

# **BREE COLLABORATIVE**

## **Obstetrics Care Topic**

### **Report & Recommendations**

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## The Bree Collaborative and its Charge

The Robert Bree Collaborative was established in 2011 by Washington State House Bill 1311 as an offshoot of the Washington State Advanced Imaging Management (AIM) project. The purpose of the Bree Collaborative is to provide a mechanism through which public and private health care stakeholders can work together to improve quality, health outcomes, and cost-effectiveness of care in Washington State.

Appointed by Governor Christine Gregoire, the 24-member Collaborative is charged with identifying up to three health care services annually where there is substantial variation in practice patterns or high utilization trends in Washington State. For each health care service, the Bree Collaborative is charged with identifying and recommending best practice approaches based on evidence that “scale up” existing efforts and quality improvement activities aimed at decreasing variation.<sup>1</sup> (See Appendix A for a list of Bree Collaborative members and subgroup members).<sup>2</sup>

The Bree Collaborative, at its September 2011 meeting, heard presentations on a variety of health procedures that are identified as having high variation in practice patterns and show the most promise for improvement in health outcomes through appropriate interventions. Members of the Bree Collaborative voted to select obstetric care (OB) as the first topic to research and make recommendations for improvement (followed by readmissions, low-back pain, and cardiology).

The Bree Collaborative is named in memory of Dr. Robert Bree. Dr. Bree was a pioneer in the imaging field and a key member of the AIM project.

## Problem Statement

A large body of evidence and administrative data shows that substantial variation in OB care practice patterns (labor and delivery) and services exists across providers and facilities in Washington State, despite local and national quality improvement efforts.<sup>i</sup> Variation is disconcerting because it may signal unfavorable outcomes for both mothers and infants, as well as higher costs. Lack of standardized labor and delivery management guidelines, useful data to guide clinical decision-making, maternal requests for procedures, perverse financial incentives, and provider behavior are the main drivers of variation.<sup>ii, iii</sup> Furthermore, the lack of nationally vetted maternity care measures and clinically relevant data in OB for measurement and process improvement may hinder community quality improvement efforts.<sup>iv, 3</sup>

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<sup>1</sup> In the bill, the Washington State Legislature does not authorize agreements among competing health care providers or health carriers as to the price or specific level of reimbursement for health care services. Furthermore, it is not the intent of the Washington State Legislature to mandate payment or coverage decisions by private health care purchasers or carriers.

<sup>2</sup> For more information on the Bree Collaborative, go to: <http://www.hta.hca.wa.gov/bree.html>.

<sup>3</sup> The main OB databases in Washington are: First Steps (birth certificates, maintained by the Washington State Department of Social and Health Services (DSHS)); Medicaid (WA Health Care Authority); the Washington State Hospital Association (WSHA) data benchmarking system; and OB COAP. For community wide quality

By utilizing a mix of actionable, innovative, and evidence-based quality improvement strategies targeted at the labor and delivery process, the Bree Collaborative aims to accelerate quality improvement in three areas of OB, which, in turn, will improve the safety, quality, and affordability of patient care for mothers and infants, and decrease costs for the entire community.

### OB Areas of Focus and Goals

The Bree Collaborative, guided by an OB subgroup that included stakeholders from across Washington State including national OB experts and practitioners, reviewed the limited data available, the evidence-based quality improvement literature on OB, and existing efforts. Based on this research, the Bree Collaborative recommends three inter-related focus areas with significant variation and the most opportunity for improvement, and recommends specific goals in each area. The three focus areas and goals are below, followed by justification for goal selection. Background on labor and delivery starts on the next page.

1. *Elective Deliveries.*<sup>4</sup> Eliminate all elective deliveries before the 39<sup>th</sup> week (those deliveries for which there is no appropriate documentation of medical necessity).
  - The Bree believes no elective deliveries before the 39<sup>th</sup> week should occur.
  - Goal builds upon the great work of existing local and national initiatives to reduce *elective deliveries* before the 39<sup>th</sup> week (The Leapfrog Group has a national target of 5%;<sup>v</sup> the Washington State Perinatal Collaborative and partners have a target of less than 5%;<sup>vi</sup> and the American Hospital Association has a target of zero<sup>vii</sup>).
  - Proven quality improvement strategies exist to meet this goal.
2. *Elective Inductions of Labor.* Decrease elective inductions of labor between 39 and up to 41 weeks.
  - Proven quality improvement strategies exist to meet this goal.
  - Decreasing elective inductions will decrease the *primary C-section rate*.
3. *Primary C-sections.* Decrease unsupported variation among Washington hospitals in the primary C-section rate.
  - Decreasing the unsupported variation of *primary C-section rates* is necessary in order to make a significant impact on outcome and cost.
  - Focusing on decreasing primary C-sections as a goal casts a wide net and will have a broad effect, thereby decreasing the C-section rate in different populations (e.g., *NTSV C-section*). Decreasing primary C-sections also prevents *repeat C-sections* and poor pregnancy outcomes resulting from accumulating C-section scars, such as *placenta previa*, *preterm birth*, and *placenta accreta*.<sup>viii</sup>

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improvement efforts, data and data analyses need to be transparent, contain clinically relevant data for quality improvement efforts, and results must be publically available. No data source currently meets all three criteria.

<sup>4</sup> See glossary for definitions of italicized terms.

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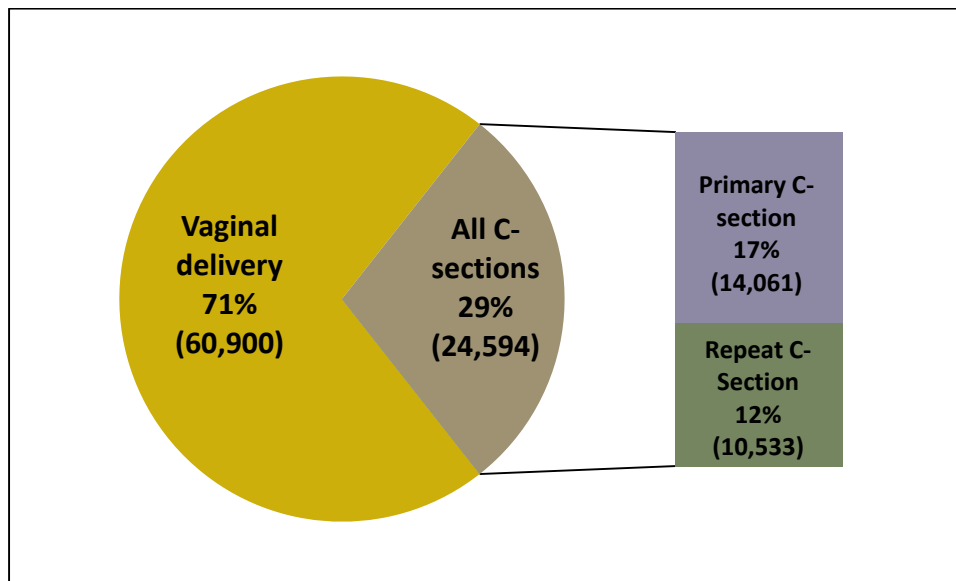
- This goal is supported by national experts who advocate that tackling the primary C-section rate should be the main goal of any OB quality improvement initiative.<sup>ix, x, xi</sup>

### Labor and Delivery in Washington State & Causes of Variation

Obstetrics is a high volume and costly service area. Pregnancy and childbirth-related conditions make up almost 25% of hospitalizations in the United States with approximately 4 million births annually.<sup>xii</sup> Pregnancy, birth, and newborn care are the most expensive hospital conditions in total billed to both Medicaid and private insurers.<sup>xiii</sup>

In 2011, 85,494 births occurred in Washington State. Births happen one of two ways: vaginal or by C-section, as shown below.<sup>xiv</sup> Medicaid paid for approximately half of these births.<sup>xv</sup>

Figure 1: Washington births by method of delivery, 2011  
(Source: Washington State First Steps database)



The Bree Collaborative is most interested in decreasing **elective** procedures with no medical indications (elective deliveries before the 39<sup>th</sup> week and elective inductions of labor between 39 and up to 41 weeks), and primary C-sections.

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### Elective Deliveries before the 39<sup>th</sup> week

An elective delivery occurs when a C-section or induction of labor is performed for non-medical reasons. Ten to fifteen percent of all births in the US are currently performed electively (without a medical indication) before the 39 weeks of gestation, including elective induction of labor and elective primary and repeat cesarean delivery.<sup>xvi</sup> *The American College of Obstetricians and Gynecologists* (ACOG) publications (1979, 1999, and 2009) have consistently advised against non-medically indicated elective deliveries prior to 39 weeks gestation. An elective delivery before 39 completed weeks can increase the risk of significant complications for both the mother and baby.<sup>xvii</sup> Babies born in the 37-39 week range are likely to have less fully developed brains, lungs, and livers than those born at 39 weeks or more, and a small proportion will require care in the Neonatal Intensive Care Unit (NICU).<sup>xviii</sup> Elective deliveries before the 39<sup>th</sup> week are also costly. One study estimates that nearly \$1 billion dollars could be saved annually in the U.S. if the rate of elective deliveries before the 39<sup>th</sup> week were reduced to 1.7%.<sup>xix</sup>

In Washington State, the elective delivery rate between 37 and 39 weeks is currently 5.4% percent (based on 4<sup>th</sup> Quarter 2011 data), down from 15.3% in 2010.<sup>xx</sup> However, the elective delivery rate among Washington hospitals varies significantly, from zero to 31% (See Appendix B for data). Evidence-based literature suggests the variation is multi-factorial, driven by both maternal requests and provider behavior/requests (a woman's physical discomfort, scheduling issues, or concern for rapid progression of labor away from the hospital).<sup>xxi</sup> Some clinicians may induce labor for their own scheduling convenience, while others may recommend elective induction due to concern about future complications.<sup>xxii</sup> No universally accepted clinical guidelines for curtailing elective deliveries exist, but an increasing number of hospitals do not allow deliveries to be scheduled before 39 weeks without appropriate documentation that they are medically necessary (called a *hard stop scheduling policy*).

*The Joint Commission*, supported by the *National Quality Forum* (NQF) and the Hospital Corporation of America, created a measure for elective delivery prior to 39 weeks to help track quality improvement efforts and hospital performance. The measure is one of five quality measures for the Washington Medicaid Quality Assessment program. The measure is "patients with elective vaginal deliveries or elective cesarean sections at  $\geq 37$  and  $< 39$  weeks of gestation completed."

### Elective Inductions of Labor between 39 and up to 41 weeks

An elective induction of labor is when labor is initiated for non-medical reasons. Nationally, from 1990 to 2009, the proportion of births in the US with induced labor more than **doubled**, from 9.5% to 23.1%.<sup>xxiii</sup> The rate of increase in medically indicated inductions of labor has been slower than the overall increase, which means the increase in **elective** inductions of labor has been more rapid.<sup>xxiv</sup>

Similar to elective deliveries less than 39 weeks, there are risks with elective inductions of labor between 39 and up to 41 weeks. There are increased risks for both moms and babies, but for moms the morbidity risk and long-term health problems are greater.<sup>xxv</sup> Induced deliveries are more likely to lead to a C-section, which is major surgery, especially in first-time mothers with a low *Bishop score* at the time of elective induction and who receive preinduction *cervical ripening*.<sup>xxvi, xxvii</sup> ACOG published a Practice Bulletin on Induction of Labor in 2009 that states



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that doctors should warn women having their first delivery that the risk of having a C-section doubles if labor is induced with an unfavorable cervix.<sup>xxviii</sup>

The percentage of induction of labor among Washington State hospitals varied from 3% to 48%, in 2011 (includes both elective and non-elective inductions<sup>5</sup>).<sup>xxix</sup> (See Appendix B for data). Reasons for the wide variation are the same as for elective deliveries before the 39<sup>th</sup> week: 1) the mother requests the procedure; 2) provider decisions (indications for whether and when to perform inductions of labor and elective inductions of labor are gray areas); 3) scheduling for convenience reasons.<sup>xxx</sup>

No national measures or community standards exist for *induction of labor* (for medical reasons or elective inductions between 39 and up to 41 weeks), but four organizations (ACOG, NICE, SOGC and VA/DOD)<sup>6</sup> have created clinical guidelines relevant for induction of labor (cervical dilation at the onset of induction). All four support avoiding elective induction of labor prior to 39 weeks, but none focuses specifically on the management of “elective” inductions. All but one guideline (NICE) were rated poor or fair in an evidence-based systemic literature review conducted by the Center for Evidence-based Policy at Oregon Health & Science University.<sup>xxxi</sup> France instituted a national guideline for elective inductions in 1995.<sup>7</sup> A French study found that among institutions that did not follow these guidelines, there was a three-fold risk of C-sections.<sup>xxxii</sup>

### Primary C-Sections

C-section delivery is now the most common operation in the US, increasing dramatically since 1970; yet the rise has not led to significant improvement in neonatal morbidity or maternal health.<sup>xxxiii</sup> C-sections can have negative consequences, including higher risks of infections, infertility, longer recovery time, and problems with future pregnancies.<sup>xxxiv</sup> In a C-section birth, babies face higher risks of respiratory problems and asthma.<sup>xxxv</sup> One study shows that primary C-sections account for at least 50% of the increasing C-section rate.<sup>xxxvi</sup> A decrease in *Vaginal Births After Cesarean* (VBAC), or underutilization of VBACs, also contributes to the rising C-section rate. Those findings suggest that a primary C-section most likely leads to a second or repeat C-section.<sup>xxxvii</sup>

The overall C-section rate in Washington State increased **73%**, from 1996 to 2009, one of the biggest increases in the nation. In Washington State C-section rates vary greatly by hospital and region, from 10 to 39%.<sup>xxxviii</sup> The overall primary C-section rate in Washington State in 2011 was 17%.<sup>xxxix</sup>

Like inductions, no national labor and delivery management standards or guidelines exist for **whether** and **when** to perform a C-section **once labor has started**. The lack of standardization

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<sup>5</sup> No data on the rate of elective inductions of labor in Washington State are publically available. Only data on 37 to less than 39 weeks elective deliveries are available.

<sup>6</sup> NICE is the UK National Institute for Health and Clinical Excellence; SOGC is the Society of Obstetricians and Gynaecologists of Canada; and VA/DOD is the Veterans Administration/Department of Defense.

<sup>7</sup> Guideline required baby to be over 39 weeks, a Bishop score of over five, and no use of preinduction cervical ripening for elective induction.

allows for random, subjective, albeit expert decision-making, by providers.<sup>xl, xli</sup> Failure to progress and fetal intolerance of labor/contractions are two indications with no standards that account for nearly all of the increase in the primary C-section rate.<sup>xlii</sup> Hospitals may have their own protocols in place, but research shows homegrown protocols may be “nonspecific and contradictory.”<sup>xliii</sup> Lack of standard clinical guidelines for *elective* inductions prior to 39 weeks of gestation may also contribute to the rising rate and variation in the primary C-section rate, because the primary C-section rate associated with induction of labor is directly related to the increased number of induced deliveries.<sup>xliv</sup>

ACOG has not issued advisories or recommendations on this issue because there is a lack of clinical consensus. However, ACOG, in one of its publications, states that active management of labor has been shown to be beneficial in reducing C-section rates.<sup>xlv, 8</sup> Similarly, no national measure exists for primary C-sections. “NTSV C-section” is the national C-section measure, because it has been shown to be highly sensitive to variations in OB practices.<sup>xlvi</sup> Healthy People 2020 and The Joint Commission use the NTSV C-section as a perinatal indicator and measure. In Washington State, OB COAP data for 2011 (6,300 births) the NTSV C-sections were 63% of the primary C-sections. Given that, concentrating on just NTSV C-sections misses almost half of the population undergoing a primary C-section.

### Examples of OB Effective Practices and Innovative Programs

Many hospitals and providers have and are currently employing various strategies to decrease variation in OB practices and improve quality. Below are examples of effective practices that have successfully decreased elective deliveries and C-sections.

**Robust Quality Improvement Program.** Some Washington hospitals have OB quality improvement programs in place, but some do not. Franciscan Health System is a model of a successful quality improvement program for managing elective deliveries before the 39<sup>th</sup> week (see Appendix C for a description of their program). As a result, the rate of elective deliveries before 39 weeks has declined significantly, to less than 1%. Components of their quality improvement program include:

- A hard stop scheduling policy using national and Washington State protocols;
- Strong physician leadership and commitment to improving maternal and child care;
- Education and engagement of staff at all levels;
- A data collection system;
- Audit and feedback reports;<sup>9</sup>
- Patient education materials and tool-kits created by national groups such as the March of Dimes and the Oregon Health & Science University; and

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<sup>8</sup> According to a national OB expert not involved in the Bree Collaborative, ACOG “is not taking on the prevention of primary C-sections at this time but most likely will in the near future.”

<sup>9</sup> According to the OHSU evidence-based literature review on C-sections, studies show that audit and feedback reports are effective at reducing C-section rates.

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- Participation in national and local perinatal quality improvement efforts like the Washington State Perinatal Collaborative.<sup>xlvii, xlviii</sup>

**Induction Management Program.** Both Swedish Medical Center (Seattle, WA) and Magee-Womens Hospital (Pittsburgh, PA) implemented similar quality improvement programs to lower the rate of primary C-section deliveries by reducing elective inductions. Quality improvement programs included instituting a protocol that included medical induction criteria and patient education (patient consent form). As a result, both hospitals decreased the elective induction rate of women at or over 39 weeks of gestation and the C-section rate.<sup>xlix, l</sup>

**Hard Stop Policy for Scheduling Elective Deliveries (using The Joint Commission and State of Washington definitions of elective).** Hard stop scheduling policies have proven to be an effective tool to decrease elective deliveries before the 39<sup>th</sup> week. In a Hospital Corporation of America study, a hard stop (versus “soft stops” or education only approaches) scheduling policy significantly reduced the elective delivery rate.<sup>10</sup> In 2001, Intermountain Healthcare instituted a hard stop on scheduling inductions, resulting in \$45 million in savings from an overall reduction in C-sections and fewer newborns needing ventilators.<sup>li</sup> Franciscan Health System, a hospital system here in Washington State with a low elective delivery rate, believes a hard stop policy for scheduling is “critical and necessary” to decrease elective deliveries before 39 weeks. In addition to the Franciscan hospitals, some other Washington hospitals already have a hard stop at scheduling policy in place, but many do not. It is not known how many hospitals do and do not. Last September all 17 Portland-area hospitals implemented a hard stop policy for scheduling elective induction and C- section births before 39 weeks.<sup>lii</sup> All Portland hospitals agreed to use a common set of indications (from The Joint Commission) as the basis for “medical necessity” with appeal to the head of OB at each institution for questionable cases. They also agreed to use the current Leapfrog measures as the basis for tracking and eventual reporting.

**Public Reporting of Hospital Performance.** The Washington State Hospital Association and other members of the Washington State Perinatal Collaborative recently published data on *elective deliveries* between 37 and 39 weeks on their website. Studies show that public reporting of intervention rates and outcomes, whether alone or in combination with other quality improvement programs, translates into better care, and that the quality of obstetric care improves more in response to public reporting than in other medical or surgical specialties.<sup>liii</sup> In addition, patients can be better consumers and make better decisions about how and where they seek care if they have access to information.

**New Payment Structure.** Geisinger Health System in Pennsylvania has implemented a bundled payment (payment is packaged around a comprehensive episode of care for women and newborns that covers all patient services related to that service) with the support of the Network for Regional Healthcare Improvement, Center for Healthcare Quality & Payment Reform, and Childbirth Connection. Results are not known at this time. The Health Care Incentives Improvement Institute (HCII) has also created a bundled payment called the PROMETHEUS Payment Pregnancy and Delivery Evidence-informed Case Rate (ECR). The ECR is designed to encourage high-quality care and appropriate decisions about pregnancy and delivery by

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<sup>10</sup> One type of soft stop policy is when attending physicians, not the scheduling staff, are in charge of elective delivery scheduling decisions.

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physicians, reduce Potentially Avoidable Complications (PACs), and eliminate waste.<sup>liv</sup> Plans to test the Pregnancy and Delivery ECR in different communities are underway.

### **OB Current Efforts**

Some components of OB care have been hot button issues nationally and locally for decades because of a rising C-section rate without accompanying improvement in outcomes for mothers and babies. Many national and local maternal and child health groups and initiatives exist which have made great progress in improving quality in OB services as well as maternal and child health overall in Washington State. The Bree Collaborative recognizes the huge strides existing efforts have made in improving maternal and child health.

Washington State Perinatal Advisory Committee (PAC). The PAC was formed in 1985 by the Washington Department of Health (DOH) to: 1) identify and prioritize statewide perinatal concerns; 2) develop recommendations through specific work groups to address perinatal issues; and 3) provide consultation and recommend prioritized solutions to DOH and Washington Medicaid. OB providers, professional organizations and consumer groups make up the Perinatal Advisory Committee. The work of the committee is accomplished through two meetings a year or through subcommittee workgroups as needed. For the next two years, the PAC has chosen to focus on C-section/labor management and episiotomies for its quality improvement work.

Washington State Perinatal Collaborative (WSPC). WSPC is the quality improvement arm of the PAC and is staffed by DOH. The WSPC is a group of public and private organizations and medical professionals committed to improving the care and outcomes for pregnant mothers, newborns, and infants in Washington State. Members include the March of Dimes, Washington State Hospital Association, Washington Health Care Authority, the University of Washington, and the Washington State Perinatal Regional Network. Over the past few years, WSPC has led a successful initiative to reduce the elective delivery rate between 37 and 39 weeks. As a result, the rate has decreased by more than half (to 5.4% in 2011 (based on 4<sup>th</sup> Quarter 2011 data). Their goal is 5% by August 2012. For more information, see <http://www.waperinatal.org/>.

Washington State Perinatal Regional Network (PRN). The PRN is coordinated by the DOH Division of Prevention and Community Health, and is a collaborative effort with Washington Health Care Authority and Washington State Medicaid. The state uses state and federal funds to contract with geographically strategic healthcare institutions to coordinate and implement state and regional quality improvement projects to decrease poor pregnancy outcomes for which Medicaid clients are at disproportionately increased risk. There are four PRN contractors throughout Washington State charged with assisting hospitals in their regional network. The PRN contractors are located at four hospitals: 1) University of Washington, Department of Obstetrics and Gynecology, Seattle; 2) Tacoma General Hospital (MultiCare), Tacoma; 3) Yakima Valley Memorial Hospital, Yakima; and 4) Sacred Heart Medical Center, Spokane.

Washington State Hospital Association (WSHA). WSHA is a member and lead partner with the WSPC on the elective delivery between 37 and 39 weeks initiative, as well as other quality and safety initiatives. WSHA recently published elective delivery rates by hospital on their website

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([www.wahospitalquality.org](http://www.wahospitalquality.org)). These initiatives are supported by the federal CMS *Partnership for Patients* grant WSHA received to reduce harm in ten strategic areas including obstetrics. Through this work WSHA will continue to measure and provide technical support to hospitals as part of the initiative to reduce the elective delivery rate, and in the future help hospitals implement strategies to reduce elective inductions and episiotomies.

Washington State Medicaid. The Washington State Medicaid program is regarded as a national leader in improving obstetrics care because it has implemented a number of innovative quality improvement strategies including incentives for delivering better care. The Bree Collaborative's goals are similar to Medicaid's goals, except Medicaid is focusing on NTSV C-sections and VBACs. Medicaid's quality improvement efforts include: equalizing facility reimbursement for uncomplicated C-sections and complicated vaginal births; contracting with Oregon Health & Science University to develop evidence-based tool-kits for providers and community stakeholders; providing feedback reports to hospitals on their performance on NTSV deliveries and VBAC rates; and paying hospitals an incentive payment for achieving a statewide 7% rate for elective deliveries between 37 to 39 weeks (Medicaid Quality Assessment Incentive program). Medicaid is also an active member of WSPC.

OB COAP. The Obstetrics Clinical Outcomes Assessment Program (OB COAP) is a clinician-led obstetrics quality improvement program. Housed at the Foundation for Health Care Quality, OB COAP brings together physician leaders and hospitals to collect and review clinical outcomes data and seek improvements in labor and delivery care.

March of Dimes. A national organization, the March of Dimes (MOD) strives to improve the health of children by preventing birth defects, premature birth, and infant mortality. The MOD accomplishes its mission through community programs, advocacy, education, and research. It created the 'Healthy Babies are Worth the Wait®' health education campaign to educate providers and mothers about the risks of early elective deliveries before the 39<sup>th</sup> week at least and preterm birth (a free copy of the toolkit can be downloaded at <https://www.prematurityprevention.org/portal/server.pt>). The MOD has also worked with clinicians to create evidence-based tool-kits to improve birth outcomes in addition to disseminating health education materials for a wide variety of stakeholders including employers. The Washington Chapter is an active member of the WSPC.

The Leapfrog Group. A national, employer-driven organization, founded by the Business Roundtable of which The Boeing Company is a member, the Leapfrog Group strives for a safe, quality and affordable health care system through the promotion of transparency and efficiencies. Leapfrog's primary quality effort is its annual hospital quality and safety survey. Leapfrog also leads a successful early elective delivery campaign, which includes publishing hospital's self-reported *early elective delivery* rates and creating an early elective delivery measure, which has been endorsed by the National Quality Forum. The published early elective delivery rate of hospitals participating in the hospital survey has decreased from 30% to 14% (5% is the target rate).<sup>lv</sup> Twenty-one Washington hospitals participate in the initiative. Leapfrog recently has partnered with other national groups (Institute for Healthcare Improvement, Childbirth Connection, and Catalyst for Payment Reform), and employer and regional business coalition



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members on a series of initiatives to eliminate elective deliveries (zero incidence), which is also the goal of the IHI Perinatal Improvement Community.<sup>lvi</sup>

**Strong Start Initiative.** A federal initiative created in February 2012 by the US Department Health and Human Services, the Strong Start Initiative strives to reduce preterm births and improve outcomes for newborns and pregnant women. HHS is collaborating with many national organizations including the March of Dimes, ACOG, Leapfrog Group, and others to conduct an awareness campaign to reduce the rate of early elective deliveries prior to 39 weeks as well as a payment reform pilot to reduce the rate of preterm births.

### **The Bree Collaborative Recommendations: Quality Improvement Strategies and Actions**

The Bree Collaborative, guided by its OB subgroup, reviewed the latest literature on evidence-based quality improvement strategies, innovative local best practices, and existing efforts. To improve the quality of maternity care, quality improvement programs should be multifaceted, employing many interventions simultaneously.<sup>lvii</sup> Each stakeholder - hospitals, individual providers, health plans, employers, and patients - shares responsibility and has a role to play in one or more of the five areas of quality improvement in order to drive system change.<sup>lviii, lix, lx</sup>

1. Strong leadership and commitment to quality improvement
2. Evidence-based or tested clinical guidelines and protocols
3. Transparency of data on selected OB procedures, by facility
4. Patient education
5. Realignment of financial and non-financial incentives

Below are specific recommended actions each stakeholder group should take to achieve the recommended goals.

#### **Hospitals**

- **Support or sustain an OB quality improvement program.** Hospitals that do not already have an OB quality improvement program similar to Franciscan Health System's should develop and implement one. Components of a successful quality improvement program include: hard stops using national and Washington State protocols; strong physician leadership and commitment to improving maternal and child care; education and engagement of staff at all levels; a data collection system; audit and feedback reports; patient education materials and toolkits created by national groups; and participation in national and local perinatal quality improvement efforts.
- **Use evidence-based, tested protocols and policies recommended by the Bree Collaborative.**
  - Standards for Scheduling Deliveries before the 39<sup>th</sup> week: Hospitals should implement a policy that limits scheduling deliveries before the 39<sup>th</sup> week and includes the following two components:

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1. The indication must be on The Joint Commission or the Washington State list used in the current elective delivery between 37 and 39 weeks Washington State Perinatal Collaborative/WSHA project; and
  2. For clinical situations not on the two lists noted in number one above, consultation must occur and agreement must be obtained that the clinical situation requires delivery.<sup>11</sup>
- Standards for Scheduling Elective Inductions between 39 and up to 41 weeks: Since no widely-accepted standard for elective inductions at or over 39 weeks exists, the Bree Collaborative recommends hospitals adopt a protocol similar to that of Swedish Medical Center, Seattle and Magee-Women's Hospital, Pittsburgh including a patient education component:
    1. The cervix must be favorable (Bishop score of 6 or greater) for an elective induction to be scheduled; and<sup>12</sup>
    2. A consent form specific to the risk and benefits of induced compared with spontaneous labor has been signed by the patient.
  - Labor and Delivery Guidelines for C-Sections: As mentioned previously, clear national guidelines do not currently exist for diagnosing labor arrest requiring C-section delivery. To fill this gap, OB experts on the Bree OB subgroup reviewed labor and delivery management literature and research studies, and recommend hospitals implement the following evidence-based guidelines and standards recommended by experts (denoted in parentheses below) until Washington State<sup>13</sup> or a national group like ACOG develops universally accepted labor and delivery management standards:
    - Admit only those spontaneously laboring women at term who present with no fetal or maternal compromise when the cervix is 4 centimeters or more dilated.<sup>lxi</sup>
    - Allow first stage labor arrest cesarean (reassuring fetal and maternal status but lack of progress of labor) to be performed only in the active phase (equal to or more than 6 centimeters dilation).<sup>lxii, lxiii</sup>
    - Allow adequate time in the active phase (4 to 6 hours) with use of appropriate clinical interventions before making a diagnosis of active phase arrest.<sup>lxiv</sup>
    - Allow sufficient time with appropriate clinical interventions in the 2<sup>nd</sup> stage before diagnosis of 2<sup>nd</sup> stage arrest or "failure to descend."<sup>14, lxv</sup>

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<sup>11</sup> If there is concurrence, the delivery would be considered medically necessary, not elective.

<sup>12</sup> France's national protocol advised a Bishop score of 5 or greater; Swedish's was greater than or equal to 6; and Magee-Women's Hospital's was at least 8 if first child or 6 for not first child (repeat birth).

<sup>13</sup> Washington Medicaid hired OHSU to develop labor and delivery management standards for Washington; draft standards are expected to be completed in summer or fall 2012.

<sup>14</sup> Zhang et al found that one-third of cesarean deliveries at the second stage were performed at less than 3 hours in nulliparous women (women who have never given birth to a viable, or live, infant), whereas, a quarter were performed at less than 2 hours in multiparous women (women who have given birth one or more times). This finding contradicts a 2003 ACOG guideline that defines arrest of descent as greater than 3 hours in nulliparous women with epidural analgesia and greater than 2 hours in multiparous women with epidural analgesia.

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- **Collect data (including baseline) on the Bree Collaborative's three goals using a clearly defined data collection process with mandatory reporting and deadlines.** All hospitals should collect data on maternity care processes and utilization – elective deliveries, elective inductions, and primary C-section rates - in order to drive quality improvement and improve care. A number of Washington hospitals already collect their own data on primary C-sections, elective inductions and elective delivery rates, according to a DOH survey.<sup>lxvi</sup> OB COAP is currently helping a number of hospitals in Washington with data collection and measurement (but results are not yet publically available).
- **Measure and provide feedback to providers.** Some Washington hospitals already have this practice in place, but those that do not should do so.
- **Support public reporting of OB procedure data through appropriate websites like Medicaid (Health Care Authority), Puget Sound Health Alliance or Washington State Hospital Association consistently.** As mentioned earlier, Washington hospitals' elective delivery rates between 37 and 39 weeks<sup>15</sup> are now publically available. However, more data on OB procedures such as elective inductions, primary C-sections, and NTSV C-sections should be posted publically.
- **Provide patient education and promote shared decision-making on maternity care options and risks of pre-term births, and elective deliveries and C-sections.** A fully informed patient is necessary to ensure that high quality medical decisions are being made. For example, patient education materials have shown to help decrease elective deliveries and incent full-term pregnancies. As part of routine care, hospitals should provide patients with information about the specific options available, and the benefits and risks of those options. The March of Dimes produces patient education materials and provider toolkits on the risks of preterm deliveries including a “Brain Card” that illustrates relative size/weight of fetal brain between gestational age of 35 weeks and 40 weeks. AWHONN (Association of Women's Health, Obstetric and Neonatal Nurses) published an advisory to mothers about getting to 40 weeks (See Appendix D for copies of these materials).

### Individual Providers

- **Commit or recommit to applying the clinical guidelines listed above.** Variation in care will not decrease and health outcomes will not improve unless OB providers managing the labor and delivery process personally commit to using evidence-based clinical guidelines including those recommended by the Bree Collaborative.
- **Enhance education of patients on maternity care options and risks of pre-term births, and elective deliveries and C-sections.** Individual providers, in addition to hospitals, should use health education materials such as the March of Dimes “Brain Card” with patients when appropriate.

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<sup>15</sup> These data are only available because of a special project that required chart review.



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### **Washington Health Care Authority (including Washington State Medicaid), Washington Department of Health & Washington PEBB (Public Employment Benefits Board)**

- **Continue to support hospitals in quality improvement efforts including implementation of Bree Collaborative-recommended evidence-based protocols, data collection efforts, measurement and analyses, patient education, feedback reports and public reporting, but add the primary C-section rate.** All departments - through the Washington State Perinatal Collaborative and Perinatal Regional Networks - have been instrumental in helping hospitals and physicians improve maternity care through quality improvement (includes data collection). The support should continue, but the primary C-section rate should be added as an indicator.
- **Continue the Medicaid Quality Incentive Program adding Bree Collaborative's elective induction and primary C-section goals as targets.** Washington hospitals currently receive a performance payment bonus if they meet targets set by Medicaid for all five indicators – elective deliveries, flu immunization, discharge instructions, emergency room plan, and anti-psychotic medications. This program is set to expire at the end of 2012.
- **Assist practitioners and facilities with the provision of easily accessible, state-certified Patient Decision Aids (PDAs).** PDAs provide unbiased, balanced information and a consent format for patients regarding risks and benefits of procedures or treatments, such as elective inductions less than 39 weeks and primary C-sections by maternal choice. PDAs also protect both patients and practitioners/facilities. If there is a legal action based on lack of informed consent, a PDA provides "prima facie evidence (evidence that will prevail unless rebutted by clear and convincing evidence) of informed consent that the patient or his or her representative signed an acknowledgement of shared decision making."<sup>16</sup>

### **Employers & Purchasers**

- **Provide preterm educational materials to employees through the workplace (employee wellness website and on-site clinics) and require health plans to include robust education as part of their maternity program.** The March of Dimes provides a free tool specifically for employers, called 'Healthy Babies Healthy Business' (<http://www.marchofdimes.com/hbhb/>). Healthy Babies, Healthy Business helps employees make better health care decisions by offering a multi-dimensional health education program that is evidence-based and consumer tested. It offers six resources to help employers improve employee health and the health of the company's bottom line. The program provides pre-conception, prenatal, and postpartum or newborn care education relevant to both women and men. Aetna, Cigna, UnitedHealthcare, and WellPoint along with national organizations participate in an awareness campaign targeting expectant mothers across the country emphasizing the importance of full-term deliveries and the risks of elective deliveries and inductions.

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<sup>16</sup> Existing RCW 7.70.060 now specifies that certification is the responsibility of the Washington State Medicaid medical director if no national or international organizations have certified PDAs.

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- **Work in conjunction with their health plans or third party administrator to make benefit design changes that support evidence-based care and reward better outcomes.** The Catalyst for Payment Reform Action Brief on Maternity Care Payment lists steps employers can take with their health plans to improve OB care.<sup>lxvii</sup> Steps include:
  - Create payment contracts with providers and hospitals that remove perverse incentives for today's high rates of intervention in labor and delivery, including unnecessary C-section deliveries;
  - Require hospitals and physicians to collaboratively implement scheduling policies to limit elective deliveries before 39 weeks and elective inductions of labor between 39 and up to 41 weeks in accordance with guidelines proposed for each procedure at the bottom of page 11/ top of page 12, or require consultation for acceptance of exceptions;
  - Incorporate maternity quality metrics in performance-based payment contracts;
  - Provide members with information on the quality of maternity care across the physicians, midwives, and hospitals in its network; and
  - Use tiered benefit arrangements that emphasize quality to steer members to higher performing hospitals.
- **Require hospitals to have OB quality improvement programs in place.** Starting in October 2012, Oregon's Public Employee Benefit Board (OR-PEBB) - the board that contracts for and administers benefits for Oregon state employees, dependents and eligible people - will require all contractors to take steps towards reducing the C-section rate and elective delivery rate and provide progress on their goals. Additionally, all questionable inductions or exceptions must be subject to facility clinical review.<sup>lxviii</sup>

### Health Plans

- **Support a new payment structure or structures for OB care.** Current reimbursement and payment systems for OB services reward unnecessary care, not necessarily quality care, and do not incentivize labor management or time intensive best care practices. The Catalyst for Payment Reform has studied and published an Action Brief featuring alternative ways to pay for maternity care that align payment with evidence-based care.<sup>lxix</sup>
- **Collaborate with other health plans in Washington to create a quality incentive program, using the same quality criteria.** In addition to a new payment structure for OB care, creating a pay-for-performance type incentive program will accelerate improvement without violating state and federal anti-trust laws.

### **Next Steps for Implementing Recommended Actions**

Many of these recommended actions can be implemented in the near term in concert with other obstetric quality improvement efforts, if organizations commit to process improvement for best maternity care. To coordinate implementation of the recommended actions, the Bree Collaborative recommends an implementation team be formed to develop an action plan to guide community-wide quality improvement efforts.

Per requirements of the Bree Collaborative legislation, the Bree Collaborative must deliver a copy of this report to the administrator of the Washington Health Care Authority. The administrator must review the strategies and recommendations and decide whether to adopt and apply recommended strategies to state purchased health care programs. Following the administrator's review, the Bree Collaborative must report to the Washington State Legislature and the Governor regarding proposed strategies and the results of the administrator's review.



## Glossary

**American College of Obstetricians and Gynecologists (ACOG):** a private, voluntary, nonprofit membership organization of obstetrical and gynecological professionals providing health care for women. The Washington State Obstetrical Association (WSOA) is Washington State's ACOG chapter.

**Bishop Score:** a pre-labor scoring system to assist in predicting whether induction of labor will be successful. It has also been used to assess the odds of spontaneous preterm delivery. The total score is achieved by assessing the following five components on vaginal examination:

- Cervical dilation
- Cervical effacement
- Cervical consistency
- Cervical position
- Fetal station

**Cervical ripening:** the softening of the cervix that typically begins prior to the onset of labor contractions and is necessary for cervical dilation and the passage of the fetus. Cervical ripening results from a series of complex biochemical processes that ends with rearrangement and realignment of the collagen molecules. The cervix thins, softens, relaxes and dilates in response to uterine contractions, allowing the cervix to easily pass over the presenting fetal part during labor. Cervical ripening in this paper (on page 12) refers to causing this process to occur (pharmacological or mechanical), rather than waiting for it to happen spontaneously.

**Cesarean Section (C-section):** a surgical procedure in which incisions are made through a mother's abdomen (laparotomy) and uterus (hysterotomy) to deliver one or more babies.

**Early Elective Delivery:** the decision to perform a C-section or induction of labor for non-medical reasons between 37 and 39 completed weeks of gestation.

**Elective Delivery:** the decision to perform a C-section or induction of labor for non-medical reasons.

**Elective Induction of Labor:** the decision to begin the process of giving birth (labor) when contractions have not yet occurred and in the *absence of any medical indication*.

**Failure to progress in labor:** when the mother's cervix does not continue to dilate more and/or the baby is not descending.

**Full Term Birth:** when the baby is 39 weeks or more. (There is growing evidence to suggest that term should be 39 weeks but national institutions and experts have not acted on this at this time).

**Hard Stop Scheduling Policy:** when scheduling of elective inductions and primary and repeat C-sections at less than 39 weeks is prohibited.

## Obstetrics Care Topic

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**Indicated Induction of Labor:** the decision to begin the process of giving birth (labor) *because of a medical problem* when contractions have not yet occurred.

**Induction of Labor:** the decision to initiate labor. The decision to induce can be elective or medically indicated.

**The Joint Commission:** An independent, not-for-profit organization, the Joint Commission accredits and certifies more than 19,000 health care organizations and programs in the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting certain performance standards.

**Labor:** uterine contractions that result in dilation of the cervix.

**Labor and Delivery Standards or Guidelines:** guidelines that help providers make decisions while taking care of a woman in labor and delivery.

**Late Preterm birth:** when an infant is born between 34 and 36 weeks gestation.

**National Quality Forum (NQF):** a nonprofit organization that operates under a three-part mission: 1) to improve the quality of American healthcare by building consensus on national priorities and goals for performance improvement and working in partnership to achieve them; 2) endorsing national consensus standards for measuring and publicly reporting on performance; and 3) promoting the attainment of national goals through education and outreach programs.

**NTSV (Nulliparous Term Singleton Vertex):** refers to the population of pregnant women who have not delivered a baby before; the baby they are carrying is at term (37-41 weeks); only one baby is in the womb (not twins or more); and baby is presenting headfirst.

**NTSV C-section:** when a C-section is performed on a mom who is in the NTSV population.

**Placenta Previa:** a complication of pregnancy in which the placenta grows in the lowest part of the womb (uterus) and covers all or part of the cervix.

**Placenta Accreta:** a complication of pregnancy involving an abnormally implanted placenta, through the endometrium and into the myometrium (the middle layer of the uterine wall).

**Preterm birth:** when an infant is born less than 37 weeks gestation.

**Primary C-section:** the first time a woman has a C-section (but could be her subsequent birth; meaning a previous child or children was delivered vaginally).

**Primary C-section Rate:** the percentage of cesarean births to women who have not had a previous C-section delivery.

**Repeat C-section:** when a woman delivers by C-Section after a previous C-section.

## Obstetrics Care Topic

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**Repeat C-Section Rate:** the percentage of C-section births to women who have had a previous cesarean delivery.

**TOLAC (Trial of Labor After C-Section):** when a woman attempts a vaginal birth after having a C-section for a prior birth.

**VBAC (Vaginal Birth After C-section):** when a woman delivers a baby vaginally after having a C-section with a previous child.

**Washington State Obstetrical Association (WSOA):** a non-profit educational organization dedicated to improving the healthcare of women in the state of Washington, and the local ACOG chapter.





## Obstetrics Care Topic

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### Appendix A – Bree Collaborative Membership and OB Subgroup

<b>Robert Bree Collaborative</b>	
Steve Hill, Chair	Director, Dept of Retirement Systems and Chair, Puget Sound Health Alliance & Bree Collaborative
Roki Chauhan, MD	Senior Vice President & Chief Medical Officer, Premera Blue Cross
Susie Dade, MS	Deputy Director, Puget Sound Health Alliance
Gary Franklin, MD, MPH	Medical Director, Labor and Industries
Stuart Freed, MD	Medical Director, Wenatchee Valley Medical Center
Thomas Fritz	Chief Executive Officer, Inland Northwest Health Services, Spokane
Joseph Gifford, MD	Executive Medical Director, Regence
Richard Goss, MD	Medical Director, Harborview Medical Center - University of Washington
Mary Gregg, MD, FACS, MHA	Director, Quality and Patient Safety, Swedish Health Services, Seattle
Tony Haftel, MD	VP Quality & Associate Chief Medical Officer, Franciscan Health Systems
Jodi Joyce, RN	Vice President, Quality & Patient Safety, Legacy Health
Gregory Marchand	Director Benefits Policy and Strategy, Boeing
Robert Mecklenburg, MD	Medical Director, Center for Health Care Solutions, Virginia Mason Medical Center
Carl Olden, MD	Family Physician, Pacific Crest Family Medicine, Yakima
Mary Kay O'Neill, MD, MBA	Chief Medical Officer PNW, CIGNA
Robyn Phillips-Madson, DO, MPH	Dean and Chief Academic Officer, Pacific NW University of Health Sciences
John Robinson, MD, SM	Chief Medical Officer, First Choice Health
Terry Rogers, MD	CEO, Foundation for Health Care Quality
Eric Rose, MD	Physician, Fremont Family Medicine, Seattle
Kerry Schaefer	Strategic Planner for Employee Health, King County
Bruce Smith, MD	Physician, Group Health Physicians
Jay Tihinen	Assistant Vice President Benefits, Costco Wholesale
Jeffery Thompson, MD, MPH	Chief Medical Officer, Health Care Authority
Peter Valenzuela, MD, MBA	Medical Director, PeaceHealth Medical Group

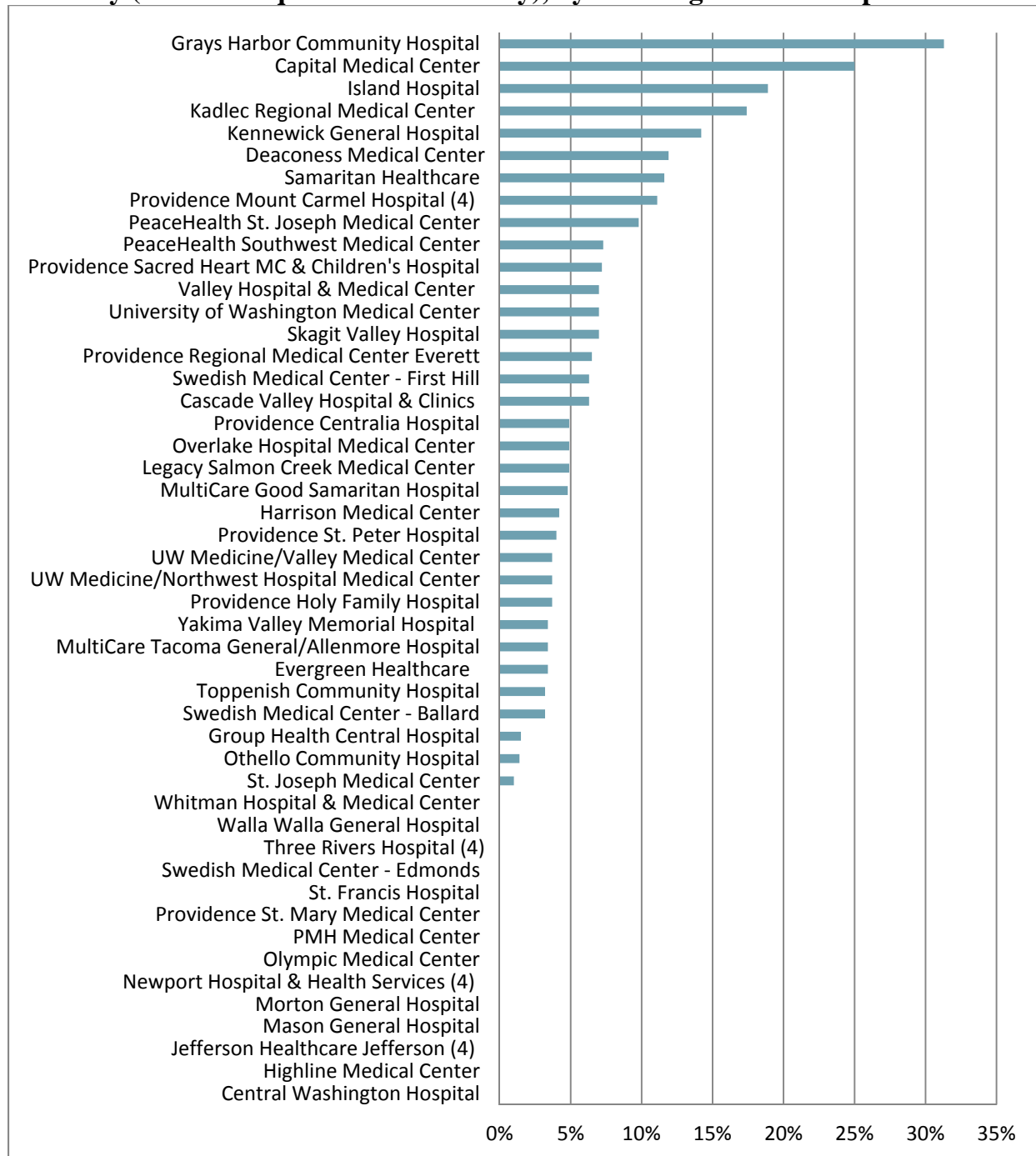
## Obstetrics Care Topic

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<b>Bree Collaborative - OB Subgroup</b>	
Theresa Helle	Manager Health Care Quality & Efficiency Initiatives, the Boeing Company
Ellen Kauffman, MD	Medical Director, OB COAP
Robert Mecklenburg, MD	Medical Director, Center for Health Care Solutions, Virginia Mason Medical Center
Carl Olden, MD	Family Physician, Pacific Crest Family Medicine, Yakima
Mary Kay O'Neill, MD	Chief Medical Officer PNW, CIGNA
Dale Reisner, MD	Perinatologist, Swedish Hospital
Terry Rogers, MD	Executive Director, Foundation for Health Care Quality
Roger Rowles, MD	OB-GYN, Yakima Memorial

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### Appendix B – Elective Deliveries between 37 and up to 39 weeks not medically necessary (3rd & 4th quarters of 2011 only), by Washington State hospital



Source: Washington State Hospital Quality Indicators, Washington State Hospital Association  
([www.wahospitalquality.org](http://www.wahospitalquality.org))

#### Footnotes:

Hospitals with no bar have a 0% elective delivery rate

4 = 4<sup>th</sup> Quarter 2011 data only

Auburn Regional Medical Center is missing because data were incomplete.

## Obstetrics Care Topic

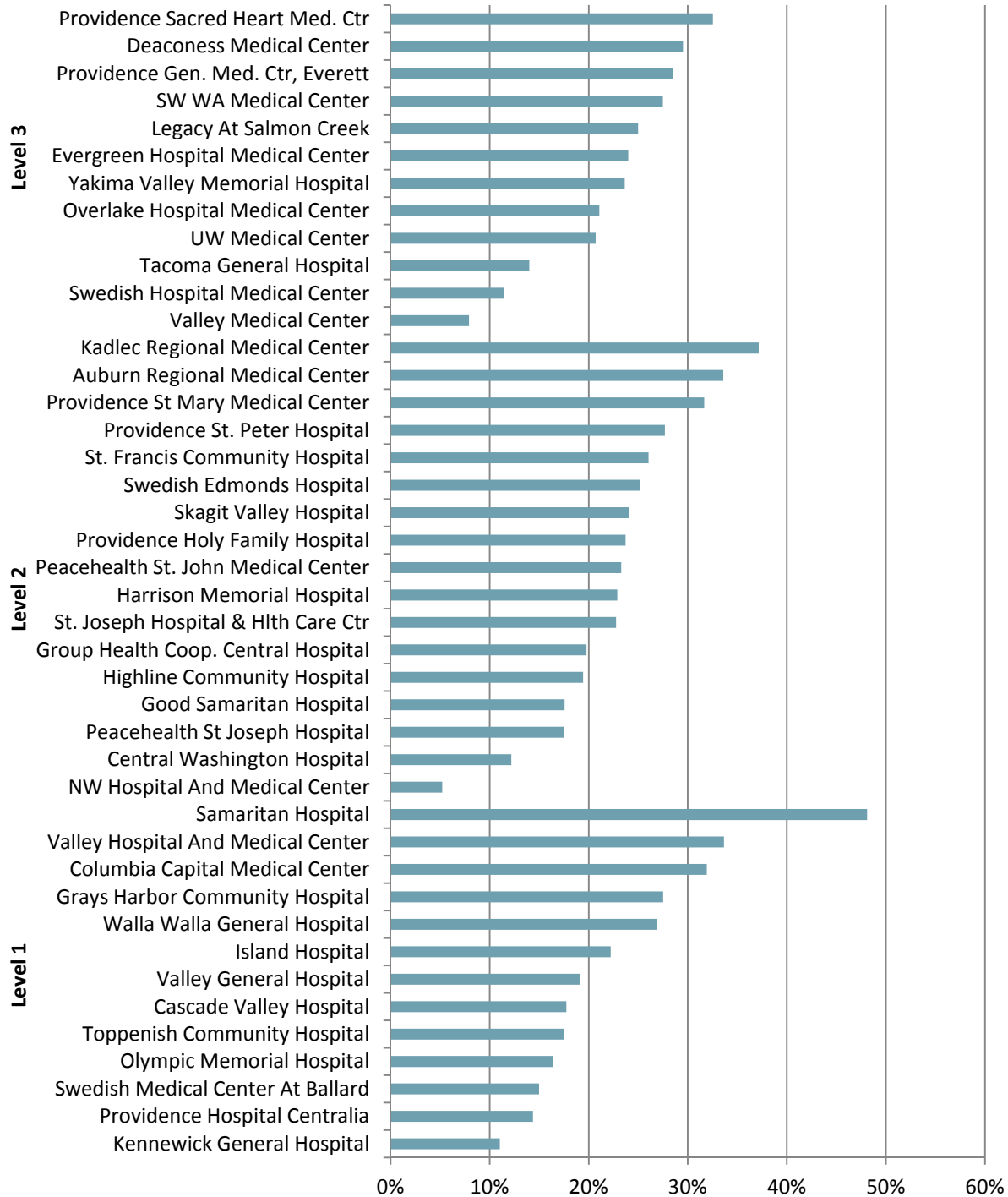
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These Washington hospitals reported that this measure is not applicable to them or no data are available (*italics indicate the hospital does not offer OB services*):

- *Cascade Medical Center*
- *Columbia Basin Hospital*
- Coulee Community Hospital
- *Dayton General Hospital*
- *East Adams Rural Hospital*
- Fairfax Hospital
- Ferry County Memorial Hospital
- Forks Community Hospital
- *Garfield County Hospital District*
- *Harborview Medical Center*
- Kindred Hospital
- Kittitas Valley Community Hospital
- *Klickitat Valley Hospital*
- Lake Chelan Community Hospital
- *Lincoln Hospital*
- Lourdes Medical Center
- *Mark Reed Healthcare District*
- Mid-Valley Hospital
- Multi-Care Mary Bridge Children's Hospital
- Navos
- North Valley Hospital
- *Ocean Beach Hospital*
- *Odessa Memorial Healthcare Center*
- PeaceHealth St. John Medical Center
- Providence St. Joseph Hospital
- Pullman Regional Hospital
- *Quincy Valley Medical Center*
- Regional Hospital for Respiratory & CC
- Seattle Cancer Care Alliance
- Seattle Children's
- Seattle VA Medical Center
- Shriners Hospital for Children
- Skyline Hospital
- *Snoqualmie Valley Hospital & Clinics*
- Spokane VA Medical Center
- St. Anthony Hospital
- St. Clare Hospital
- St. Elizabeth Hospital
- St. Luke's Rehabilitation Institute
- Sunnyside Community Hospital & Clinics
- Swedish Medical Center – Cherry Hill
- *Tri-State Memorial Hospital*
- *United General Hospital*
- Valley General Hospital
- *Virginia Mason Medical Center*
- Wentachee Valley Hospital
- Whidbey General Hospital Island
- *Willapa Harbor Hospital*
- Yakima Regional Medical & Cardiac Center

# Obstetrics Care Topic

## Crude Inductions for 2010 WA Live Births Non-Military Non-Critical Area Hospitals (CAH) by Level of Care (Level I=provides basic labor and delivery care only; Level 2=intermediate care; and Level 3=able to manage complicated pregnancies and preterm births)



Source: State of Washington, First Steps Database

Excludes cases where mother was transferred to higher level care for maternal medical or fetal indicators for delivery, hospital births where intended place of birth was other than hospital, and hospitals with fewer than 20 live births.



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## Obstetrics Care Topic

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### **Appendix C – Case Study of a System Change in Washington State: Franciscan Health System (FHS) Management of Early Elective Deliveries**

*Interview of:*

- Mary LaFalce, Associate Administrator, Women's and Children's Services
- Debbie Raniero, Director of the Family Birth Center at Saint Joseph Medical Center

*Interviewed by:*

- Steve Hill, Director, WA State Retirement System & Chair, Bree Collaborative
- Dr. Dale Reisner, Chief of Obstetrics, Swedish
- Jason McGill, Executive Policy Advisor, Governor Gregoire's Office

*Date of interview:* March 13, 2012

#### **How did your System become aware of an opportunity to improve OB Care?**

- Elective Inductions <39 weeks: Two years ago Leapfrog data showed that Franciscan had a high elective induction rate; they attributed the high rate to two factors: 1) misdocumentation/data issues and 2) practice issues/lack of parameters for scheduling <39 week deliveries with no medical indication (the main driver of the elective induction rate, and cause of 75% of elective inductions).
- New Service Line Medical Director, Dr. Peter Andrew Robilio, serves as champion to improve both outcomes for babies and documentation of births.
- Ms. Raniero and other family birth center leaders at FHS are active members of the Perinatal Collaborative and participate in many list serve and collaboration activities within IHI and elsewhere.

#### **Where did the leadership for changing practices come from?**

- Dr. Robilio, Service Line Medical Director
- OB Leaders' Group and Women's and Children's Interdisciplinary Team (IDT)
  - OB Chiefs, Nursing Leaders, System Medical Director, System Quality Leader, Neonatologists, Anesthesia, Performance Improvement, etc.
  - Meets twice per quarter

#### **What process did you follow to understand the problem and opportunity?**

- The same process that is used for all major quality improvement and change at FHS
  - Idea Generation – From Nursing Leadership and Medical Leadership as well as clinicians.
  - Leadership Consideration / Approval
    - Discussion at OB Leadership Meeting / (IDT)
      - System Leapfrog Data
      - WSHA Safe Table Webinar information
      - Facts and experience of clinicians – impact of induction on C/S rate and babies
    - Engagement of OBs by OB Chiefs at each hospital.
      - Quarterly OB Section Meetings @ each hospital
      - Mailings
  - Data (covered below)

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- Education (covered below)
- Operationalization (covered below)
- Feedback and reporting – Sustain the change (covered below)

### **What data, research, or national standards were brought into the process?**

- 100% chart audit to abstract data covering three months at all three hospitals-- manual
- Data from WSHA Safe Table Webinar, Thomas J Benedetti, MD, & Suzan Walker, RN, [http://www.wsha.org/files/82/June\\_22\\_2011\\_Elective\\_Deliveries\\_Webinar.pdf](http://www.wsha.org/files/82/June_22_2011_Elective_Deliveries_Webinar.pdf)
- March of Dimes toolkit

### **How did you engage and educate Providers, Nurses and Patients?**

- Providers
  - Quarterly OB Section meetings, mailings, and face to face at time of scheduling
- Nurses
  - Monthly meetings
  - Training on Coding and Exception lists
- Patients
  - March of Dimes materials
  - “Brain Card” is very effective tool to communicate risk of early delivery to patients / families.

### **What was the conclusion of the process – what agreements were reached on standards and procedures**

- No scheduling of pre 39 week deliveries unless clinical indicators met one of two exclusion sets
  - The Joint Commission
  - State of Washington
- Exception process to Perinatologists if OB or midwife felt patient warranted an exception beyond the two lists above

### **How was the change operationalized?**

- Hard Stop at scheduling (this is critical and necessary)
- Exception Process to Perinatologist
- Chart Audits and Feedback reports
  - Manual auditing of outliers by Labor & Delivery manager, and Women’s and Children’s Quality RN
  - Key Dashboard Indicator

### **Was there any push back from OB’s or patients? Do you have any indication that deliveries were scheduled at other systems because of your change in standards and procedures?**

- Some OB Chiefs were more enthusiastic than others.
- Requires regular education and reminders to OB community
- No evidence of MDs or patients moving to other systems



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- In discussions with another hospital where using “soft stop” has not been as effective in reducing pre 39 week elective deliveries.

### **When did FHS begin this work and how long did it take to see results?**

- Completed initial chart review July-Sept 2010 and then started the education and communication. Began monthly audits in January of 2011. Due to “hard stops” results were notable soon after the start of the program.

### **Other Information**

- System – Five Hospitals, three provide Obstetric Services service lines
  - Saint Joseph – 3,800 births/yr
    - Laborist on duty 24/7
  - Saint Francis – 1,200 births/year
  - Saint Elizabeth – 300 births/year
- No Electronic Medical Records (except at SEH)
  - Not an impediment to doing chart review and feedback reports
- Other OB QI efforts –
  - Reintroduced VBACs at Saint Joseph in April '11 and at SFH Jan '12; (SEH has always done VBAC).
  - Used same change process: Leadership, Data, Education, Operationalize, & Feedback
  - Used standardized process and materials for patient selection, patient education, and consent across all hospitals
  - Bundle Compliance is another QI area where this process was used to effect change. Here is a link to IHI regarding the bundle compliance.

<http://www.ihi.org/knowledge/Pages/Changes/ElectiveInductionandAugmentationBundle.aspx>



### Appendix D - Examples of Effective Patient Education Materials

Late Preterm Brain Card, produced by the March of Dimes

(available at: <http://www.marchofdimes.com/catalog/product.aspx?productcode=37-2229-07>)





# 40 Reasons To Go the Full 40

Nobody likes to be rushed—especially babies!

Your baby needs a full 40 weeks of pregnancy to grow and develop. While being done with pregnancy may seem tempting, especially during those last few weeks, inducing labor is associated with increased risks including prematurity, cesarean surgery, hemorrhage and infection. Labor should only be induced for medical reasons—not for convenience or scheduling concerns. Baby will let you know when she's ready to emerge. Until then, here are 40 reasons to go at least the full 40 weeks of pregnancy:

### Finish Healthy & Well

1. **End right by starting right**—keeping all of your prenatal appointments helps ensure a healthier ending
2. **Savor the journey**—soon you will meet your baby
3. **Let nature take over**—there are fewer complications and risks for both you and baby through natural birth
4. **Recover faster** from a natural birth than cesarean, which is major abdominal surgery that causes more pain, requires a longer hospital stay and a longer recovery
5. **Birth a brainier baby**—at 35 weeks your baby's brain is only 2/3<sup>rd</sup> the size it will be at term
6. **Set her thermostat**—baby will better regulate her temperature when born at term
7. **Boost breastfeeding**—term babies more effectively suck and swallow than babies born earlier
8. **Delight in those kicks and flips**—marvel at the miracle of the life inside
9. **Enjoy your convenient excuse** for every mood swing and crazy craving
10. **Nourish your body**—diets don't work but breastfeeding will help you return to your pre-pregnancy size
11. **Let others carry** the groceries, mail, packages just a while longer
12. **Indulge in "we" time** before you're a threesome or more
13. **Sport your bump**—as your belly increases, so do your chances of getting a great seat almost anywhere

The nurses of AWHONN remind you not to rush your baby—give her at least a full 40! [www.GoTheFull40.com](http://www.GoTheFull40.com)

### Manage Your Risks

14. **Eat healthfully**—indulge occasional cravings without remorse
15. **Give baby's development the benefit of time** since you may not know exactly when you got pregnant
16. **Let baby pick her birthday**—if she decides to emerge after 37 weeks there's no need to try to stop your spontaneous labor
17. **Skip an induction**—which could lead to cesarean—by waiting for labor to start on its own
18. **Reduce your baby's risks** of jaundice, low blood sugar and infection by waiting until he's ready to emerge
19. **Build your baby's muscles**—they'll be strong and firm, and ready to help him feed and flex at term
20. **Maximize those little lungs**—babies born just 2 or more weeks early can have twice the number of complications with breathing
21. **Ignore people who say an induction** is more convenient. Nothing is convenient about a longer labor and increasing your risk of cesarean
22. **Respond to requests to speed baby's birth** with the facts that inductions often create more painful labors and can lead to cesarean surgery
23. **Let others do the heavy lifting**—and the extra housecleaning
24. **Splurge on pedicures**—or ask a friend to do them for you, especially when you can't see or touch your feet
25. **Relish in the fact that right now you're the perfect mom**—your healthy pregnancy habits are growing baby the best possible way
26. **Finish well**—more time in the womb usually means less time in the hospital

### Enjoy This Time

27. **Relax!** Babies are usually so much easier to care for in the womb
28. **Shamelessly wear comfy, stretchy clothes**
29. **Postpone changing the eventual 5,000+ diapers** baby will use
30. **Be out and about** without having to buckle, unbuckle, rebuckle baby into her car seat or stroller while running errands
31. **Carry your most stylish purses** especially the ones too small to hold diapers and wipes
32. **Relish parenting**—right now you know exactly where baby is and what he's doing
33. **Snooze when you can**—what sleep you're currently getting is actually quite a lot compared to the interruptions ahead
34. **Massage remains a must**—ask your partner to help ease the aches
35. **Enjoy nights out** without paying for a babysitter
36. **Indulge in shopping** without the added responsibilities of baby in tow
37. **Redecorate your house** around your nursery's theme
38. **Prop up your paperback**—your burgeoning belly peaks at just the right reading height
39. **Make the best-possible birth experience**; don't rush it
40. **Write your own healthy reason**—if it gets baby a full 40 weeks of pregnancy it deserves to be on this list



- <sup>i</sup> Sakala C, Corry M. "Evidence-based maternity care: what it is and what it can achieve." Childbirth Connection, the Reforming States Group, and the Milbank Memorial Fund. 2008 October. Available at <http://www.milbank.org/uploads/documents/0809MaternityCare/0809MaternityCare.html>. Accessed April 4, 2012.
- <sup>ii</sup> Clark SL, Belfort MA, Hankins GDV, et al. "Variation in the rates of operative delivery in the United States." *Am J Obstet Gynecol* 2007;196:526.e1-526.e5. (Level of Evidence: III)
- <sup>iii</sup> Williams C. Medicaid Evidence-Based Decisions Project (MED) Policy Brief: "Cesarean Section." Oregon Health & Science University. Center for Evidence-Based Policy, June 2010.
- <sup>iv</sup> Clark SL, Belfort MA, Hankins GDV, et al. "Variation in the rates of operative delivery in the United States." *Am J Obstet Gynecol* 2007;196:526.e1-526.e5. (Level of Evidence: III)
- <sup>v</sup> The Leapfrog Group. *Early Elective Deliveries (between 37-39 completed weeks of gestation)*, January 17, 2012. Available at: <http://www.leapfroggroup.org/media/file/FactSheetElectiveDeliveries011712.pdf>.
- <sup>vi</sup> Washington State Perinatal Collaborative. FAQs (revised January 2012). Available at: <http://www.waperinatal.org/content.cfm?categoriesID=29>.
- <sup>vii</sup> American Hospital Association. *Member Advisory: AHA Board Supports Policies to Eliminate Early-Term, Non-Medically Necessary Deliveries*, June 18, 2012. Available at: [http://www.hpoe.org/topic-areas/ETED%20Advisory\\_6%2018%2012.pdf](http://www.hpoe.org/topic-areas/ETED%20Advisory_6%2018%2012.pdf).
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### Definitions of Levels of Evidence

Level of Evidence I: a randomized, controlled trial

Level of Evidence II-1: a nonrandomized, controlled trial

Level of Evidence II-2: a cohort or case-controlled study

Level of Evidence II-3: multiple observations with or without intervention; uncontrolled studies are in this category

Level of Evidence III: the opinion of authorities, usually as a result of clinical experience or committee opinions