Labour and delivery account for nearly a quarter of all hospitalizations for many employers, and costs associated with pregnancy and its complications are a driving factor in the rising costs of health care. Cesarean deliveries, elective labor inductions and scheduled deliveries before 39 weeks are also on the rise. The growing use of medically unnecessary interventions is increasing costs and the incidence of complications among mothers and babies, with no evidence of improved outcomes.

**Maternity Care Practice Is Moving Away From the Evidence**

Maternity practices that were developed to treat specific problems are now applied routinely to all pregnant women regardless of their risk, and many obstetrical practices have become standard without scientific evaluation of their effectiveness. As a result, medically unnecessary interventions, such as elective cesarean deliveries, episiotomy and electronic fetal monitoring, are increasing the cost of maternity care and worsening the health outcomes of both infants and mothers. However, many less-invasive approaches, such as continuous labor support, nonsupine positions for giving birth, delayed cord clamping, and vaginal birth after cesarean (VBAC), continue to be underutilized. The areas of greatest concern in the growing gap between evidence-based practice and current US practice patterns are the increasing rates of preterm births, cesarean delivery, and elective induction.

**What Is Driving These Trends?**

This trend is driven by both expectant mothers and providers. Expectant mothers sometimes request deliveries at convenient times, and the use of anesthesia, which has increased, has been shown in some cases to interfere with the progression of labor. While there have been recent efforts to educate pregnant women about the potential risks of elective pre-term delivery and elective inductions and cesareans, many women may not be aware of the added risks of intervention.

In addition, the current fee-for-service payment mechanisms for labor and delivery create incentives for hospitals to perform complex, costly procedures. In the most recent comprehensive report on evidence-based maternity care, the “perverse incentives of payment systems” are listed as one of the pervasive barriers to evidence-based care. Hospitals are generally paid a case rate for vaginal and cesarean deliveries, with provisions for...
additional payments when there are complications. The fee schedule tends to be based on the portion of prenatal, labor and delivery, and postpartum services provided as well as the type of birth the patient had. The average costs for cesarean deliveries were almost 50% higher than those for vaginal deliveries.

In addition to receiving higher payments for cesarean births, planned cesarean deliveries have lower opportunity costs for obstetricians and facilities. For facilities, spontaneous vaginal deliveries may be more difficult to plan and manage compared to scheduled cesarean deliveries. With a planned cesarean delivery, hospitals can schedule operating room time and ideal hours for nursing staff. For providers, scheduling a cesarean birth ensures that they will be the ones to perform the delivery and they will not have to transfer care and associated payment to a colleague or be delayed from office or other hospital duties. In addition to securing reimbursement, having scheduled births allows providers more time to schedule billable procedures. Improved reimbursement and decreased opportunity costs help drive the increase in cesarean deliveries.

The real or perceived level of malpractice risk also contributes to adverse practice patterns. Fear of malpractice litigation can drive providers to favor intervention when there is any sign of fetal distress, resulting in a higher cesarean birth rate. Fear of liability also makes obstetricians and hospitals hesitant to offer vaginal birth after cesarean delivery (VBAC), although VBACs are a reasonable alternative for most women, and uterine rupture is quite rare.

**HOW CAN CHANGING PAYMENT HELP?**

There are a variety of payment alternatives that can align incentives for providers and hospitals to adhere to evidence-based practices that improve outcomes for both infant and mother and decrease the growth in health care spending for maternity care services.

Implementing maternity care payment reform can not only help reduce the growing burden of health care costs on employers, but also improve health outcomes for infants and mothers.

See Appendix for various alternative approaches to maternity care payment.
What steps can a purchaser take?

- **USE** CPR’s health plan request for Information (RFI) questions and model contract language available at [catalyzepaymentreform.org/RFI.html](http://catalyzepaymentreform.org/RFI.html)

- **ENCOURAGE** your insurer or third party administrator (TPA) to:
  - Create payment contracts with providers and hospitals that remove perverse incentives for today’s high rates of intervention in labor and delivery, including unnecessary cesarean deliveries;
  - Encourage or require hospitals and physicians to implement a “hard stop” policy on elective inductions prior to 39 weeks;
  - Require pre-authorizations for any elective deliveries prior to 39 weeks for hospitals that do not have a “hard stop” policy;
  - 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;
  - Educate members, network physicians, and hospitals about high-quality, safe, cost-effective maternity care; and,
  - Credential and reimburse certified nurse midwives to provide maternity care in a hospital setting.

- **SUPPORT** statewide efforts for maternity outcomes benchmarking and quality improvement activities, such as elimination of elective deliveries prior to 39 weeks gestation.

- **STAND** by your plan during contract disputes with providers regarding programs that incentivize members to seek evidence-based maternity care.

- **EDUCATE** employees on the importance of full-term births and the health consequences of elective inductions and cesarean deliveries.

- **IMPLEMENT** benefit design changes and shared-decision making tools to encourage pregnant mothers to make informed and evidence-based decisions about when and how they deliver their babies.

Reforming maternity care payment may face **POLITICAL challenges:**

- Pushback from employees who do not want restrictions on the timing or mode of delivery
- Pushback from providers who are profiting from and comfortable with current payment arrangements
- Resistance from providers prompted by fears of increased litigation and liability they associate with spontaneous labor and delivery

**ABOUT US**

Catalyst for Payment Reform is an independent, non-profit corporation working on behalf of large employers to catalyze improvements in how we pay for health services and to promote better and higher-value care in the U.S.
FINANCIAL INCENTIVES TO ELIMINATE ELECTIVE DELIVERIES PRIOR TO 39 WEEKS GESTATION

What does it look like? Established guidelines that recommend against elective inductions prior to 39 weeks gestation can be promoted through positive or negative payment structures. The California Quality Maternity Care Collaborative advocates the use of rewards for high quality, such as not exceeding targeted rates of deliveries prior to 39 weeks. Financial rewards can also be provided to hospitals that reduce rates of elective, pre-term inductions or cesarean deliveries. To create added incentive, health plans can require prior authorization for elective deliveries before 39 weeks to encourage hospital compliance with ACOG’s guidelines.

What incentives are created? Creating a “do not pay” policy for elective deliveries prior to 39 weeks provides a powerful disincentive for this practice. Paying rewards for reduced deliveries prior to 39 weeks could also create financial incentives to avoid them. Note that reducing the rate of elective induction prior to 39 weeks will also reduce the rate of term NICU admissions and may modestly reduce the rate of cesarean deliveries overall.

Has this been tried? Washington State offers hospitals the “opportunity to earn a new one percent Medicaid quality incentive” for achieving a target of less than 7% for elective deliveries prior to 39 weeks. The Joint Commission’s guidelines on elective inductions prior to 39 weeks provide a standardized method of data collection for monitoring. In Oregon, 17 hospitals have agreed to a “hard stop” on elective deliveries before 39 weeks gestation. The State of Texas has also passed a law restricting Medicaid payments for early elective delivery.

What are some concerns or limitations? One challenge is that medical record review is typically required to determine that an elective delivery was performed prior to 39 weeks. Some states are making progress in this area, however, such as in California where the California Maternal Data Center has created a system to collect such data in a very cost-effective manner. Obstetricians, especially those in small private practices, have been resistant to such policies, and some hospitals fear that obstetricians could move their deliveries to hospitals that do not implement this policy.

PRETERM BIRTHS

Premature births account for 12.2 percent of births in the U.S. The related costs are high. In 2005, the annual societal economic cost (medical, educational and lost productivity) associated with preterm birth in the U.S. was estimated to be at least $26.2 billion, or $51,600 per preterm infant born. About 25 percent of the youngest and smallest babies who survive have long-term health problems and lower cognitive abilities. Rates of complications rise with earlier deliveries. For example, while 3.4% of infants delivered at 39 weeks show signs of respiratory problems, this increases to 5.5% of infants delivered at 38 weeks and 8.2% of those delivered at 37 weeks.

Employers bear much of the cost of preterm births; premature babies covered through employer plans spend an average of $51,600 per infant.
**BLENDING FACILITY PAYMENT FOR DELIVERY**

**What does it look like?** A blended payment for the delivery fee creates a single rate for maternity care, whether it be a vaginal or cesarean delivery. One model used to establish a blended rate for a delivery multiplies the desired percentage of utilization for each type of delivery by the respective reimbursement rate. As an example using 2005 data when an uncomplicated vaginal delivery cost $7,773 and a cesarean delivery cost $10,958 and using the current cesarean delivery rate of 32%, a blended rate for delivery would be $8,792. Although the reimbursement rate for vaginal deliveries increases, the anticipated drop in cesarean births will lead to fewer dollars spent on labor and delivery.

This model can be pushed one step further by creating a blended rate based on a desired proportion of cesarean deliveries.

**Example of a Blended Payment Method for Delivery Costs**

<table>
<thead>
<tr>
<th>Vaginal Delivery</th>
<th>Cesarean Delivery</th>
<th>Blended Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7,773</td>
<td>$10,958</td>
<td>$8,792</td>
</tr>
<tr>
<td>$7,773</td>
<td>$10,958</td>
<td>$8,537</td>
</tr>
</tbody>
</table>

Current cesarean delivery rate, 32%  
If cesarean delivery rate is reduced to Healthy People goal of 24%

Blended payment rates can be applied to the current fee-for-service model or to any degree of bundled payments described in this paper.

**What incentives are created?** Providing one case rate for delivery, regardless of mode, removes the financial incentives for cesarean delivery for both the hospital and the physician without a third party trying to dictate hospital practices.

**Has this been tried?** The Minnesota Department of Human Services adjusted Medicaid payment to a blended rate for deliveries that assumed up to 5% fewer cesarean deliveries. DRGs for uncomplicated vaginal and cesarean deliveries were equalized (increasing the

**PRETERM BIRTHS** (continued)

16.8 days in the hospital during the first year of life, and receive expensive neonatal intensive care for much of this time. Premature infants are usually among the most expensive catastrophic cases for employers. In addition, premature babies make an average of nine visits to the doctor’s office during the first year of life, compared to six visits for healthy, full-term babies.

**ACKNOWLEDGEMENT**

Jeff Levin-Scherz, Thi Montalvo, Maureen Corry, and Elliott Main contributed valuable input to the content of this action brief.
Catalyst for Payment Reform

CESAREAN DELIVERIES

Cesarean deliveries are on the rise increasing costs for all health care purchasers and payers. Cesarean delivery rates for the privately insured have risen to over 32 percent in the United States, up from less than 20 percent in 1996. These rates have negative implications for the health of mothers and babies as well as health care costs. The World Health Organization warns that a cesarean delivery rate above 15% may do more harm than good to mothers and infants. Healthy People 2020 identified 23.5% as the United States’ goal for uncomplicated, medically necessary cesarean deliveries. The costs for cesarean deliveries are much higher than those of vaginal births; in 2004 the average allowed cost for commercial payers of an in-hospital vaginal birth with no complications rate for vaginal births slightly, while decreasing cesarean delivery reimbursement significantly. The overall projected facility savings estimated for the state is almost $2.25 million annually.

What are some concerns or limitations? Even equal payment for all deliveries might not fully compensate for the increased opportunity cost of vaginal deliveries. Offering too low a rate for vaginal delivery would continue to encourage cesarean delivery, while offering too high a rate could encourage professionals to delay the decision to move to a cesarean delivery when medically indicated.

NEW BUNDLED PAYMENTS FOR PREGNANCY

What does it look like? In “Transforming Maternity Care,” Childbirth Connection, a national not-for-profit organization focused on improving the quality and value of maternity care, recommends advancing “efforts towards comprehensive payment reform through a restructured payment model that bundles payment for the full episode of care for women and newborns.” There are a variety of options when creating bundled payments for maternity care. Each approach to bundled payment creates different incentives.

Option 1: Bundle the hospital birth payment and the professional (obstetrician or midwife) fee for labor and delivery into a single payment. Combining the hospital and provider payment into one bundle encourages hospitals and providers to coordinate efforts to reduce rates of cesarean delivery and improve the quality of maternity care. Without bundled payments, hospitals do not have a financial lever to use with providers toward reducing unnecessary intervention in labor and delivery. Under a system where the facility pays the professionals, their practice can be better aligned with hospital quality goals.

Option 2: Bundle the hospital delivery payment for both mother and infant into a single payment. Creating a bundled payment that includes infant costs takes current facility case rates for delivery that cover the mother’s expenses and adds on the infant’s care immediately after delivery into the case. In essence this model adds into the bundle any neonatal/NICU expenses for term infants without pre-existing conditions.
Additional payment for outliers, such as premature infants or those infants with known congenital anomalies, would be paid outside of the bundle.

**Option 3:** A comprehensive, single bundled payment for a maternity care “episode.”

A single, comprehensive payment for pregnancy entails one risk-adjusted price paid for a pregnancy, from prenatal office visits, to ultrasounds, to lab work, to the actual delivery, including anesthesia. The provider(s) are paid this rate per pregnancy, regardless of the resources expended. Lower cesarean delivery rates and fewer complications will lead to higher margins for providers.

**What incentives are created?** A bundled payment structure shifts the financial responsibility of care management to providers and creates financial incentives to reduce resource costs. Creating a single episode payment structure (the most comprehensive bundle) is non-prescriptive, allowing the facility and associated providers to determine how best to achieve optimal health outcomes while managing costs. The facility is paid a risk-adjusted global fee to provide care for the needs of a patient during a pre-defined episode of care, including professional fees, so that practices that save costs benefit the hospital and its providers. Bundled payments provide incentives for better outcomes, rather than more units of service, particularly when coupled with quality metrics.

**Example of PROMETHEUS Method** The PROMETHEUS Payment Method, established by the Health Care Incentives Improvement Institute (HCI3), uses bundled payments to create system-wide improvements. The PROMETHEUS Payment Pregnancy and Delivery Evidence-informed Case Rate (ECR) is designed to encourage high-quality care and appropriate decisions about pregnancy and delivery by physicians, reduce Potentially Avoidable Complications (PACs), and eliminate waste. The ECR is triggered by the diagnosis of pregnancy and extends to 8 weeks after delivery. The established ECR is paid out to providers for the delivery, regardless of what specific services were provided. Review of a large claims database suggests that approximately up to one-third of all costs associated with pregnancy are PACs. With a financial incentive for facilities to reduce PACs, HCI3 anticipates that bundled payment will help hospitals put in place the processes to reduce substantially the rates of complications.

**CESAREAN DELIVERIES (continued)**

was $7,773, while an in-hospital cesarean delivery with no complications was $10,958. Complications for infants delivered by early cesareans include infections, five days or more of hospitalization, and the need for cardiac resuscitation. Despite the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) standard which requires 39 weeks gestation prior to elective delivery, more than a third of elective repeat cesarean deliveries are performed before 39 weeks.

**ACKNOWLEDGEMENT**

Jeff Levin-Scherz, Thi Montalvo, Maureen Corry, and Elliott Main contributed valuable input to the content of this action brief.
INDUCED LABOR
Induced labor is also on the rise. Induced labor has doubled to about 20% of all deliveries since 1990.41 While labor should only be induced for valid medical reasons, there is evidence that inductions without a medical indication – elective inductions – are on the rise.42 Reasons for elective, non-medically necessary, inductions may include patient discomfort, patient and physician scheduling preferences, concerns about risks due to a patient’s geographical isolation, or physicians’ economic benefit.43 More disturbing than the increase in non-medically necessary inductions is the rise in elective inductions prior to 39 weeks of gestation.

In addition to poor health outcomes for infants and higher cesarean deliveries. In addition to the time concerns, liability concerns may also drive use of non-evidence-based interventions,44 though research has shown that most delivery-related medical malpractice claims paid are a result of sub-standard care.26

Putting evidence-informed bundled payments into practice has taken substantial effort.26

What are some concerns or limitations? Financial levers may not be enough to compensate for the lower opportunity costs of scheduled elective inductions and cesarean deliveries. In addition to the time concerns, liability concerns may also drive use of non-evidence-based interventions, though research has shown that most delivery-related medical malpractice claims paid are a result of sub-standard care.26

4. Ibid.
7. CPA staff and UHC email correspondence 8/5/11.
11. Ibid.
14. 32 percent cesarean delivery: 0.687/(773+0.32/10,958)+5.7892
16. Facility DRG for vaginal birth without complications changed from $3,144.00 to $3,528.00. Facility DRG for cesarean delivery without complications change from $5,266.00 to $5,528.00
17. Savings based on 26,195 state paid births, with a projected 4.5% decrease in cesarean deliveries.
20. Ibid.
23. CPA staff and François de Brantes email correspondence 11/14/11.
33. Ibid.
38. Bhuttaat AT, Cleves MA, Casey PH, Cadock MM, Anand KJS. Cognitive and behavioral outcomes of school-aged children who were born preterm.
39. Journal of the American Medical Association
40. JAMA
41. Alan TN, Landon MB, Spong CY, Leveno K, Varnar MW
43. Ibid.
45. Ibid.