Partnership for Patients
Safe Deliveries Roadmap
Learning Collaborative Webcast
October 21, 2014

Safe Deliveries Roadmap
Advancing Safety for Mothers and Babies
A Roadmap from Pre-pregnancy to Postpartum
Safe Deliveries Roadmap Project Coordinator

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Partnership for Patients
Washington State Hospital Association

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Presented at Washington State Hospital Association Safe Table Webcast Oct. 21, 2014
Today

• Hear updates on the Safe Deliveries Roadmap initiative.
• Learn what drives maternity unit culture and the leverage points for creating shifts.
• Get up close and personal with the leadership team from Yakima Valley Memorial Hospital. Hear about their unit culture and its affect on their cesarean section rates.

Presented at Washington State Hospital Association Safe Table Webcast Oct. 21, 2014
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Safe Deliveries Roadmap Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesarean Section Rate-Nullip, Term Singleton, Vertex (PC-02)</td>
<td>30.7%</td>
</tr>
<tr>
<td>Primary Term Singleton Vertex (TSV) CS Rate</td>
<td>20.5%</td>
</tr>
<tr>
<td>CS Rate for Term Inductions of Labor in Nulliparous Women ≥ 39 Weeks</td>
<td>38.5%</td>
</tr>
<tr>
<td>Maternal ICU/Higher Care Level: Admission rate among deliveries ≥ 20wks</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

View all 17 Safe Deliveries Roadmap Measures

Hospital Clinical Performance Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
</table>
| Elective Delivery (PC-01)                                               | 0.0%  *
| Cesarean Section Rate-Nullip, Term Singleton, Vertex (PC-02)            | 30.7% |
| Vaginal Birth After Cesarean (VBAC) Rate, Uncomplicated (AHRQ IQI 22)  | 21.7% |
| Total Cesarean Section Rate                                             | 35.9% |
| Primary Cesarean Section                                                | 26.3% |
| Failed Induction                                                        | 22.7% |

View all 40 Hospital Clinical Performance Measures

Provider Performance Measures

<table>
<thead>
<tr>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesarean Births</td>
</tr>
<tr>
<td>Elective Deliveries</td>
</tr>
<tr>
<td>Vaginal Births</td>
</tr>
</tbody>
</table>

Hospital Data Quality Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing / Inconsistent Birth Weight (among &lt;2500g)</td>
<td>10.9%</td>
</tr>
<tr>
<td>Unlinked Mothers</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Data Submission Trends

View all 7 Hospital Data Quality Measures

Case Lookup by MRN

First you must authenticate using 2-factor authentication

View Delivery Logbook

First you must authenticate using 2-factor authentication
## Safe Deliveries Roadmap Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Q2 2014 Rate</th>
<th>Jun 2014 Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesarean Section Rate-Nullip, Term Singleton, Vertex (PC-02)</td>
<td>30.7%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Primary Term Singleton Vertex (TSV) CS Rate</td>
<td>20.5%</td>
<td>13.0%</td>
</tr>
<tr>
<td>CS Rate for Term Inductions of Labor in Nulliparous Women ≥ 39 Weeks</td>
<td>38.5%</td>
<td>25.0%</td>
</tr>
<tr>
<td>CS Rate for Term Inductions of Labor in Multiparous Women ≥ 39 Weeks</td>
<td>10.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Maternal ICU/Higher Care Level: Admission rate among deliveries ≥ 20wks</td>
<td>0.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Number of Maternal ICU/Higher Care Level: Days per 100 deliveries ≥ 20wks</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Maternal Transfusion Rate for Deliveries ≥ 20wks</td>
<td>2.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Number of massive blood transfusions ≥ 4 units among 1000 delivering women ≥ 20 wks GA</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of Blood product units transfused among 1000 delivering women ≥ 20 wks GA</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Vaginal Deliveries ≥20 wks with Post-Partum LOS ≥4 Days</td>
<td>1.7%</td>
<td>1.9%</td>
</tr>
<tr>
<td>CS Deliveries ≥ 20 wks with Post-Partum LOS ≥6 day</td>
<td>4.3%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Operative Delivery rate for vaginal deliveries</td>
<td>8.5%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Unexpected Newborn Complications</td>
<td>6.9%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Preeclampsia: ICU Admission Rate among delivering women ≥ 20 wks with preeclampsia diagnosis</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Preeclampsia: Number of ICU Days per 100 delivering women ≥ 20 wks with preeclampsia diagnosis</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Severe Morbidity with Preeclampsia</td>
<td>12.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Timely Treatment for Severe Hypertension</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Collaborative Comparisons: Jan - Jun 2014

- **UW Medicine/ UW Medical Center**: 31.4%
- **Confluence Health**: 16.3%
- **Kittitas Valley Community Hospital**: N/A
- **Legacy Salmon Creek**: 22.2%
- **Mason General**: 8.6%
- **Othello Community Hospital**: 22.5%
- **Overlake Hospital Medical Center**: 31%
- **Providence Holy Family**: 26.6%
- **Providence Sacred Heart**: 18.2%
- **Samaritan Healthcare**: 23.8%
- **St. Francis Hospital**: N/A
- **St. Joseph-Franciscan**: N/A
- **Swedish Medical Center - Ballard**: N/A
- **Swedish Medical Center - First Hill**: N/A
- **Swedish Medical Center - Issaquah**: N/A
- **Swedish Medical Center - Edmonds**: N/A
- **UW Medicine/ Northwest Medical Center**: N/A
- **UW Medicine/ Valley Medical Center**: 32.5%
- **Whidbey General Hospital**: N/A

**Measure**
- Hospital Trend
- Definition

**Comparisons**
- Peer
- **Collaborative
- System
- NICU Level
- By Payer
- By Provider

**Description**
Cesareans among live births that are: 1) singleton; 2) vertex; 3) lacking "early onset delivery" ICD-9 code; 4) ≥37 weeks GA; 5) to nulliparous women.

Presented at Washington State Hospital Association Safe Table Webcast Oct. 21, 2014
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Cesarean Section Rate-Nullip, Term Singleton, Vertex (PC-02)

Measure

Hospital Trend

Definition

Comparisons

Peer

Collaborative

System

NICU Level

By Payer

By Provider

Description

Cesareans among live births that are: 1) singleton; 2) vertex; 3) lacking "early onset"
Primary Cesarean Section: Measure Analysis

Period: Jul 2013 - Jun 2014 (12 months)

What Drives Our Primary CS Rate?

The Primary CS rate (Denominator—all mothers without a prior CS; Numerator=among those mothers, who had a CS) is comprised of 3 major, mutually exclusive sub-populations. Nulliparous term singleton vertex (NTSV), multiparous term singleton vertex (MTSV) and mothers who have a preterm, multiple, or non-vertex pregnancy. NTSV is the component that has driven the 50% increase in primary CS in the last decade, is typically the largest component, and has the greatest variation among hospitals. This graph helps you determine what drives your primary CS rate. Each component tells you what percentage of your women with no prior CS has a CS for these populations.

How do Our Hospital’s Primary CS Sub-population Rates Compare?

What Drives Our Nulliparous Term Singleton Vertex (NTSV) CS Rate of 35.7%?

How do our hospital’s NTSV CS Sub-population Rates Compare?

What Drives Our Multiparous Term Singleton Vertex (MTSV) CS Rate of 9.6%?

How do our hospital’s MTSV CS Sub-population Rates Compare?

How Do Our Hospital’s Multiples, Malpresentation and Preterm CS Rates Compare?
What Drives Our Nulliparous Term Singleton Vertex (NTSV) CS Rate of 35.7%?

The NTSV CS rate is comprised of 3 major, mutually exclusive sub-populations (Spontaneous labor resulting in CS, Induced Labor Resulting in CS, and CS with no Labor). This breakdown of the NTSV CS rate should help determine where QI efforts can best be applied. The most common issue among most hospitals is a high rate of CS during NTSV spontaneous labor. Some hospitals may also have a high rate during induced labor.

UW Medicine/ UW Medical Center
CA Statewide (Jul 2012 - Jun 2013)

<table>
<thead>
<tr>
<th></th>
<th>Spontaneous Labor</th>
<th>Induced Labor</th>
<th>No Labor</th>
<th>Total NTSV CS Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>UW Medicine/ UW Medical Center</td>
<td>17.1%</td>
<td>13.1%</td>
<td>5.5%</td>
<td>35.7%</td>
</tr>
<tr>
<td>CA Statewide (Jul 2012 - Jun 2013)</td>
<td>15.4%</td>
<td>7.2%</td>
<td>4.9%</td>
<td>27.5%</td>
</tr>
</tbody>
</table>
Unexpected Newborn Complications

- Measure Analysis
- Comparisons
  - Peer
  - Collaborative
  - System
  - NICU Level
  - By Payer

Description:
Severe or moderate neonatal complications among babies without preexisting conditions (birth defects, ...
Presented at Washington State Hospital Association Safe Table Webcast Oct. 21, 2014

Unexpected Newborn Complications: Measure Analysis

Period: Jul 2013 – Jun 2014 (12 months)

- Currently, your hospital is being compared to California averages (representing ~500,000 births annually). WSHA anticipates receiving Washington statewide data within the year, at which time Washington comparative statistics will be added to the graphical display.

- The denominator for this measure is term infants without preexisting conditions (approximately 85% of the birth population).
- The CA Statewide numbers are from Jul 2012 – Jun 2013.

By Morbidity Level

<table>
<thead>
<tr>
<th></th>
<th>Hospital Severe</th>
<th>Hospital Moderate</th>
<th>CA Statewide Severe</th>
<th>CA Statewide Moderate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td>3.61%</td>
<td>7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>UW Medicine/ UW Medical Center</th>
<th>CA Statewide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>2.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Severe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>4.2%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
The patient, Kelly, sits on the bed, propped up by pillows. It’s her second pregnancy — the first time, she had a C-section.

This time, she wants to give birth vaginally. Some doctors and hospitals in Washington state would discourage her from trying a vaginal birth after a previous caesarean, but Valley supports moms like her.

Washington, like the rest of the country, has seen a dramatic increase in C-sections since 1996.

KUOW examined rates at hospitals throughout the state and found that the rates vary dramatically, from 6 percent at Othello Community Hospital in eastern Washington to 41.8 percent at Whitby General. On average, about one-quarter of first-time, low-risk moms get C-sections.

“It was scary,” Kelly recalled of her C-section. “When they pulled my daughter out — all I could do was reach for her hand.”

“No,” the nurses told her. “Not yet.”

Doctors and nurses at hospitals throughout the state gave many reasons for the variability: Older patients and an increase in fertility treatments around Seattle, rise of obesity statewide, low rates of vaginal births after C-section, fear of being sued.

But many say another reason prevails: hospital culture.

“When you see all that variation, you always wonder, what is going on? Because you cannot explain all that kind of variation by biologic variation,” said Dr. Tom Benedetti of UW Medical Center. “We’re learning that there are different cultures in different hospitals.”
“THE WAY THINGS ARE DONE AROUND HERE”

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Cultural Attribute Categories

• **Group** – high value on joint decision making, consensus building and teamwork

• **Developmental** – high value on risk taking and trying new things

• **Hierarchical** – high value on chain of command and distinct role responsibilities

• **Rational** – high value on costs and efficiencies
NICU Profile (Personality)

FIGURE 6, UNIT CULTURE SCALES
CENTER Q23 AND ALL COLLABORATIVE CENTERS
VERMONT OXFORD NETWORK
EVIDENCE-BASED QUALITY IMPROVEMENT COLLABORATIVE
ORGANIZATIONAL ASSESSMENT QUESTIONNAIRE, 1998 AND 2000

Printed August 22, 2000 by JHC
Presented at Washington State Hospital Association Safe Table Webcast Oct. 21, 2014
Increased Cesarean Sections

C-sections are “risk free”

“C-section is Safer”

Professional Autonomy

Operational Management Practices

Liability Concerns

“C-section is Safer”

Professional Hierarchy

Patient is Tired of Being Pregnant

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Findings from Survey and Visit

• Teamwork and communication (providers listen to nurses)
• Everyone is responsible for all patients. The culture supports bringing concerns to a clinician even if the patient is not theirs
• Providers and staff motivated toward vaginal deliveries
• Tend to not intervene operatively or surgically unless necessary
• Less intervention early but once a woman is declared “ready” they do what it takes to get her delivered
• Patience with inductions
• Patient demographics and community culture (Hispanic/young/desire for SVD)
• Skills with instrumented deliveries
• Experience level of providers and nurses
Findings from Survey and Visit (Cont.)

• Policies strictly enforced (e.g., no elective inductions for nulliparous women with unfavorable cervix (<9 cm))
• Higher tolerance for variances in fetal heart rate patterns
• Access to breech and VBAC deliveries
• Continuity of care while in hospital as well as from prenatal to and delivering baby
• No central monitoring
• Supportive “go to” manager
• Train new grads (can mold them according to culture)
• Good relationship with the residency program and surrounding hospitals (provide nursing training)
Yakima Valley Memorial Hospital

Aimee Borley, RN, BSN, Manager of the Family Birth Place
Karly Floyd, RN, Central Washington Perinatal Regional Network Coordinator
Roger Rowles, MD, Director of Perinatal Unit

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Safe Deliveries Roadmap Meeting Schedule

2014

• Roadmap Monthly (webcast) 7:00 – 8:00 a.m.

<table>
<thead>
<tr>
<th>January 9</th>
<th>July 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 21</td>
<td>August 19</td>
</tr>
<tr>
<td>March 26</td>
<td>September 18</td>
</tr>
<tr>
<td>April 23</td>
<td>October 21</td>
</tr>
<tr>
<td>May 20</td>
<td>November 26</td>
</tr>
<tr>
<td>June 12</td>
<td>December 18</td>
</tr>
</tbody>
</table>

• Safe Tables (in-person) 9:00 a.m. – 2:30 p.m.
  • November 18  Cancelled!

2015

• Safe Tables (in-person) 9:00 a.m. – 2:30 p.m.
  • February 10
• Remainder of 2015 schedule coming soon!

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Thank You!

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Safe Deliveries Roadmap Website
http://www.wsha.org/0513.cfm%20