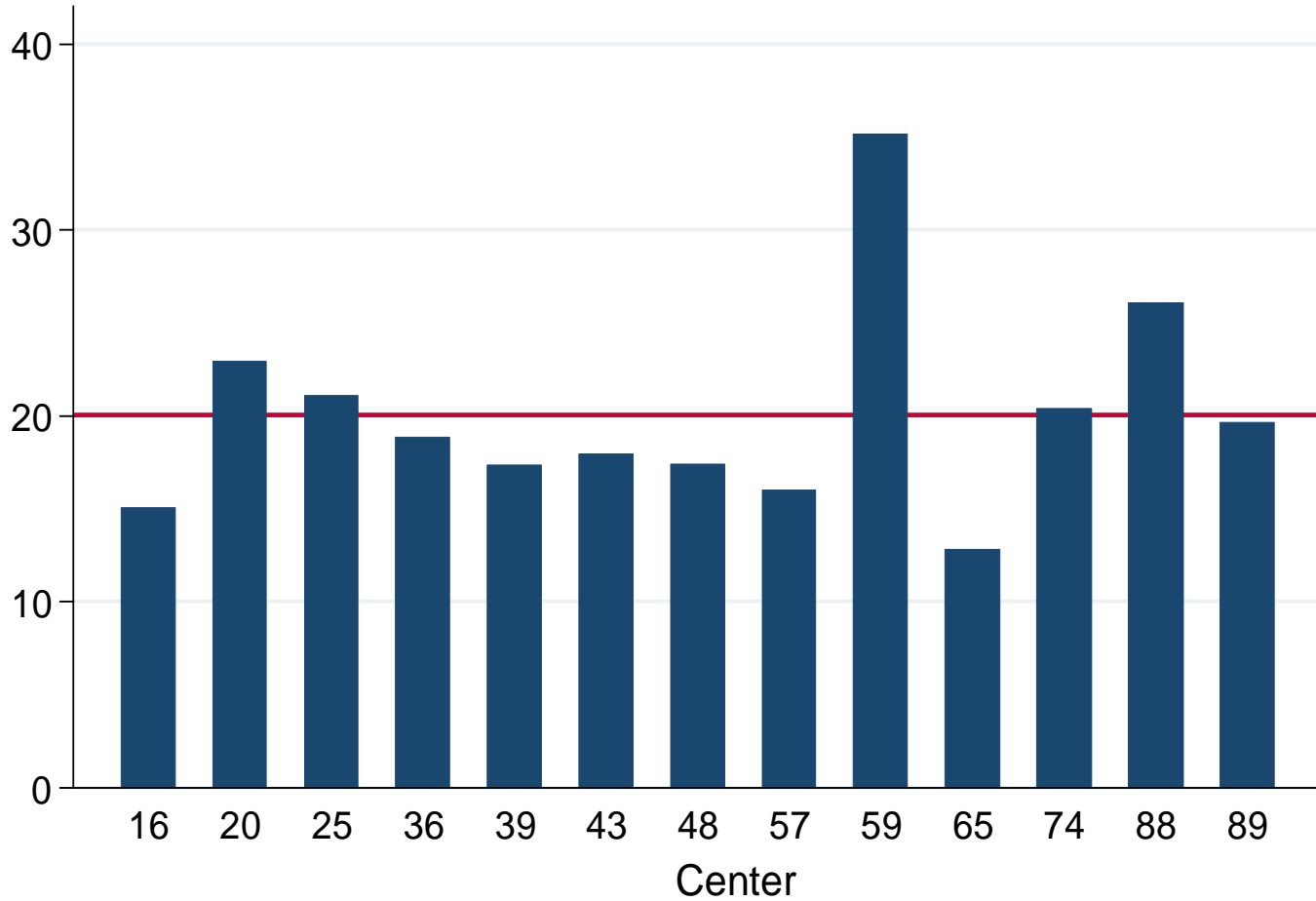
Overall VBAC Percentage



Overall Cesarean Delivery Percentage



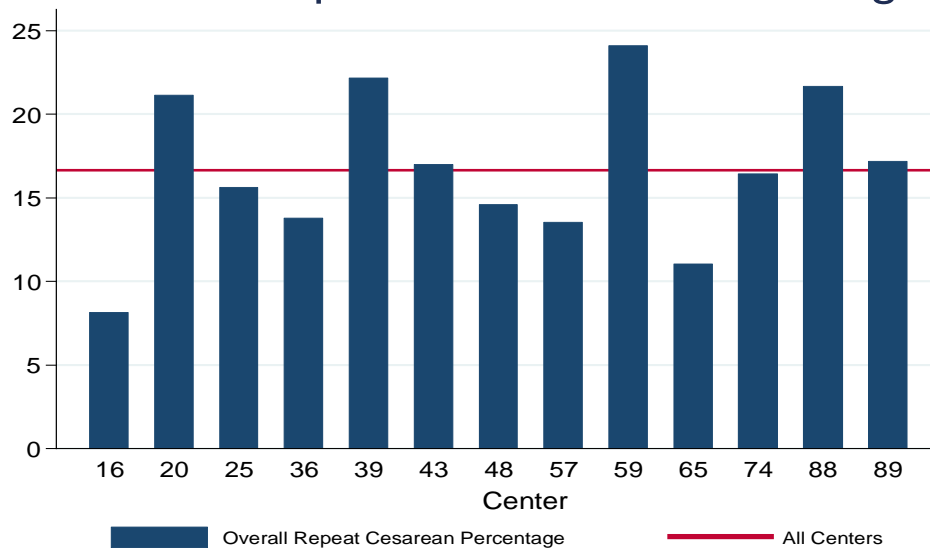
Overall Primary Cesarean Percentage



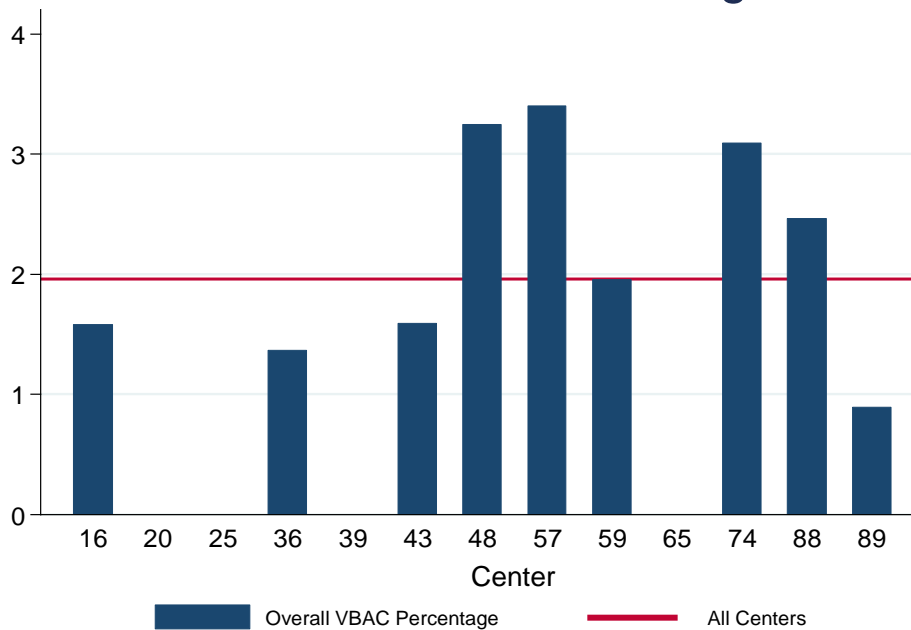
Overall Primary Cesarean Percentage

All Centers

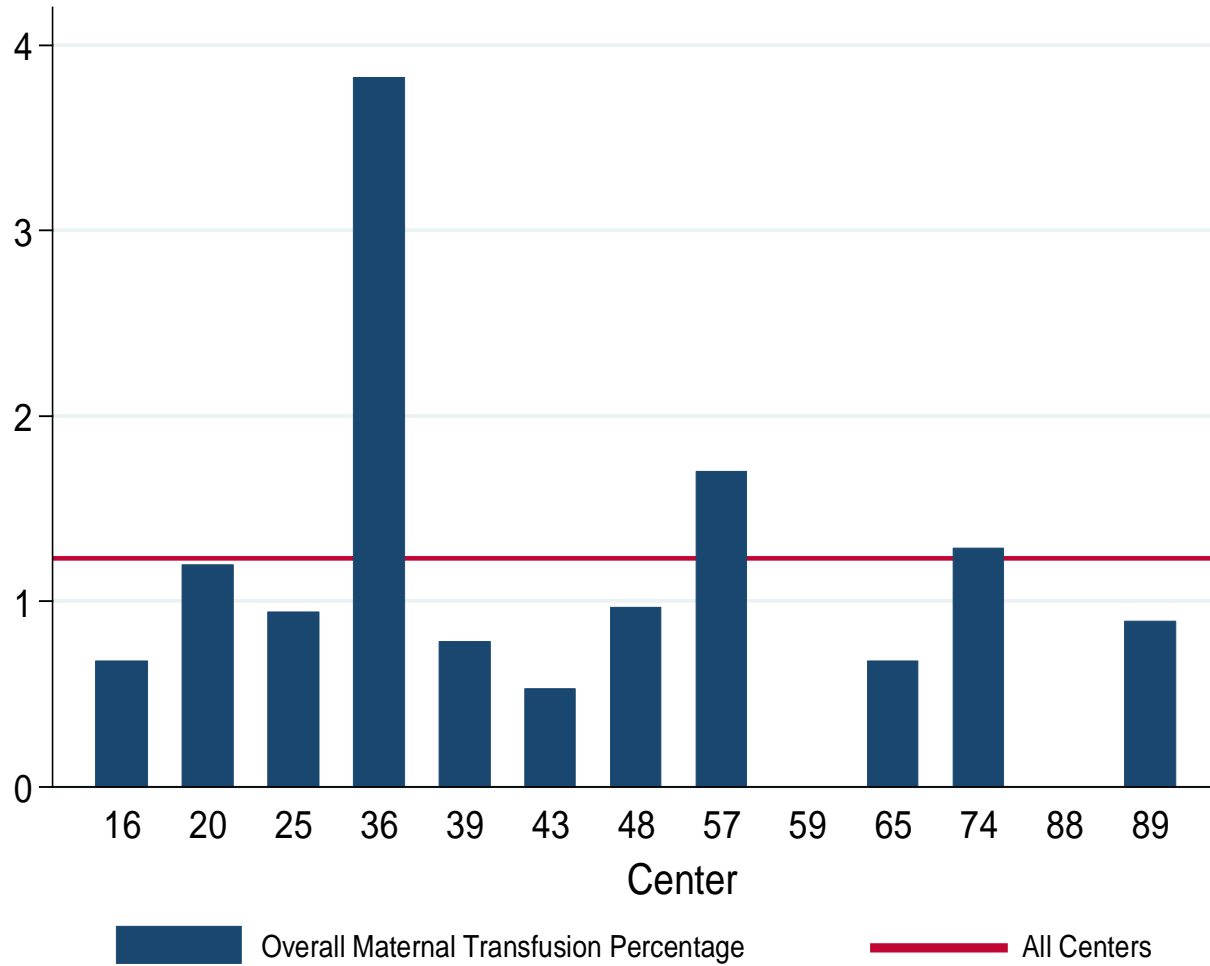
Overall Repeat Cesarean Percentage



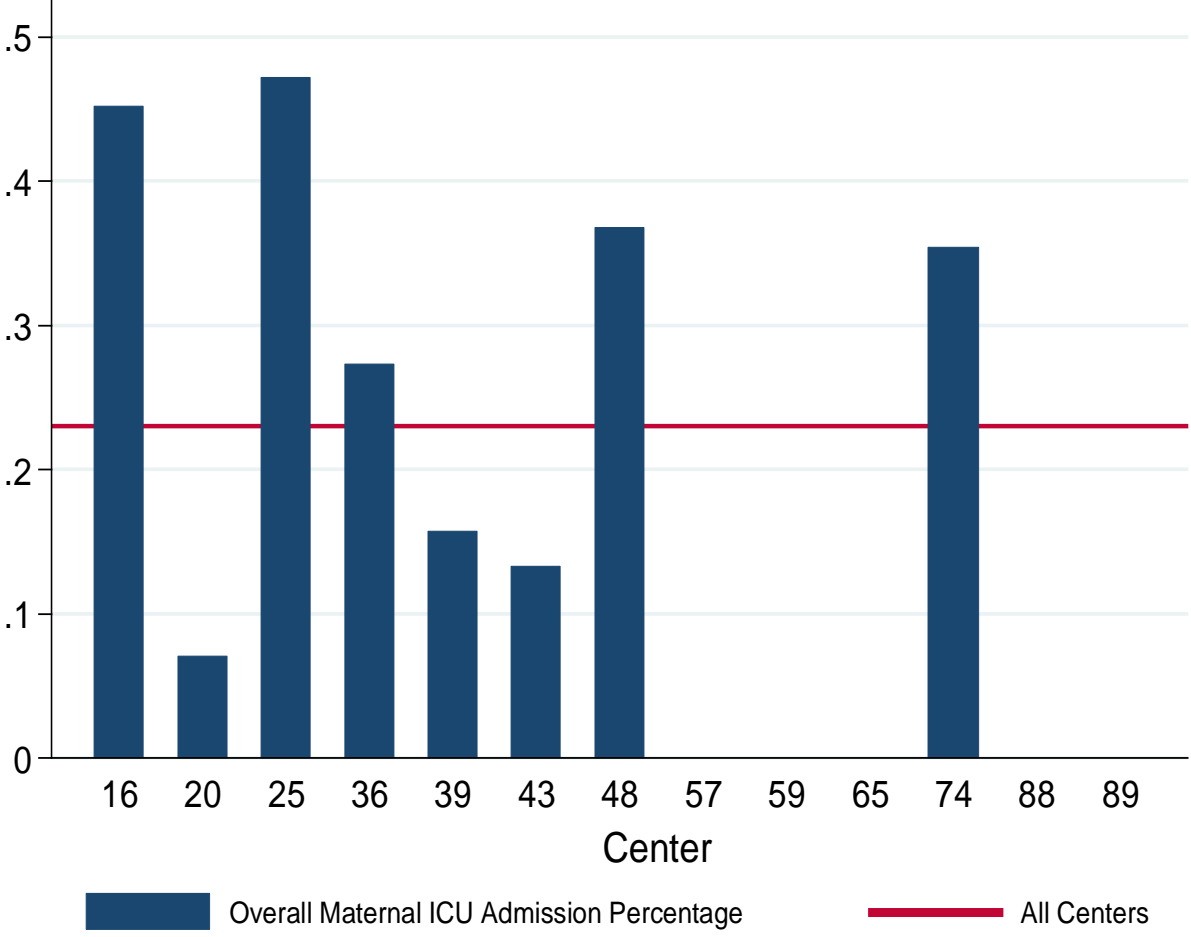
Overall VBAC Percentage



Overall Maternal Transfusion Percentage

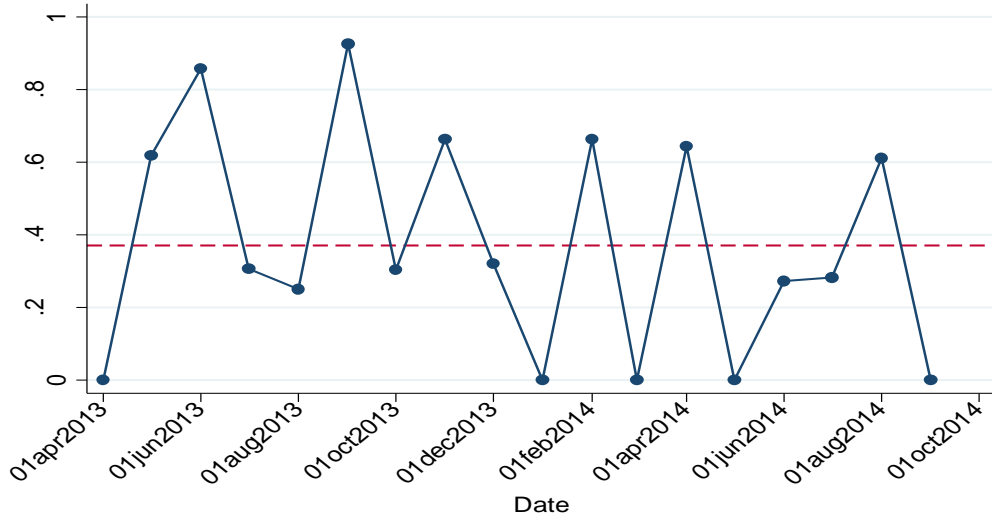


Overall Maternal ICU Admission

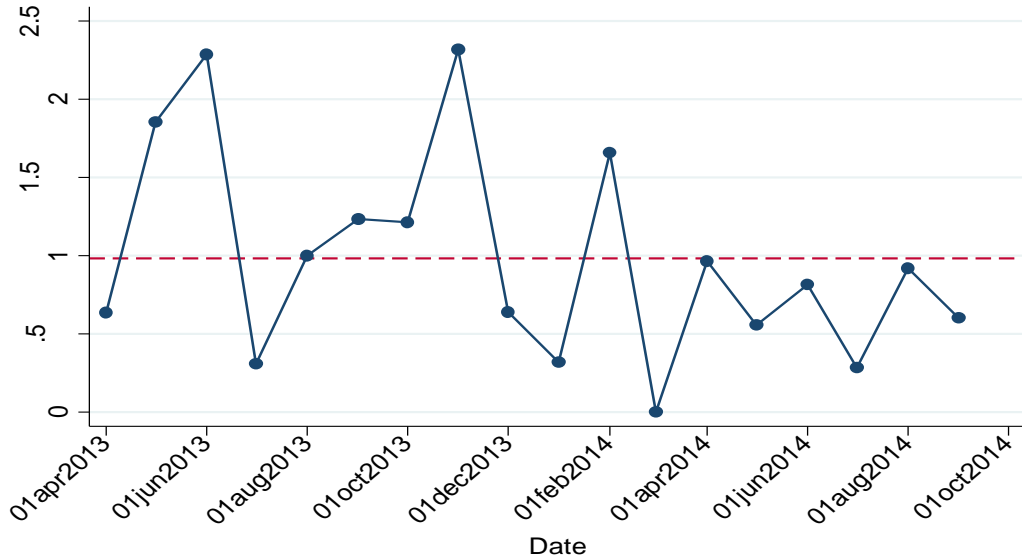


Run Tables

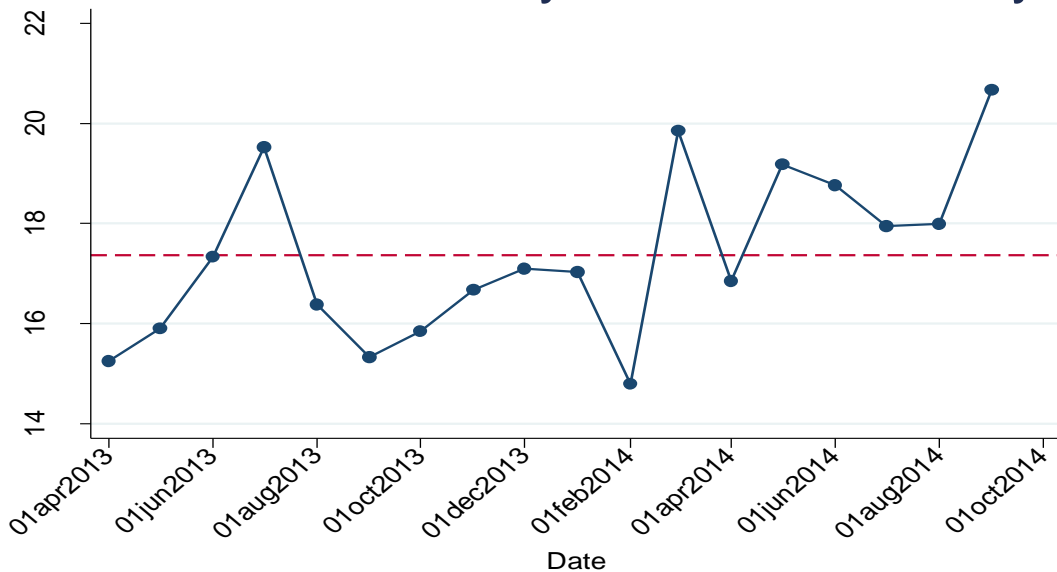
Center 48 Maternal ICU Admissions



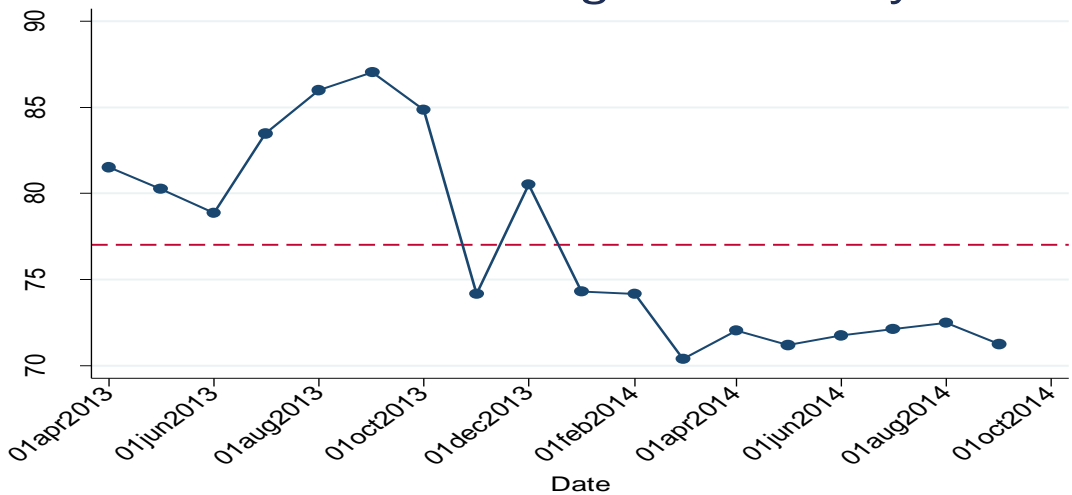
Center 48 Maternal Transfusions



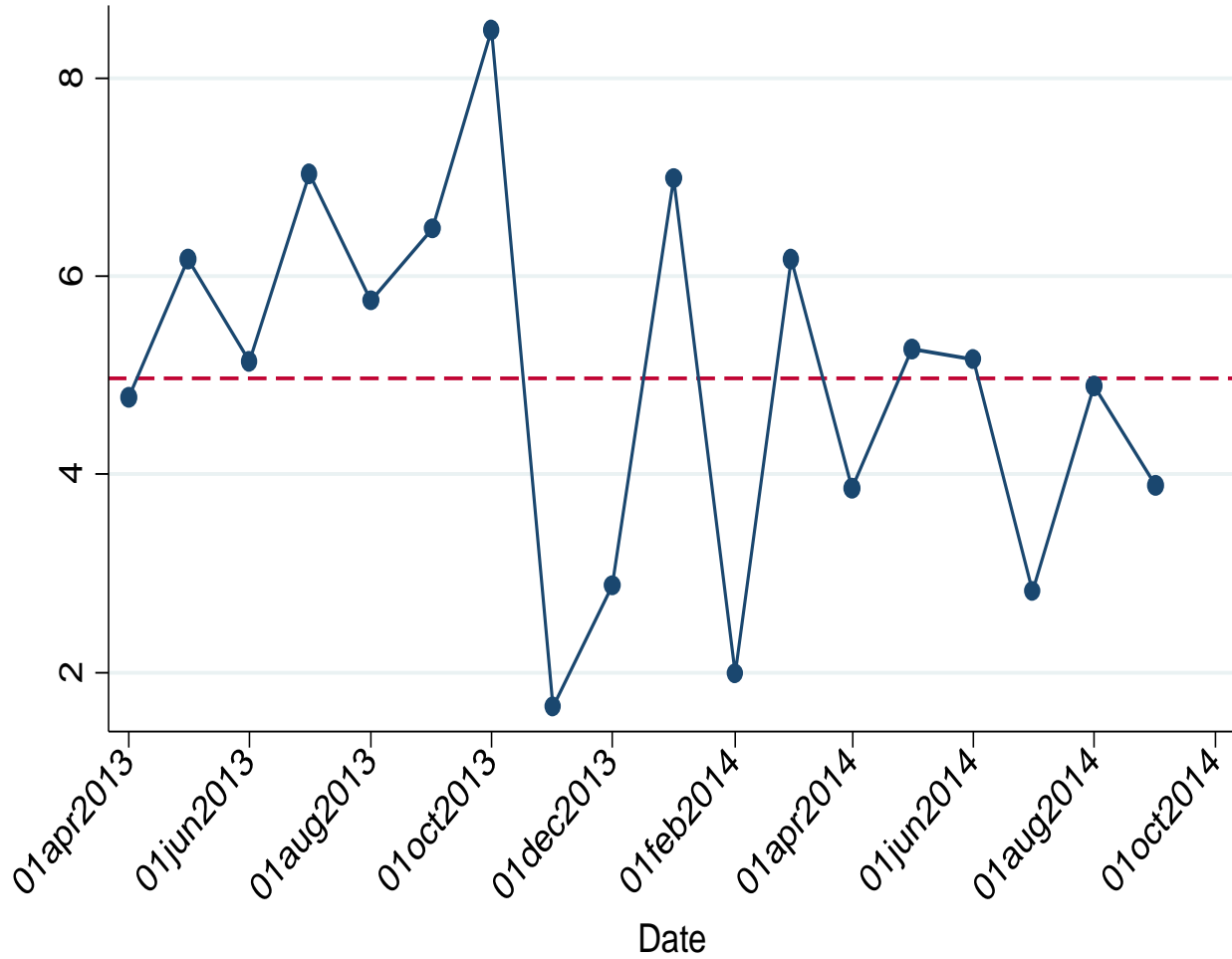
Center 48 Primary Cesarean Delivery



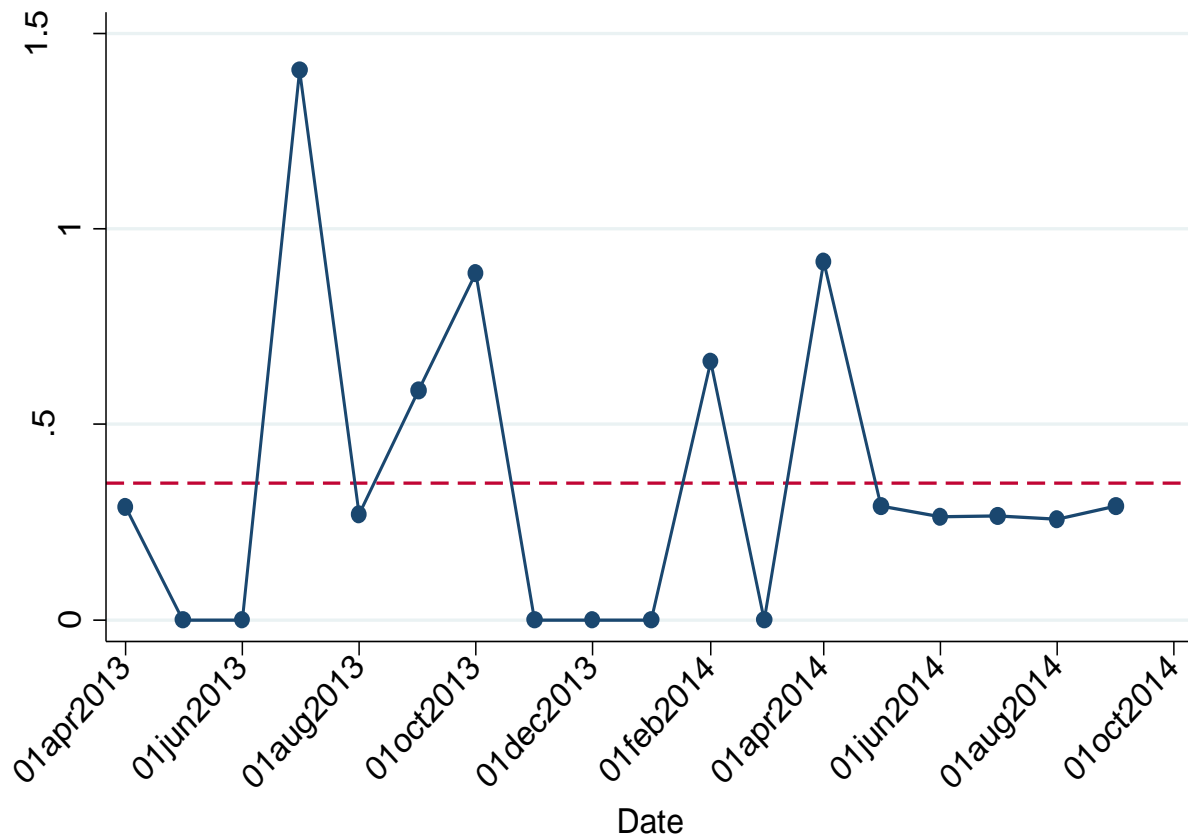
Center 48 Vaginal Delivery



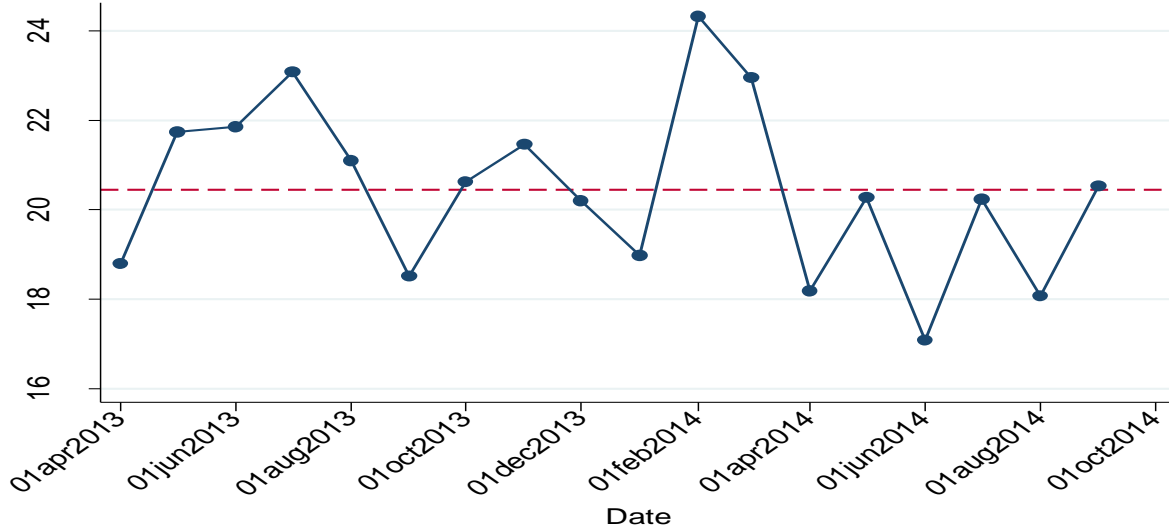
Center 48 Operative Vaginal Deliveries



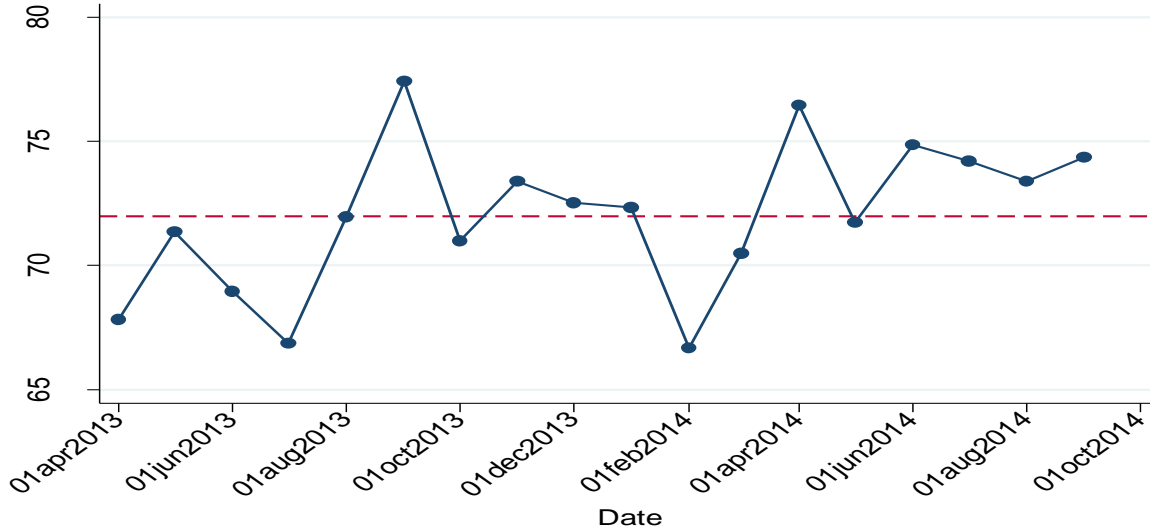
Center 74 Maternal ICU Admissions



Center 74 Primary Cesarean Delivery



Center 74 Vaginal Delivery



Conclusions

- Limited/focused data can be collected and rapidly returned to hospitals for quality analysis and process improvement purposes

Future Goals

- CDC Grant – Impetus for collection from entire state
- Expand to remainder of the state – from November 2014 – December 2015
- Expand to utilize RedCap Data Base
 - Increased ease, anonymity and security

Focus

- Basic Stats
- Hemorrhage outcome variables
- Hypertensive poor outcome variables
- VTE poor outcome variables

Want to Join?

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