2010: Annual Benchmarking Report *Malpractice Risks in Obstetrics* 

CriCO strategies



# Are your obstetrics providers at risk?



Obstetrics leaders who only implement risk reduction initiatives in hindsight—or based on a single event—may be misinformed and misdirected. The following study of more than 800 obstetrics-related malpractice cases offers an opportunity to proactively identify unseen risk factors and sharpen the focus for patient safety efforts.



**ROBERT HANSCOM** Senior Vice President Loss Prevention and Patient Safety CRICO and CRICO Strategies

We are pleased to present our second Annual Benchmarking Report: Malpractice Risks in Obstetrics.

While risk is inherent in the practice of medicine, it cannot be tolerated or ignored. CRICO Strategies maintains an aggressive, proactive stance by using innovative, data-driven approaches to identify areas of greatest risk, to support and protect health care providers, and, most importantly, to improve patient care.

This year's Report provides an in-depth exploration of today's most prevalent obstetrical risks, based on data mined from Strategies' Comparative Benchmarking System (CBS). We identify clinical trends, provide relevant case examples, and offer unique examples of organizations translating data into action. Our goal is to provide you with actionable intelligence to confidently guide your organization's obstetrical patient safety efforts. Placing these data into context with your contemporaneous risk indicators will help you gain insight into your hidden areas of risk, and drive fundamental change where it is needed most. Our Report highlights innovative collaborations between hospitals, hospital systems, and insurers—united by the effective use of malpractice data to implement successfully a targeted strategy to protect their patients and providers.

As you read this Report and evaluate your own clinical landscape, consider how our findings resonate with your understanding of your organization's key obstetrical risks. Do you have the right intelligence to support resourcestressed clinicians in making practice changes to enhance safety? Are you leveraging opportunities for focused collaboration with your insurer or insureds?

We welcome your comments and reflections, and would be delighted to speak with you in more detail as you consider how to translate these and other data into opportunities for action to reduce risk and improve obstetrical patient safety in your organization.

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**Childbirth is a natural** process in which severe complications can occur with little warning and requiring a prompt response. As obstetricians, pediatricians, anesthesiologists, midwives, and nurses, we are privileged and obligated to strike a balance between supporting this natural process and preventing avoidable complications. Research has clearly demonstrated that a team approach is the best way to respond to these challenges. As our understanding of pregnancy, fetal medicine, and newborn care continues to advance, so too does our responsibility to collaborate closely with our clinical colleagues—and our patients to ensure the safest care possible throughout the entire perinatal process.

**Dr. Benjamin Sachs** Senior Vice President and Dean, Tulane University School of Medicine

The impact of an obstetrics-related malpractice case radiates into every realm of your organization and community. Average losses exceed \$900,000, but even cases closed without payment leave behind emotional damage for patients and providers.

On an otherwise unremarkable day, a tragedy invades the pervasive optimism of a Labor and Delivery unit. The parents, who anticipated a perfect outcome, are devastated, as are the physicians and nurses. Others sense that something out of the ordinary has occurred. For a short time, the pattern of activity changed, voice tones were altered, laughter was curtailed; the air was imbued with shocked helplessness. The families for whom everything went according to expectations shudder, count their blessings, and focus on the positive. The clinicians shift their attention back to the insistent stream of mothers and babies. But everyone wonders "Why did it happen?" and asks "How do we keep it from happening again?"

When a Labor and Delivery unit experiences a "bad baby" case, the leadership team may struggle to ascertain if it was the result of bad clinical judgment, bad technique, bad communication, or simply bad luck. A single case can be informative, but it can also be misleading. Chaos, accusations, and obfuscation can upstage the underlying causes that must be addressed to prevent recurrence. Efforts to "fix the problem," if applied to the wrong problem, can leave the unit even more vulnerable than before.

Through aggregated analysis and peer comparisons, Strategies' Comparative Benchmarking System offers the credibility of analyzable malpractice data. In obstetrics, the annual rate of claims is, generally, less than one case per 1,000 births. Ironically, their infrequency is implicit in their occurrence. Clinical judgment errors in the midst of a gradually developing crisis—that may feel to all involved like a routine course of eventsare at the root of the majority of OB malpractice cases. Infrequency and inexperience are also factors in cases involving improper management of an assisted vaginal delivery, shoulder dystocia, and maternal hemorrhage. Practices and training that better enable the clinical team to manage rare events may help mitigate the likelihood of both tragic outcomes and subsequent lawsuits.

Stanford has years of experience in applying Strategies' clinical coding taxonomy to claims and lawsuits. This relationship has led to a meaningful understanding of the fundamental reasons behind our loss experiences, which has, in turn, advanced a keenly informed risk management strategy for the Stanford hospitals.

**Jeffrey Driver** Executive Vice President and Chief Risk Officer, The Stanford University Medical Indemnity Trust

# The average payment in OB-related malpractice claims is more than twice that of other clinical areas.



## How often do OB patients sue?



**65**%

OF OB CASES INVOLVE HIGH-SEVERITY INJURIES, INCLUDING MATERNAL AND INFANT DEATHS.

#### COMPARATIVE BENCHMARKING

The Comparative Benchmarking System (CBS) contains approximately 200,000 medical malpractice claims and suits from leading academic and community hospitals, and commercial and captive insurers. Analyzing these cases enables participants to capture compelling snapshots of where their institution, or group of institutions, may be at high risk for certain types of preventable adverse outcomes. Participation in CBS offers organizations unparalleled opportunities for benchmarking with comparable local institutions, as well as with peers from across the country.

The unique application of CRICO's detailed coding taxonomy, which incorporates human and cognitive factors, clinical data, and system issues provides clients with a credible understanding of past events and vulnerable systems. Organizations using CBS data as a divining rod to identify their most significant vulnerabilities are better able to prioritize application of patient safety funding to support key interventions. As health care organizations struggle to optimize patient safety, deeply coded and analyzed malpractice data can offer compelling intelligence for development of targeted interventions that dramatically reduce medical errors and minimize financial loss.

Everyone expects a perfect outcome: anything less is unsatisfactory; anything tragic is unforgiveable.

# **GENERAL RISKS**

Whether their setting is a one-provider practice at a rural hospital, or a big city academic center with 10,000 annual deliveries, parents expect the natural process of pregnancy and childbirth to result in a "perfect" baby: 10 fingers and toes, unblemished, and capable of life without limitations—and Mom in equally good health. A less than perfect outcome for infant or mother can trigger a hunt for inept judgment, miscommunication, or substandard practice reaching from preconception counseling to the postpartum visit.

The natural process of birth is routinely efficient and the vast majority of labors end with a healthy mother and child. When things do go wrong in obstetrics, the reasons are often unclear. The unique clarity of hindsight illuminates how OB malpractice cases are, in fact, rarely prompted by a single act or omission by one individual. Instead, they typically reflect a series of missteps and mishandled decisions by a team of physicians and nurses that subtly converged too late for remedy. Understanding the critical decision points that influence such scenarios is the first step in the task of preventing their recurrence.

The more than 800 OB cases in this study span care delivered in both the office setting and the Labor and Delivery unit, from prenatal management to intra- and postpartum care. The majority of these cases name an attending obstetrician who performed a vaginal delivery (or emergency cesarean section) after a prolonged second stage of labor. Most prevalent in this study are cases whose allegations involve mismanagement of second stage labor, operative vaginal deliveries, or prenatal care.

Analysis reveals that plaintiffs experiencing injuries ranging from emotional distress of a stillbirth or a severely compromised infant to the tragedy of a maternal death primarily cite communication failures, judgment lapses, and faulty technique as the reasons behind their injuries and their malpractice cases.

# What allegations are most common?

	Hospitals with <2,000 births/year	Hospitals with >2,000 births/year
	PERCENT OF CASES	
DELAY IN TREATMENT OF FETAL DISTRESS	<b>25</b> %	19 %
IMPROPER PERFORMANCE OF OPERATIVE VAGINAL DELIVERY	15 %	18 %
IMPROPER MANAGEMENT OF PREGNANCY	<b>13</b> %	20 %

# What contributes most to OB claims?



- Inadequate Documentation
- O Administrative Failures
- Technical Error
- O Ineffective Supervision

## Most frequent OB case types

	PERCENT OF CASES	AVERAGE INDEMNITY INCURRED
BIRTH ASPHYXIA	27 %	\$ 1,431,000
SHOULDER DYSTOCIA	18 %	\$ 559,000
INTRAUTERINE FETAL DEATH	6 %	\$ 373,000
MATERNAL HEMORRHAGE	4 %	\$ 305,000

#### **BIRTH STATISTICS**

According to the CDC's National Vital Statistics Report, more than 4.2 million babies were born in the United States in 2008. For every 1.000 live births:

- 990 occurred in a hospital
- 323 were by cesarean section
- 35 were by vacuum extraction
- 7 were by forceps

According to our CBS study, approximately one in 1,000 births involves a preventable adverse outcome (ranging from temporary injuries to death). While adverse obstetrical events stem from all stages of pregnancy and childbirth, the majority of malpractice cases in this study allege mismanagement of the labor and delivery, most notably the second stage of labor.

Martin JA, Hamilton BE, Sutton PD, et al.: Births: final data for 2008. National Vital Statistics Report. 2010; (59) 1. www.cdc.gov/nchs/data/nvsr/ nvsr59/nvsr59\_01.pdf

Inconsistencies in data interpretation, and miscommunication among obstetrical team members in the midst of such discrepancy, are at the root of most OB cases.

# MANAGEMENT OF THE SECOND STAGE OF LABOR

The majority of perinatal claims in this study cite missteps in judgment and communication during the second stage of (active) labor: delays in the response to fetal distress that prevent a timely rescue. The most troublesome cases involve failures in clinical judgment fueled by the loss of individual perspective and the lack of a collaborative discussion. Together, these factors hinder obstetrical team members' recognition of fetal distress indicators, especially in a slowly declining situation. Often, the clarity of hindsight reveals that signs of distress were present, but providers isolated in one-on-one labor coaching, or navigating evolving priorities and changing shifts, struggled to maintain the awareness required for accurate decision making.

Because a routine delivery can insidiously devolve into crisis, accurate interpretation, structured communication, and shared decision making leading to timely and effective intervention are paramount. Electronic fetal monitor (EFM) training, followed by regular opportunities for practice, is critical for effective translation of the baby's "language." Learning is enhanced when training is conducted in a multi-disciplinary environment, further establishing a shared lexicon across disciplines and hierarchies and solidifying effective team communication. Training provides a structure to ensure that decision making is a team process, diminishing opportunities for missed signs of an escalating crisis.

Individuals with strong teamwork skills are less susceptible to loss of perspective, better suited to facilitate action on often-veiled indicators of distress, and less vulnerable to preventable patient harm and allegations of malpractice.

# Is your staff adequately trained?



OF OBSTETRICAL MALPRACTICE CLAIMS ORIGINATING FROM SMALL HOSPITALS (<1000 BIRTHS) INVOLVE ISSUES RELATED TO STAFF TRAINING AND EDUCATION.

# Do clinical judgment errors or communication failures threaten the safety of your laboring patients?

	ACADEMIC MEDICAL CENTERS	COMMUNITY HOSPITALS
	PERCENT OF CASES	
MISINTERPRETATION OF DIAGNOSTIC STUDIES	38 %	<b>62</b> %
COMMUNICATION AMONG PROVIDERS REGARDING PATIENT'S CONDITION	30 %	<b>56</b> %

#### CASE EXAMPLE

Cascade of environmental, team, and clinical judgment factors lead to poorly managed twin delivery.



In preparation for possible cesarean-section, a patient at 37 weeks twin gestation was prepped for delivery in the OR by a rotating team of residents, who were juggling coverage. With the attending OB managing a concurrent c-section, an unsupervised intern delivered twin #1 without complication.

Twelve minutes later, twin #2 appeared to be in distress, indicating the need for immediate delivery. Two unsupervised, unsuccessful vacuum attempts revealed problematic positioning of the head. The decision among team members regarding next steps was delayed until the attending OB returned and ordered conversion to a stat c-section. While the kit was readied, efforts were made to manually reposition twin #2 and palpate the baby's pulse, which was (incorrectly) thought to be reassuring.

In this flurry of activity, the fetal heart rate monitor—which would later indicate 10 minutes of flat tracings—was out of sight and had not been watched. Upon recognizing this, the attending OB delivered twin #2 by forceps with one pull. Due to injuries suffered after a prolonged period of hypoxia, twin #2 was removed from life support and died after four days. (Case settled: \$600K)

#### TEAMWORK TRAINING AND ELECTRONIC FETAL MONITORING INTERPRETATION

TAKING ACTION: After a Labor and Delivery tragedy suggested latent vulnerabilities in delivery rooms across its entire hospital network, one northeastern health care system took decisive action by implementing obstetrical team training across its four hospitals within a year.

Successful management of second stage labor requires that key clinical indicators be accurately interpreted, uncertainty be recognized, and that team members be fully informed and poised for decisive action.

At the intersection of individual decision making and team communication, teamwork training fosters development of a culture and structure for effective communication and decisive action. Its hallmarks: development of shared mental models, broad situational awareness, and clear communication among team members, facilitate clinicians' ability to timely identify signs of distress and take appropriate action.

The most successful organizations build these skills concurrently along with multi-disciplinary didactic training sessions to support accurate interpretation of electronic fetal monitoring strips. This approach capitalizes on the richness of clinicians' multi-disciplinary expertise while nourishing assimilation of a shared language that supports effective communication during critical moments of labor. Harm to the mother or baby during an assisted delivery is commonly related to poor decisions or inadequate technical skill.

# IMPROPER MANAGEMENT OF OPERATIVE VAGINAL DELIVERIES

At the height of expectations, when patient, family, and providers await first sight of the newborn at delivery, fatigue and commotion sometimes diminish preparedness for the unexpected. If unrecognized, these factors can impede the OB team's capacity to make rapid decisions and perform technical maneuvers with the precision necessary to prevent injury to mother and baby.

The more severe injuries result from shoulder dystocia (ranging from brachial plexus fractures to maternal injuries and severely compromised infants). Inexperience—especially with assistive devices (forceps, vacuum) and maneuvers—is often identified as the primary reason for alleging negligence in the delivery process. Because complications that require assistive devices and techniques during a vaginal delivery may be infrequent for individual providers, inadequate experience and training can increase the risk of such interventions.

Obstetrics providers without the experience or opportunity to periodically practice technical and

communication skills needed during a crisis may be insufficiently prepared to respond—either individually or as part of a team. Units that employ drills or simulation-based training focused on the decision to continue or alter the labor plan may encounter fewer unrecoverable situations and mitigate the dangers of fixation and indecision frequently present in delivery-related claims.

The presence of shoulder dystocia is the most common complicating factor in vaginal delivery cases, however, preventive strategies are hindered by the lack of predictability. As maternal obesity and macrosomia may foreshadow the presence of shoulder dystocia, providers must be vigilant to these and other factors that may present danger to mother or baby, and able to decisively redirect delivery in their presence. Protocols to ensure preparedness for a rapid response to shoulder dystocia and other atypical complications may afford providers the chance to minimize patient harm.

# What types of procedures are most frequently attributed to maternal and fetal birth injuries?

	ACADEMIC MEDICAL CENTERS	COMMUNITY HOSPITALS
	PERCENT	OF CASES
VACUUM	<b>20</b> %	17 %
FORCEPS	17 %	23 %
MANUAL	47 %	54 %

# Are your providers or trainees vulnerable to errors arising from improper technique or equipment use?

	Hospitals with <2,000 births/year	Hospitals with >2,000 births/year	
	PERCENT	PERCENT OF CASES	
POOR TECHNIQUE	18 %	15 %	
IMPROPERLY UTILIZED EQUIPMENT	18 %	15 %	
SUPERVISION OF HOUSE STAFF	5 %	<b>19</b> %	

#### CASE EXAMPLE

Inexperience with maneuvers, ineffective team communication, and poorly managed resuscitation cause severe injury to infant.



An obese patient, with a history of non-gestational diabetes and pre-eclampsia with mild proteinuria, was admitted at 34 weeks for induction. When shoulder dystocia was encountered, a young attending OB attempted multiple maneuvers without success. A second attending took over, successfully delivering the infant after five minutes with Apgars of 0 and 2. Resuscitation—managed by residents—was complicated by delayed response by the attending pediatrician, malfunctioning resuscitation equipment, and lack of a contingency plan. The infant was transferred to the NICU and, three years later, suffers with permanent neurological deficits, requiring full-time care. (Case settled: \$1.3M)

#### MAINTAINING READINESS: SIMULATION/DRILLS

TAKING ACTION: After a risk assessment indicated opportunities to improve crisis management skills at their insured hospitals, Pennsylvania-based Cassatt Risk Retention Group took action by supplying simulators-and educational programmingto maximize effectiveness of shoulder dystocia and maternal hemorrhage drills. Regular monitoring of their hospitals' progress ensured that drills were implemented and regularly practiced. Ongoing review of CBS data with their OB advisory group continues to support Cassatt's development of targeted patient safety initiatives.

Labor and Delivery units often employ impromptu safety drills to keep the staff practiced for rare emergencies. Those that look to their own malpractice claims for scenarios on which to base their drills have the opportunity to learn from the very factors that triggered the adverse outcome and prompted the plaintiff to allege substandard care. Hospitals that cultivate a learning environment by regularly employing in-situ simulations in their Labor and Delivery units will reinforce critical teamwork skills, and more rapidly transform the culture to one of enhanced awareness in the face of delivery-related crises.

The expanding ability to uncover potential and present prenatal risks further pressures obstetrics providers to coordinate those opportunities and manage their patients' expectations.

## IMPROPER MANAGEMENT OF PREGNANCY

Obstetrical care occurring outside the Labor and Delivery unit encompasses both evident and hidden risks that can complicate the course of a pregnancy and the initial postpartum period. Inherent in the ambulatory setting are risks that arise from intermittent, office-based care. Maternal comorbidities and congenital fetal conditions test obstetrical practices' ability to ensure appropriate assessment, monitoring, and communication among specialists and with the expectant mother. Obstetrics providers in the community settingperhaps hindered by a lack of available specialists or interconnected electronic medical records-are particularly vulnerable to loss of key information at handoffs and to narrow diagnostic focus, sometimes despite the presence of indicators for fetal or maternal complications. If mismanaged, prenatal and postpartum encounters may become the focus of an allegation of malpractice. Because such errors may go unnoticed until the onset of labor or in the aftermath of an ill-advised perinatal decision,

obstetrical practices are hard-pressed to self identify vulnerabilities and proactively implement remedies.

Comorbidities, especially the growing epidemic of obesity, and clinical trends such as advancing maternal age, present multiple clinical challenges beyond the normal course of pregnancy. Providers and patients benefit when they are able to nurture a partnership that reinforces their concerns and supports compliance with the prescribed treatment plan. Waning vigilance to potential complications (e.g., pre-eclampsia, placenta previa, gestational diabetes) can be perceived (by patients and jurors) as minimizing their significance and a failure to prepare for a safe delivery.

# Inadequate communication contributes to patient harm.

20%

OF OB CASES INVOLVE COMMUNICATION FAILURES BETWEEN PROVIDERS INVOLVED IN PRENATAL CARE.

# Are your patients vulnerable to harm arising from mismanagement of prenatal care?

TOP FINAL DIAGNOSES	PERCENT OF CASES	AVERAGE INDEMNITY INCURRED
CONGENITAL/GENETIC ANOMALIES	11 %	\$ 1,002,000
MATERNAL COMPLICATIONS (PLACENTA PREVIA, PRE-ECLAMPSIA, GESTATIONAL DIABETES)	10 %	\$ 295,000
PREMATURITY	8 %	\$ 1,597,000
INTRAUTERINE FETAL DEATH	8 %	\$ 347,000

#### CASE EXAMPLE

Narrow diagnostic focus and failure to appreciate the potential gravity of a patient's clinical presentation lead to fetal and maternal demise.



In the setting of a "reassuring" fetal assessment, an attending obstetrician failed to exercise appropriate vigilance in exploring maternal complaints of abdominal pain and pressure during a visit to Labor and Delivery triage at 32 weeks. The patient was prematurely discharged without a full assessment of possible complications. She collapsed at home the next day in full cardiac arrest, hemorrhaging from placental abruption. (Case settled: \$1.1M)

Poorly coordinated clinical care and lack of vigilance in management of emergent changes lead to premature delivery of infant in distress.



A patient diagnosed with cervical weakening and disruption of membranes during an office visit at 22 weeks was identified as a candidate for cerclage. The obstetrician consulted a Maternal Fetal Medicine (MFM) colleague who was not available to provide treatment that day. The MFM attending planned to contact a colleague for assistance in managing the patient, but did not follow through. Over the following weeks, ongoing clinical indicators of distress went unaddressed by providers, and a delay in interventional management was justified by lack of resources and lack of clinical urgency. Six weeks later, at 28 weeks, the patient delivered an infant later diagnosed with cerebral palsy. (Case settled: \$750K)

# DELIVERING SAFER CARE IN THE AMBULATORY SETTING

With an ever-broadening scope of services offered in the ambulatory setting, obstetrics providers must be increasingly vigilant to vulnerabilities in this environment. The course of outpatient treatment evolves at a slower pace, and so too does the emergence of clinical judgment errors leading to patient harm. Providers in this setting responsible for coordinating care among specialists are particularly at risk when their systems fail to ensure closedloop communication. Decisions hindered by an absence or loss of key information can lead to disastrous consequences-recognized too late to prevent harm. Organizations that routinely evaluate the strength of their systems for reconciling ordered tests and referrals with incoming results and consult notes, and those that implement standardized practices to support closed-loop communication, will create a stronger foundation from which their providers deliver care.

Obstetrics providers named in malpractice suits have to assess their ability to focus the jury on what is, and what is not, within their control and capabilities.

# DISPOSITION

In this study, the volume of OB cases asserted has stabilized in recent years, but their impact on a hospital's bottom line continues to be significant. Overall, OB cases were more likely than non-OB cases to close with payment, and the average payment was considerably higher than for other case types. While malpractice juries may have more balanced expectations than the plaintiff, the potential impact of a child with severe physical and/or neurological deficiencies present in the courtroom factors into determining how a case is resolved.

Complicating the process of deciphering OB malpractice cases is the fact that the obstetrical community is sometimes held accountable for outcomes that cannot be scientifically linked to medical intervention, particularly cases involving children with cerebral palsy. Not infrequently, such cases pit the legal defense of appropriate care against empathetic malpractice juries that despite a preponderance of credible evidence to the contrary—side with the child facing a lifetime of overwhelming challenges.

Of course, the best antidote to allegations of malpractice is good care and good documentation. Maintaining manageable professional liability premiums for obstetricians is a complex challenge requiring close attention to data, relentless hazard identification, and innovative patient safety initiatives. Obstetrics leaders who can help providers balance their wariness of malpractice with appropriate attention to the underlying causes (and risk management techniques) should be able to accelerate patient safety improvements.

# Patients who sue for obstetrics-related care are increasingly receiving an indemnity payment.



OB cases closed with payment

## For 1,213 obstetrics-related malpractice cases closed from 2005-2009



OF ALL CASES CLOSED WITH PAYMENT

# **CLINICIAN SUPPORT SERVICES**

TAKING ACTION: As a proactive gesture of post-event support for clinicians involved in adverse events and other emotional encounters. CRICO produced a probing film documentary using actual case studies. Healing the Healer highlights programs at Johns Hopkins, University of Michigan, Brigham and Women's Hospital, and others in a call to action for health care leaders to take up the charge of clinician support, raise awareness, and institute change.

The impact on an obstetrics provider -or team-of a severe, unexpected patient outcome can transcend emotional boundaries, impacting the safety of future clinical encounters. While the immediate needs of the patient and family are paramount following an adverse outcome, the needs of the providers should not be subordinated.

Helping providers recover after medical care goes wrong is both a compassionate gesture and a patient safety imperative. As a hospital, health care system, or insurer, organizations must consider that subsequent clinical performance may be at risk. Whether or not litigation ensues, a terrible and unexpected outcome for a patient should be followed by routine and systematic support for everyone involved.

# With careful navigation, small warning beacons can lead to transformations in patient care and safety.

# TRANSLATE YOUR MALPRACTICE DATA INTO ACTION

#### **1. LOOK FOR AND EXPLORE DATA BEACONS**

A spate of second stage labor events at Ferndean Community Hospital\* concerns FCH leaders. Is there a trend? If so, what should they do?

A larger set of peer data sharpens the perspective on risks related to second stage labor. Drilling into the underlying causes in fetal distress cases leads FCH to a richer understanding of what systems and skills should be prioritized for patient safety initiatives.

#### 2. TAKE ACTION

In the broader set of peer data, FCH's leaders see that misinterpretation of diagnostic studies and communication among providers are more common contributing factors to malpractice cases, despite FCH's own undifferentiated experience.

Once FCH identifies specific improvements necessary for its Labor and Delivery unit, it again considers its peers as a valuable resource. Who has encountered the same problem? Who has already implemented an effective solution?

#### 3. FINE-TUNE AND SUSTAIN

Based on peer recommendations, FCH implements team training and multidisciplinary EFM training. FCH also establishes baseline metrics and measures outcomes to evaluate impact.

When this garners improvement for those clinicians who participated, FCH mandates the training as a condition of privileging.

\*While the name is a pseudonym, the data presented are real. Ferndean managed 2,300 births in 2009.

#### CASES ALLEGING DELAY IN TREATMENT OF FETAL DISTRESS (2005-2009)

# In isolation, Ferndean has a handful of cases to examine



# Peer data provide a clearer picture

CONTRIBUTING FACTORS	FERNDEAN	PEERS
	NUMBER OF CASES	
MISINTERPRETATION OF DIAGNOSTIC STUDIES	4	28
MONITORING OF PATIENT'S PHYSIOLOGICAL STATUS	3	13
COMMUNICATION AMONG PROVIDERS REGARDING PATIENT'S CONDITION	3	26

ORGANIZATIONS THAT LEVERAGE COMPARATIVE DATA TO AMPLIFY WEAK SIGNALS AND CLARIFY THEIR OWN EXPERIENCE ARE POSITIONED TO MAKE A SIGNIFICANT IMPACT ON PATIENT SAFETY.

# REMEDIES

The following initiatives exemplify ongoing attention to the risks obstetrics providers and patients are exposed to under "everyday" circumstances as well as opportunities for maintaining less frequently called upon skills.

#### AN EARLY WARNING SYSTEM: PERINATAL ADVERSE EVENT REPORTING

To promote safer, high quality care of obstetrics patients, the Harvard-affiliated obstetrics leaders turned to consistent, systematic, institutional reporting of six categories of perinatal adverse events (maternal death; uterine rupture/ scarred uterus; retained foreign object; 5 min. Apgar  $\leq$  4, term infant,  $\geq$  2500g; brachial plexus injury; intrapartum death of a term infant,  $\geq$  2500g; neonatal death of a term infant,  $\geq$  2500g, no congenital anomalies). Review of these signal data support a proactive effort to facilitate more timely improvements in obstetrical care across Harvard's perinatal units.

#### REWARDING EFFORTS TO IMPROVE: PREMIUM INCENTIVES

CRICO-insured obstetricians and certified nurse midwives who regularly participate in a series of patient safety education activities qualify for a significantly less costly malpractice insurance premium category than non-participants. The key requirements: a team training course, study of CRICO's OB Guidelines, participation in safety drills, and completion of shoulder dystocia and electronic fetal monitoring CME courses. Participation is more than 90 percent of eligible obstetrical care providers.

#### LEVERAGING RESOURCES TO DEVELOP SOUND PRACTICE: OB CLINICAL GUIDELINES

Published since 1988 and aimed at the most prominent issues seen in obstetrics-related malpractice claims, the Clinical Guidelines for the Obstetrical Services of the CRICO-insured Institutions are a codification of best practices and recommendations of the American College of Obstetricians and Gynecologists, and Guidelines for Perinatal Care of the American Academy of Pediatrics.

#### TRANSLATING EXPERIENCE INTO SCALABLE ACTION: TEAM PERFORMANCE PLUS

A structured analysis of 10 years of OB claims indicated that 42 percent of those cases could have been prevented or mitigated with better teamwork. These data led to the development of Team Performance Plus (TPP), based on the elements of crew resource management, expanded and customized to the unique obstetrics environment. TPP trains to the specific skills of high performance teams: leadership, communication, shared vision, and error reduction strategies. The program provides the structure and tools needed to effectively implement and sustain those skills, ensure leadership support, and manage roadblocks and resistance.

#### MEDSTAR HEALTH: A DECADE OF INITIATIVES

In 2001, MedStar Health, a community-based network in the Baltimore/ Washington DC corridor, analyzed 10-years of its professional liability claims. Recognizing vulnerabilities in its Labor and Delivery units, MedStar initiated an OB Task Force to maximize high-quality, patientcentered care while minimizing risk and liability. What followed was 10 years of data-driven interventions resulting in measurably improved outcomes and demonstrably safer care.

#### SPRING 2001

Claims analysis reveals OB is MedStar's top risk area.

#### FALL 2001

MedStar Management formed OB Risk Reduction Task Force.

#### 2001-2003

Standardization of care practices and uniform clinical protocols to address clinical judgment errors prevalent in claims.

#### 2004-2005

EMR with embedded clinical decision support for monitoring and managing deviations in OB practice.

#### 2005

Risk Reduction Task Force transformed into "Council for Ideal Obstetrical Care."

#### 2006-PRESENT

MedStar participates in regional perinatal collaborative to reduce maternal and infant harm.

#### 2007-PRESENT

MedStar Obstetrical Safety Training, team training in a simulated environment. Huddles-Enhanced Communication: RNs and MDs meet four times daily to discuss laboring patients.

#### 2008

Online electronic fetal monitoring training course.

# COMPARATIVE BENCHMARKING SYSTEM (CBS):

30%

A landscape view of key clinical risk areas

## All CBS data

Monitoring high-level trends in claims experience through CBS allows Strategies and its CBS partners across the country to keep abreast of emerging national trends that affect high-risk service areas, and to share model interventions.

#### TOP ALLEGATIONS



Percent of cases

#### ALLEGATION TRENDS



#### TOP RESPONSIBLE SERVICES



## Surgery

Organizations that systematically evaluate the human and environmental factors driving technical errors in each clinical specialty are best positioned to develop successful, targeted, interventions.

#### TOP RESPONSIBLE SERVICES



#### **INPATIENT CASE RATE**



#### TOP CONTRIBUTING FACTORS

	PERCENT OF CASES
TECHNICAL SKILL Intraoperative complications	<b>36</b> %
CLINICAL JUDGMENT Inappropriate selection of procedure or surgical approach	<b>17</b> %
CLINICAL JUDGMENT Failure/delay in ordering a diagnostic test	<b>16</b> %
COMMUNICATION Among providers regarding patient's condition	11 %
CLINICAL JUDGMENT Failure to respond to repeated complaints of symptoms	10 %

\*Cases generally have 2-3 factors identified.

### **Emergency Medicine**

The fast-paced Emergency Department harbors opportunities for missed diagnoses driven by clinical judgment errors and inefficient communication. Team training's emphasis on shared awareness and communication is an effective way to create a culture of safety amidst the chaos.

#### TOP ALLEGATIONS



Percent of cases

#### CASE RATE



### Outpatient Diagnosis-Related Claims

Providers delivering long-term, episodic care are vulnerable to diagnostic errors arising from flawed clinical judgment and communication lapses. Systems for closed-loop clinical management and education on the risks of diagnostic error are critical for supporting safe, office-based care.

#### **TOP RESPONSIBLE SERVICES**



#### TOP CANCERS



#### TOP CONTRIBUTING FACTORS

	PERCENT OF CASES
CLINICAL JUDGMENT Inadequate assessment leading to premature discharge	<b>40</b> %
CLINICAL JUDGMENT Failure/delay in ordering a diagnostic test	<b>31</b> %
CLINICAL JUDGMENT Failure/delay in obtaining a consult/referral	27 %
CLINICAL JUDGMENT Narrow diagnostic focus, failure to establish a differential diagnosis	24 %
COMMUNICATION Among providers regarding patient's condition	18 %

\*Cases generally have 2-3 factors identified.

#### **OUTPATIENT DIAGNOSTIC PROCESS OF CARE**

	PERCENT OF CASES	TOTAL INCURRED DOLLARS
Patient notes problem and seeks care	2 %	\$11,478,000
History/physical and evaluation of symptoms	39 %	\$151,131,000
Order of diagnostic/ lab tests	63 %	\$250,997,000
Performance of tests	4 %	\$10,931,000
Interpretation of tests	43 %	\$168,323,000
Receipt/transmittal of test results	12 %	\$47,864,000
Physician follow-up with patient	15 %	\$71,865,000
Referral management	32 %	\$99,921,000
Patient compliance with follow-up plan	11 %	\$17,938,000

# CRICO's Comparative Benchmarking System has caught the attention of the insurance industry...



CRICO's work to eliminate health care risk is unmatched—it saves lives. As a reinsurer, we have a vested interest in anyone who can offer significant value to patient safety efforts and have watched with interest as eliminating patient harm has, rightly, taken on much greater importance. In this respect, CRICO's work with comparative data is more relevant than ever."

# ... Especially in obstetrics.

Charlie Pearch, Lloyd & Partners

Bill Yurek, AVRECO-RPS As reinsurance brokers, we spend much of our time discussing the travails of severe obstetric complications. We have witnessed with admiration how CRICO's measurement and analysis of obstetrical medical malpractice incidents have empowered their ability to identify root causes and leverage that intelligence to engage its insured practitioners in structured interventions to improve practice. As a result, we've seen CRICO's obstetrical case rate decline, allowing us to negotiate more rational attachment points for transfer to the commercial reinsurance market, and to transfer this risk at a remarkably stable cost. CRICO's approach has greatly improved patient safety, and as a result has lowered the risk of medical malpractice."

John L. McCarthy, President, CRICO If you have good data that show why something went wrong and where the process or system failures really occurred, then you can have a fruitful interaction with your trustees, clinical leaders, and administrators. At CRICO, we provide our Board of Directors with credible data that engages them in terms they can act upon. Their support—based on our comparative data—has lead to effective and sustained remediation."

#### **CRICO STRATEGIES**

Since 1976, CRICO has been the medical malpractice company owned by and serving the Harvard medical community. Our success is rooted in a datadriven approach to claims management and patient safety, and is the outcome of years of service to our members.

The establishment of Strategies in 1998 allowed CRICO to reach beyond Harvard to create an international membership of physicians, health care systems, and their medical malpractice insurers, using our proven methodologies: comparing analyses of claims data, sharing effective patient safety practices, and promoting dialogue among a community of peers.

For more information about the CBS database and Strategies services and products, contact: Gretchen Ruoff, MPH, CPHRM 617.679.1312, or gruoff@rmf.harvard.edu.

# Crico strategies

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