



OBSTETRICS CLINICAL OUTCOMES ASSESSMENT PROGRAM

A PROGRAM OF THE FOUNDATION FOR HEALTH CARE QUALITY



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PROGRAM OVERVIEW

Ellen Kauffman, MD

Medical Director

Kristin Sitcov

Program Director



WHAT'S IN THIS FOR MY HOSPITAL??

- ▲ Access to your own **COMPLETE AND COMPREHENSIVE high quality data with which to provide OPTIMAL CARE to your PATIENTS**
- ▲ The ability to see where **YOUR CARE PRACTICES fit in the SPECTRUM OF CARE delivered by your PEERS to pregnant women in Washington State**



WHAT IS...



- ▲ A Washington State **CLINICIAN-LED** quality improvement initiative
- ▲ Uses **CHART-ABSTRACTED** data of the intrapartum management of pregnant women
- ▲ Facilitates physician leaders and hospitals working together in a voluntary and **COLLABORATIVE** way
- ▲ Allows review of clinical outcomes data to **IMPROVE** labor and delivery **CARE**



WHAT IS...



The goal of OB COAP is to
ENSURE THAT ALL WOMEN IN THE
STATE OF WASHINGTON
RECEIVE THE SAME EVIDENCE-BASED
OBSTETRICAL CARE.



TODAY YOU WILL LEARN...

- ▲ **BACKGROUND & RATIONALE** behind OB COAP
- ▲ **RESULTS** from the six month pilot program
- ▲ **ADVANTAGES** to participation
- ▲ **EXPERIENCES** of the pilot program participants
- ▲ **LOGISTICS** of joining OB COAP
- ▲ **ANSWERS** to your Questions



TODAY YOU WILL SEE THE BENEFIT OF...

- ✓ Having access to your data as soon as entered;
- ✓ Ease of collecting the currently recommended NQF guidelines;
- ✓ Using these data for patient safety and process & quality improvement projects;
- ✓ Quick turn-around of meaningful data with comparative reports to facilitate quality improvement efforts;
- ✓ The development of a community of providers who can learn from one another in a trusted, collaborative environment;
- ✓ Helping to set a quality improvement agenda for the state;
- ✓ Participating in a quality improvement initiative based on data from 90,000 deliveries per year.



THE NEED FOR DATA

“We do not have a system to evaluate birth in a detailed manner by using outcome data or performance measures.”

Dr. Richard Waldman, from his inaugural address as incoming president of ACOG in 2010.
Waldman RN. Together We Can Do Something Wonderful. *Obstetrics & Gynecology* 2010;115:1116-1119.



THE NEED FOR PROBLEM SPECIFIC DATA

*“We call on epidemiologists, **clinicians**, and researchers to collect data distinguishing early term births and their outcomes from babies born later at full term to provide new insights and strategies for improving birth outcomes.”*

Fleischman A, Oinuma M, Clark, SL.

Rethinking the Definition of “Term Pregnancy”. *Obstetrics & Gynecology* 2010;116:136-139.



THE NATURE OF THE DATA

*“Trying to study obstetric and neonatal outcomes from **data on birth certificates** is analogous to trying to study the cause of motor vehicle accidents from **data on drivers’ licenses** (e.g., sex, height, eye color, hair color).”*

Grimes description of administrative data bases.

Grimes DA. Epidemiologic Research Using Administrative Databases. *Obstetrics & Gynecology* 2010;116:1016-1018.



PRECEDENT FOR PATIENT-LEVEL, CHART-ABSTRACTED DATA

*“...data...allowed the **identification of several clinical situations that place patients at an increased risk for adverse outcome, and place physicians at an increased risk for litigation.**”*

*“...data...has driven **improvements in patient outcomes, a dramatic decline in litigation claims, and a reduction in the primary cesarean delivery rate.**”*

Clark SL, Belfort MA, Byrum SL *et al.* Improved outcomes, fewer cesarean deliveries and reduced litigation: results of a new paradigm in patient safety. *American Journal of Obstetrics and Gynecology* 2008;199:105.e1-7.



PRECEDENT FOR PATIENT-LEVEL, CHART-ABSTRACTED DATA

*“A committee made up of doctors, nurses and administrators has tried to **identify variations** and then figure out which treatments have not been working.”*

Dr. Brent James, Chief Quality Officer at Intermountain Healthcare

Leonhardt D. If Health Care is Going to Change Dr. Brent James's Ideas Will Change It. *New York Times, Sunday Magazine*
November 8, 2009.



PRECEDENT FOR PATIENT-LEVEL, CHART-ABSTRACTED DATA

...**Decreased elective deliveries** before 39 weeks using **chart-abstracted data** from electronic medical records from 9 urban L&D units with an average of 16,300 deliveries/year for a period of 5 years (July '01- June '06).

Oshiro, BT, Henry E, Wilson J *et al.* Decreasing Elective Deliveries Before 39 Weeks of Gestation in an Integrated Health Care System. *Obstetrics & Gynecology* 2009;113:804-811.

...used **patient level data** to “**reduce scheduled births between 36 0/7 - 38 6/7 weeks that lack appropriate medical indication**”.

The Ohio Perinatal Quality Collaborative Writing Committee. A statewide initiative to reduce inappropriate scheduled births at 36 0/7-38 6/7 weeks' gestation. *American Journal of Obstetrics and Gynecology* 2010;202:243.e1-8.

...used **chart-abstracted data** to successfully decrease elective inductions between 39 and 41 weeks.

Reisner DP, Wallin TK, Zingheim RW *et al.* Reduction of elective inductions in a large community hospital. *American Journal Obstetrics and Gynecology* 2009;200:674.e1-7.



WHAT IS...



OB COAP

GOES BEYOND PROBLEM-SPECIFIC DATA COLLECTION



WHAT IS...



Instead of collecting data on a given outcome or process for a specific quality improvement initiative, OB COAP generates an **ongoing comprehensive database of the clinical interactions on L&D performed by clinicians caring for their patients.**

Where the data show need for education and possible improvement in outcome, programs can be designed and initiated through the collaboration of the clinician leaders.

Data identify problems and encourage changes that improve quality and safety for your patients.



CLINICIAN-LED QUALITY IMPROVEMENT PROGRAMS OF THE FOUNDATION FOR HEALTH CARE QUALITY

COAP: Clinical Outcomes Assessment Program (est. 1997)

- *Cardiac revascularization procedures*
- *32 participating hospitals (100% eligible)*
- *20,000 procedures/year*

SCOAP: Surgical Care and Outcomes Assessment Program (est. 2003)

- *Abdominal and colorectal surgical procedures*
- *56 participating hospitals*
- *15,000 procedures/year*

OB COAP: Obstetrics Clinical Outcomes Assessment Program (est. 2009)

- Goal** {
- *Labor and delivery interventions and decisions*
 - *69 delivering hospitals + home & birth-center births*
 - *90,000 deliveries/year*



QUALITY IMPROVEMENT PROTECTION

The programs of the Foundation for Health Care Quality have been approved by the Washington State Department of Health as Certified Quality Improvement Programs (CQIP) under:

RCW 43.70.510

“A CQIP... may share information and documents... with one or more other CQIPs or committees or boards... and shall not be subject to the discovery process...”



OBSTETRICAL FACILITIES IN WASHINGTON STATE

# Deliveries / Year	# Facilities / Level of Care		
	Level 1	Level 2	Level 3
< 100	8		
100 - < 1000	28	4	
1000 - < 2000	3	10	1
2000 - < 3000		2	4
3000 - < 4000		2	4
4000 - 7000			3
Total	39 18% of births in WA State*	18 34% of births in WA State*	12 46% of births in WA State*

* 2006 Department of Health Statistics

54 Hospitals do <2000 births/year
40 Hospitals do <1000 births/year





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What Data Are Collected?



DATA COLLECTION: OB COAP

Demographics

Patient name

Date of birth

Race/ethnicity

Date/time of admission

Place of admission

Transfer TO or FROM

Weight: *pre-pregnancy; at admission*

Height

OB/GYN & Medical History

Gravidity

Parity:

liveborn; stillborn

Uterine surgical history:

cesarean; other

Pre-pregnancy diagnoses:

hypertension; diabetes; other

Current Pregnancy

Singleton / Twins / Multiple

First prenatal visit: *date; gestational age*

LMP

EDC

Cervix dilation/effacement on admission

Complications of pregnancy:

preeclampsia/hypertension;

gestational diabetes; other

Patient's practitioner:

prenatal visits; admission for delivery;

management of labor; at delivery

Prior hospitalizations this pregnancy

Antenatal steroids



DATA COLLECTION: OB COAP

Labor

Spontaneous/induced

Indication for induction

Cervical ripening

Membrane status:

*intact; ruptured; AROM;
date/time ROM; cervix at ROM*

Meconium

Regional anesthesia:

date/time

Oxytocin

GBS prophylaxis

Antibiotics for chorioamnionitis

Amnioinfusion

Magnesium sulfate

IUPC

Date/time complete dilation

Delivery

Vaginal birth:

*spontaneous; operative (forceps/vacuum);
vertex; breech; shoulder dystocia*

Cesarean birth:

*indication; cervix at cesarean; prophylactic
antibiotics; DVT prophylaxis; anesthesia;
uterine incision*

Laceration

Episiotomy

Date/time of delivery

Date/time of placenta delivery

Post partum complications:

diagnosis; interventions



DATA COLLECTION: OB COAP

Newborn

Apgars

Weight

Length

Sex

Gestational age by Physical Exam

Anomalies

Cord gases

NICU level of care

Resuscitation Efforts

Birth trauma

Complications

Hepatitis B vaccine given to newborn

Breastfeeding on discharge

Death: *antepartum; intrapartum; neonatal*

Post Discharge

Readmission within 30 days of delivery:

Mother; Newborn





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How Are Data Collected?



A. Administrative



Version: 1.5

Last Update: January 28, 2011

B. Demographics

Patient Name Last: Doe First: Jane M.I.: J Age at Admission: 36

Date of Birth: 1/1/1975 Date and Time of Admission to L&D Service: 1/1/2011 11:00:00

Place of Admission: Hospital

Site Number:

Current Pregnancy: Singleton Twins Multiple If Not Singleton, STOP!!

Race: Native Hawaiian/Other Pacific Isl Hispanic or Latina Ethnicity: Yes No

Transfer: No Transfer

Name of Hospital Transferred To:

Date and Time of Transfer: / / : :

Name of Hospital Practitioner Transferred From:

(If from your own antepartum service put "antepartum")

Weight

Height

Weight and Height input fields with radio buttons for units (Pounds, Kilograms, Inches, Centimeters).

C. OBGYN History

Gravidity #: 3 # Liveborn: 2 # Stillborn > 20 wks: 0

Uterine Surgical History: Yes No # CS: 4 Other: Yes No

Pre Pregnancy Diagnosis: Hypertension: Yes No Diabetes: Yes No Other: Yes No

LMP: First Prenatal Visit Date:

EDC: Gestational Age at First Prenatal Visit:

Weeks on Admission:

Print Table Clear Settings

Record Doe Jane Severity

- Tree view of clinical findings: D. Labor Interventions, C. OBGYN History, E. Newborn Data, Postpartum, F. Post Discharge. Includes error messages like 'Parity-Cesarean is greater than the allowed maximum' (Illegal) and 'Labor Allowed is missing' (Warning).

Unknown Patient



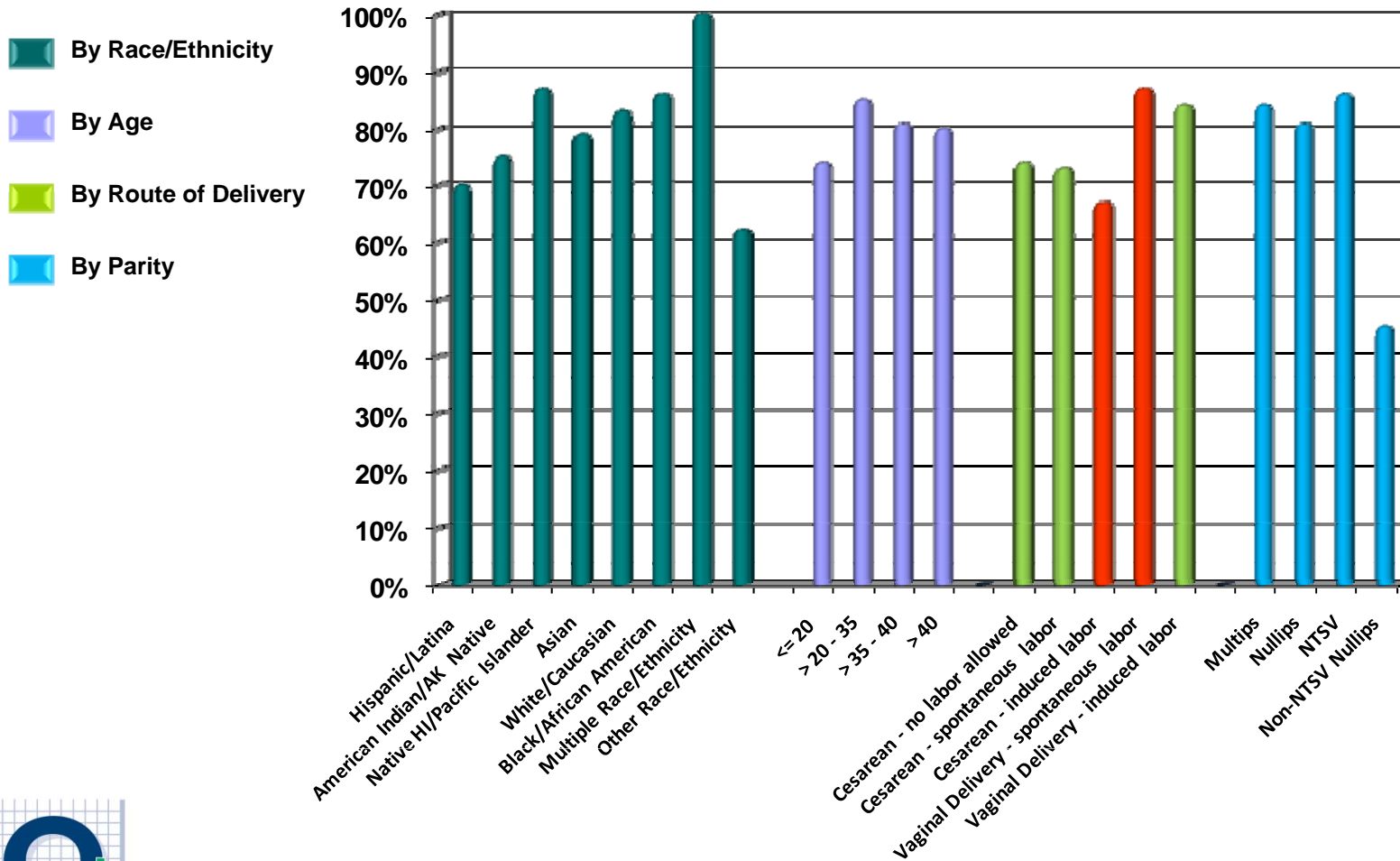
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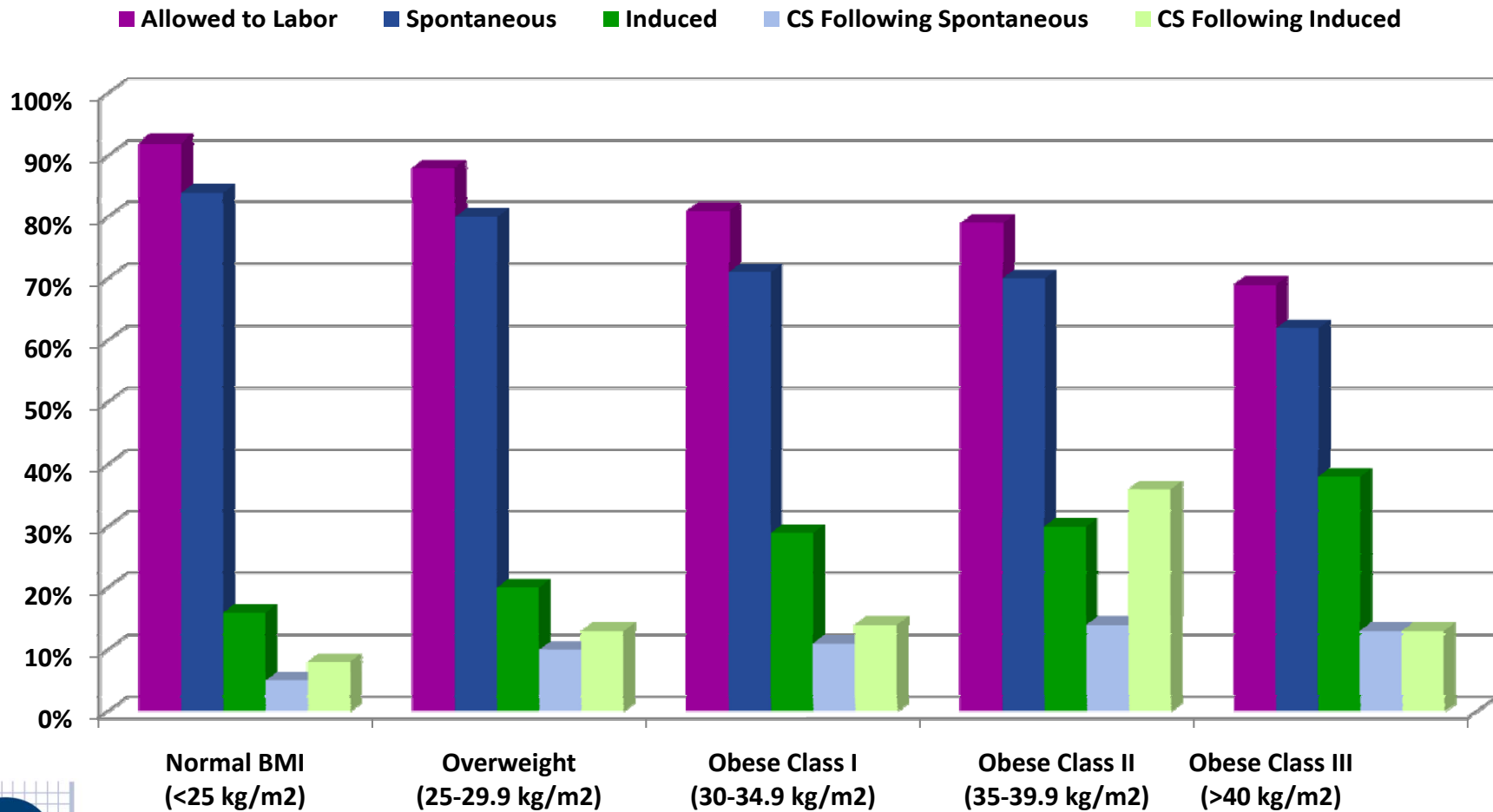
Samples of Results From Pilot Project



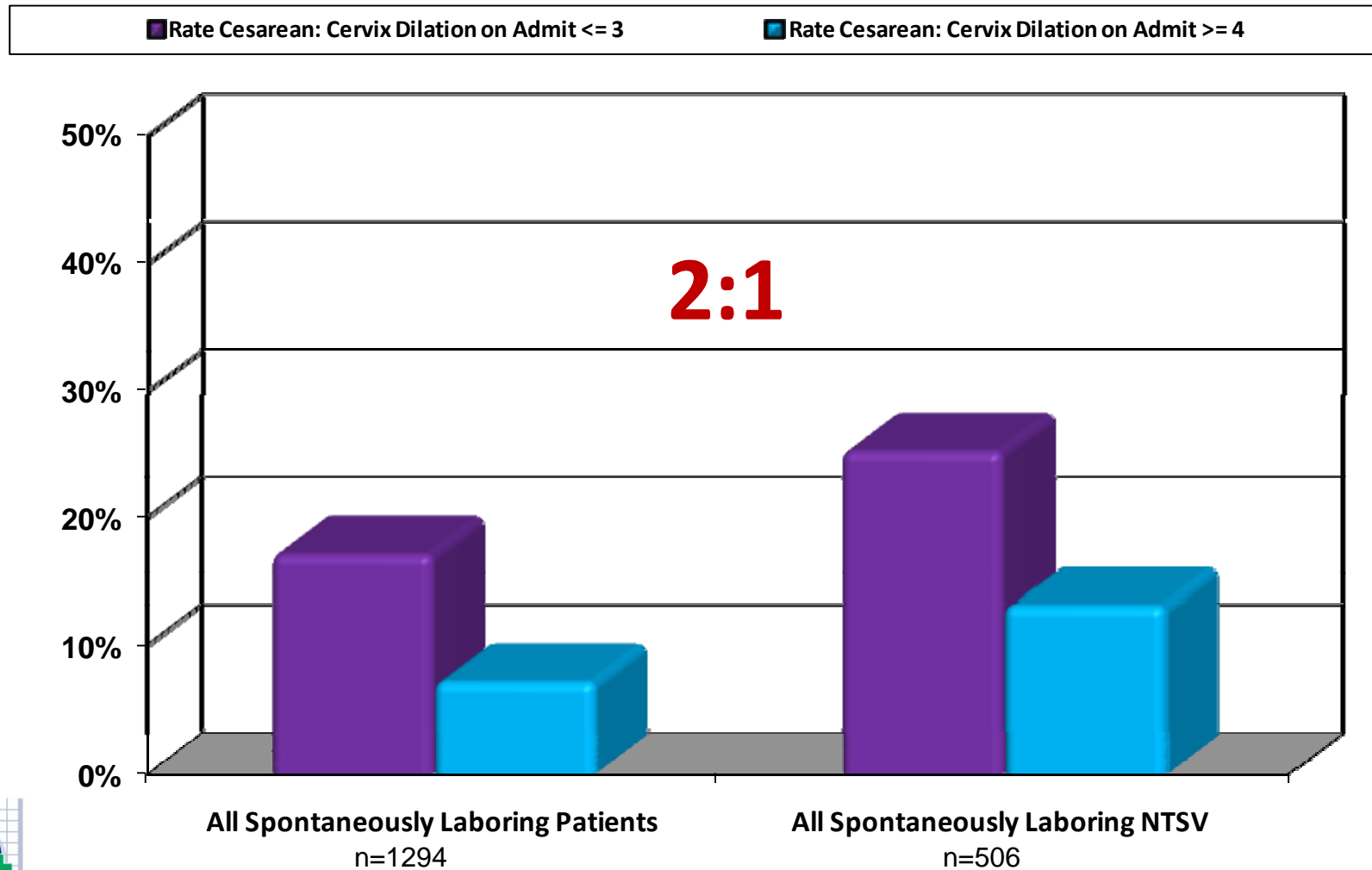
NQF GUIDELINE COMPLIANCE: BREAST FEEDING ON DISCHARGE



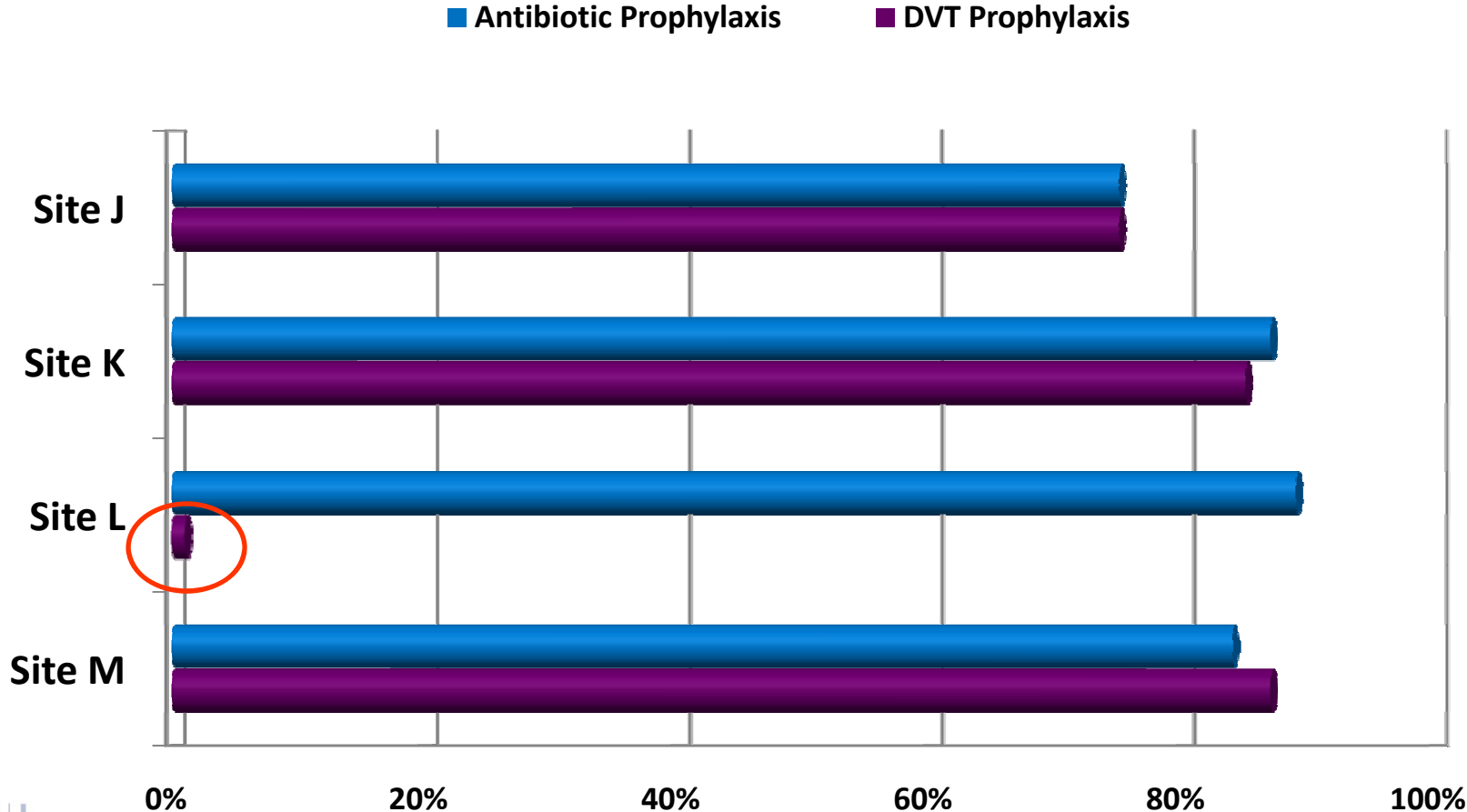
ROUTE OF DELIVERY AS A FUNCTION OF BMI



CESAREAN AS A FUNCTION OF ADMISSION IN EARLY VS ACTIVE SPONTANEOUS LABOR



NQF GUIDELINE COMPLIANCE: DVT & ANTIBIOTIC PROPHYLAXIS



NQF GUIDELINE COMPLIANCE: ELECTIVE TERM DELIVERY < 39 WEEKS

- Repeat Cesarean: **224**
 - Repeat Cesarean <39 Weeks: **53 = 24%**
-
- Maternal Request Primary: **6**
 - Maternal Request Primary <39 Weeks: **3 = 50%**
-
- Elective Induction: **87**
 - Elective Induction <39 Weeks: **4 = 5%**



BARRIERS TO PARTICIPATION IN OB COAP

“Chart abstraction is labor intensive.”

“Compared to what?”

- ✓ *No data = UNACCEPTABLE*
- ✓ *Administrative data = INAPPROPRIATE*
- ✓ *Clinicians & administrators already take a lot of time and resources to look at specific problems*



OVERCOMING BARRIERS TO PARTICIPATION IN OB COAP

Small Hospitals:

...(our data abstractor) has gotten so good at it that it seems to just be part of her daily routine to check the charts of our laboring and delivered patients.

Angela Graff RN, MSN
Director of OB and NFS
Olympic Medical Center

Large Hospitals:

Personnel are already engaged in quality improvement projects with each project starting at square one to look up what's needed...

With OB COAP all data capturing the delivery of maternity care are available for review, discussion, and action.





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Advantages to Participation



ADVANTAGES TO PARTICIPATION IN OB COAP

- ✓ Access to ones own data as soon as entered;



EASILY RUN YOUR OWN DATA TABLES AT ANY TIME AND QUICKLY NAVIGATE BACK TO INDIVIDUAL RECORDS...

Outcomes Patient Utilities
File Edit Export Table

New Open Save Export Refresh Print Delete Patient

Drag a column header here to group by that column

Parity-Live	Uterine Surgical History	Labor Allowed	Labor Type	Induced Labor Indication	Cesarean	Indication
0	No	No			Yes	Maternal Request Primary
1	Yes	No			Yes	Repeat
0	No	Yes	Induced	PROM	Yes	Failure to Descend
1	Yes	No			Yes	Repeat
0	No	No			Yes	Breech
0	No	Yes	Spontaneous		Yes	Failure to Progress
2	Yes	No			Yes	Repeat
0	No	Yes	Induced	PROM	Yes	Failure to Progress
1	Yes	No			Yes	Repeat
1	Yes	No			Yes	Repeat
1	Yes	No			Yes	Repeat
3	Yes	No			Yes	Repeat
0	No	Yes	Induced	Other	Yes	Fetal Intolerance of Labor
0	No	Yes	Induced	Post Dates	Yes	Failure to Progress
7	No	Yes	Spontaneous		Yes	Failure to Progress
0	No	Yes	Spontaneous		Yes	Failure to Progress
0	No	Yes	Spontaneous		Yes	Failure to Descend
1	Yes	No			Yes	Repeat
3	Yes	No			Yes	Repeat
2	Yes	No			Yes	Repeat
1	Yes	No			Yes	Repeat
0	No	No			Yes	Maternal Disease



ANALYSES OF YOUR OWN DATA MAY BE DONE AT ANY TIME USING THE SUMMARY TABLE FUNCTION...

	All Patients	Weeks on Admission ≥ 39	Weeks on Admission ≥37 and <39
Indication for Cesarean = Repeat	45	33	12
Indication for Cesarean = Maternal Request Primary	1	0	1
Indication for Induction = Elective	23	23	0

	All Patients	Cesarean	Operative Vaginal Delivery Attempt
Cervix on Admission ≤3 (in spontaneously laboring women)	84	20 23.81%	8 9.52%
Cervix on Admission ≥4 (in spontaneously laboring women)	122	17 13.93%	5 4.10%



ADVANTAGES TO PARTICIPATION IN OB COAP

- ✓ Access to ones own data as soon as entered;
- ✓ Collection of currently recommended NQF guidelines;



NQF GUIDELINE COMPLIANCE

Interventions/Outcomes

Elective Deliveries < 39 Weeks

Episiotomy

Prophylactic Antibiotics

DVT Prophylaxis

Antenatal Steroids

Breast Feeding

Birth Trauma

Newborn < 1500g Delivered @ Level III

Cesarean Rate for Low Risk 1st Birth Women (NTSV)



ADVANTAGES TO PARTICIPATION IN OB COAP

- ✓ Access to ones own data as soon as entered;
- ✓ Collection of currently recommended NQF guidelines;
- ✓ Multiple uses for hospital administrators, including:
 - patient safety
 - process improvement
 - quality improvement projects
- ✓ Quick turn-around of meaningful data with comparative reports provided to facilitate quality improvement efforts;
- ✓ The development of a community of providers who can learn from one another in a trusted, collaborative environment;
- ✓ Ability to provide input on setting a quality improvement agenda for the state;
- ✓ Quality improvement initiative based on data from 90,000 deliveries per year.



OB COAP TESTIMONIALS

- ▲ *Our experience with OB COAP has illuminated where the flaws are in our own documentation and charting system.*
- ▲ *We certainly value the information that can be obtained from participating in such a database*
- ▲ *OB COAP can be very helpful for us in terms of providing provider specific information to fulfill Ongoing Professional Practice (OPPE) requirements for the Joint Commission.*
- ▲ *We do support OB COAP...!*

Angela Chien, MD

OB Quality Improvement, Evergreen Hospital & Medical Center

The Midwives' Association of WA State got great benefit out of its participation in the pilot phase of OB COAP. Not only did it give the midwives an opportunity to look critically at our own data and find out what we didn't know about practices within our community; it gave us a chance to be in conversation with hospital-based clinicians and engage in thoughtful and respectful cross-disciplinary dialogue about opportunities to improve the care of mothers and babies in all maternity care settings.

Audrey Levine, CPM

President, Midwives' Association of WA State

I appreciate all of the data that we have gotten back from this project and the interaction that we have had with you and your staff. Thank you

Angie Graff RN, MSN

Director of OB and NFS, Olympic Medical Center

OB COAP is a comprehensive and dynamic database that allows you to easily see practice trends; it provides the ability to use data to support quality initiatives and benchmark progress; and it is an intuitive database which is user friendly...

Amy Bertone, RN, BSN

Perinatal Regional Network Coordinator

Providence Sacred Heart Medical Center & Children's Hospital



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Participation in OB COAP



MEMBERSHIP FEES FOR OB COAP

- **Level 1:** \$1000 + \$3/case
- **Level II:** \$2500 + \$3/case
- **Level III:** \$5000 + \$3/case



JOINING OB COAP

- ✓ Contact us
- ✓ Select a clinician leader
- ✓ Determine data abstraction staff
- ✓ Sign contract (standard FHCQ document – identical to COAP/SCOAP)
- ✓ Data base training for data abstraction staff
- ✓ Begin collecting data



QUESTIONS?

How to Contact Us:

Ellen Kauffman, MD

OB COAP Medical Director

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OB COAP Program Director

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THANK YOU





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Appendix



The Need for Data

**In his inaugural address as incoming president of ACOG in 2010
Richard Waldman noted:**

Lack of consistent and comprehensive data about births in the United States is one area needing attention. Can you believe that this country with so much know-how and advanced technology has not implemented a uniform method of recording birth statistics? We do not have a system to evaluate birth in a detailed manner by using outcome data or performance measures. Such systems would provide information needed to assess practices and evidence needed to make clinically sound decisions in maternity care.

Waldman RN. Together We Can Do Something Wonderful. *Obstetrics & Gynecology* 2010;115:1116-1119.



The Need for Problem Specific Data

The March of Dimes' interest in pregnancies being “guided by data derived from gestational age-specific studies” prompted Fleischman, Oinuma, and Clark to issue the following call to action:

We call on epidemiologists, clinicians, and researchers to collect data distinguishing early term births and their outcomes from babies born later at full term to provide new insights and strategies for improving birth outcomes.

Fleischman A, Oinuma M, Clark, SL. Rethinking the Definition of “Term Pregnancy”. *Obstetrics & Gynecology* 2010;116:136-139.



The Nature of the Data

Grimes described administrative databases as... a) claims made for services provided by health care providers and institutions (“In billing databases recording of events is related to the probability of reimbursement”) or, b) vital records (birth certificates) collected for civil and legal purposes. Neither of these types of databases is designed to collect data for research or quality improvement initiatives.

Research using administrative databases has important strengths and weaknesses. Sample sizes are often large...and using an existing database is fast and inexpensive compared with generating a new one. The drawbacks, however, are substantial – and often insurmountable. ...Epidemiologic analyses with birth certificate data are popular but treacherous...Trying to study obstetric and neonatal outcomes from data on birth certificates is analogous to trying to study the cause of motor vehicle accidents from data on drivers’ licenses (e.g., sex, height, eye color, hair color).

Grimes DA. Epidemiologic Research Using Administrative Databases. *Obstetrics & Gynecology* 2010;116:1016-1018.



Precedent for Patient-Level, Chart-Abstracted Data

Dr Steven Clark, Medical Director, Women and Children's Clinical Services of Hospital Corporation of America (HCA), a hospital system comprised of 120 facilities in 21 states performing about 220,000 deliveries a year, used an internal HCA data system that *"allowed the identification of several clinical situations that place patients at an increased risk for adverse outcome, and place physicians at an increased risk for litigation"*.

Dr. Clark reports that change has been driven by HCA's own internal data: *"We have seen improvements in patient outcomes, a dramatic decline in litigation claims, and a reduction in the primary cesarean delivery rate"*.

Clark SL, Belfort MA, Byrurm SL *et al.* Improved outcomes, fewer cesarean deliveries and reduced litigation: results of a new paradigm in patient safety. *American Journal of Obstetrics and Gynecology* 2008;199:105.e1-7.



Precedent for Patient-Level, Chart-Abstracted Data

Dr. Brent James, Chief Quality Officer at Intermountain Healthcare, a system of hospitals, surgery centers, doctors, clinics, and homecare & hospice providers serving Utah and parts of Idaho has identified 50 clinical conditions (accounting for 50% of their patients) for which *“a committee made up of doctors, nurses and administrators has tried to identify variations and then figure out which treatments have not been working”*.

The committees that James set up meet monthly to refine protocols, set clinical goals, and track patient outcomes. The statistics the committees examine reach down to the level of the individual doctors.

Leonhardt D. If Health Care is Going to Change Dr. Brent James’s Ideas Will Change It. *New York Times, Sunday Magazine* November 8, 2009.



Precedent for Patient-Level, Chart-Abstracted Data

Dr. Bryan Oshiro and colleagues at Intermountain Healthcare in Utah decreased elective deliveries before 39 weeks using chart-abstracted data from electronic medical records from 9 urban L&D units with an average of 16,300 deliveries/year for a period of 5 years (July '01- June '06).

Oshiro, BT, Henry E, Wilson J *et al.* Decreasing Elective Deliveries Before 39 Weeks of Gestation in an Integrated Health Care System. *Obstetrics & Gynecology* 2009;113:804-811.

The Ohio Perinatal Quality Collaborative, comprised of 20 maternity and neonatal care hospitals accounting for 47% of births in Ohio used patient level data to “reduce scheduled births between 36 0/7 - 38 6/7 weeks that lack appropriate medical indication”.

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Reisner and colleagues used chart-abstracted data to successfully decrease elective inductions between 39 and 41 weeks.

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