

Reducing Obstetric Litigation Through Alterations in Practice Patterns

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OBJECTIVE: To estimate the extent to which obstetric malpractice claims might be reduced by adherence to a limited number of specific practice patterns.

METHODS: We examined all 189 closed perinatal claims between 2000 and 2005 from a single, large, professional liability insurer. Each case was subjected to three separate analyses: 1) whether the adverse outcome was caused by substandard care, 2) what changes in practice likely would have avoided the adverse outcome, regardless of standard-of-care considerations, and 3) to what extent did substandard documentation lead to payment in cases in which there was no objective evidence of substandard care.

RESULTS: Seventy percent of claims involving obstetric practice (accounting for 79% of all costs) involved substandard care. Payments in 85% of cases involving non-vaginal birth after cesarean (VBAC) fetal monitoring, 16% of maternal injury cases, 80% of cases involving VBAC, and 54% of shoulder dystocia cases were avoidable had four specific practice and documentation patterns been followed.

CONCLUSION: Most money currently paid in conjunction with obstetric malpractice cases is a result of actual substandard care resulting in preventable injury. Well more than half of hospital litigation costs might be avoided if physician practice included: 1) delivery in a facility with 24-hour in-house obstetric coverage; 2) adherence to published high-risk medication protocols; 3) a more conservative approach to VBAC; and 4) use of

a comprehensive, standardized procedure note in cases of shoulder dystocia.

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LEVEL OF EVIDENCE: III

Medical malpractice claims in obstetrics continue to be a major driver of both the cost of medical care and physician dissatisfaction with obstetric practice.^{1–4} Such claims also may contribute to a lack of access to obstetric specialists in some areas of the United States.^{5,6} More importantly, in that fraction of cases in which violations of the standard of care actually caused an injury, such claims reflect preventable adverse outcomes for mothers and newborns. Against this background, we sought to determine whether a small number of specific practice patterns might be identified that account for a larger fraction of avoidable adverse events and/or malpractice payments.

MATERIALS AND METHODS

We reviewed materials collected or produced by a large, professional liability insurer during the evaluation of all paid claims involving perinatal care that were closed during the years 2000 to 2005. Such materials included medical records, abstracts or summaries, claims analyses, interviews with providers, and opinions of clinicians serving as defense consultants. During this timeframe, approximately 1.1 million deliveries occurred, although the times of occurrence do not correlate exactly with the years in which the cases were closed. Approximately 2% of claims were the results of jury verdicts; the remainder settled out of court.

Cases were divided into categories according to the nature of the major issue or allegation (Table 1). Minor claims involved issues such as retained vaginal sponge, small cauterization burns, or slips and falls. Each case then was subjected to three separate analyses: 1) Was the adverse outcome caused by substan-

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Table 1. Analysis of 189 Closed Claims

Category	Number of Cases (%)	Care Substandard (%; 95% CI)	Cost (% of Total Dollars Paid)	Payment (Mean and Range in U.S. \$)
Fetal monitoring/hypoxia, non-VBAC	64 (34)	60 (94, 85–98)	53	1,392,629 (25,500–16,850,428)
Minor injury	46 (24)	31 (67, 53–79)	2	74,478 (173–724,955)
Shoulder dystocia	26 (14)	6 (23, 11–42)	6	429,480 (30,617–3,248,262)
Maternal injury/death	19 (10)	16 (84, 62–95)	15	1,331,816 (24,488–4,600,369)
VBAC	10 (5)	6 (60, 31–84)	6	992,703 (30,873–3,707,348)
Fetal trauma	9 (5)	2 (22, 6–55)	2	425,532 (58,281–1,949,747)
Preterm birth	3 (2)	2 (67, 21–94)	1	615,546 (285,553–1,014,287)
Group B streptococcus	3 (2)	3 (100, 44–100)	1	218,669 (1,500–577,492)
Prenatal diagnosis	3 (2)	2 (67, 21–94)	4	2,011,868 (22,504–3,715,503)
Nonobstetric	6 (3)	NA	10	2,446,389 (56,346–10,960,856)

CI, confidence interval; VBAC, vaginal birth after cesarean. The 95% CIs are reported using no continuity correction.

standard care? 2) What changes in practice likely would have avoided the adverse outcome, regardless of standard-of-care considerations? 3) To what extent did substandard documentation lead to payment in cases in which there was no objective evidence of substandard care? Claims involving nonobstetric perinatal health care providers (pediatricians or anesthesiologists) were not analyzed in terms of standard of care or preventability (Table 1).

Data were analyzed with respect to both the number of cases and the dollar payments. Defense costs were not included in the analysis.

RESULTS

A total of 189 perinatal claims that were closed during the calendar years 2000 to 2005 were identified and analyzed. The frequency of claim type as well as the cost associated with these categories of claims are listed in Table 1. The total value of all claims was \$168 million. Although minor claims were common and generally avoidable, they had much less significance in terms of dollar value.

Seventy percent of all obstetric claims involved substandard care that was causally related to the injury. These cases accounted for 79% of all costs associated with the 189 claims. The frequency with which claims within a given category were associated with substandard care is listed in Table 1.

Four major patterns emerged from an analysis of these cases:

1. Twenty-three percent of cases involving fetal monitoring in non-vaginal birth after cesarean (VBAC) patients (14% of total costs) were deemed avoidable had an obstetrician been continuously in-house. In each of these cases, delayed physician evaluation of a nonreassuring

fetal heart rate tracing and delayed delivery was the primary issue associated with the adverse outcome and resulting litigation.

2. Forty-five percent of cases involving fetal monitoring in non-VBAC patients (27% of total costs) and 16% of maternal injury cases (3% of total costs) were deemed avoidable had the health care providers followed published, checklist-driven protocols for administration of oxytocin, misoprostol, and magnesium sulfate. An additional 17% of non-VBAC fetal monitoring cases (10% of total costs) were avoidable had either one of the above two practices been in place.
3. Eighty percent of cases involving VBAC (5% of total cost) were avoidable had this procedure been limited to spontaneous labors progressing without augmentation and in the absence of repetitive moderate/severe variable decelerations.
4. In 54% of shoulder dystocia cases (4% of all costs), payment was primarily driven by poor documentation and could have been avoided had record keeping been complete and uniform. In an additional 23% of cases, care was substandard. Thus, payment may have been avoided in 77% of cases involving shoulder dystocia with both better care and better documentation.

DISCUSSION

Litigation remains a major issue in obstetric practice.^{1–6} Such concerns have led to a lowered threshold for performance of cesarean delivery, a decreased willingness to care for high-risk patients, a decline in



the number of physicians willing to provide VBAC, as well as a cessation of all obstetric care by some practitioners.⁶ Indeed, the average age at which an obstetrician–gynecologist stops providing obstetric care is currently 48 years, an age at which most physicians approach the peak of judgment and experience. According to one recent survey, “it is apparent that the current medico-legal environment continues to deprive women of all ages, especially pregnant women, of their most educated and experienced women’s health care physicians. By any measure, quality health care for women suffers a significant negative impact reflected in a diminution of obstetric services, a reduction in gynecologic surgery, and an increase in the practice of defensive medicine.”⁶

Efforts aimed at tort reform, award caps, and the policing of junk science have not been uniformly successful.^{7–9} A recent report from our group demonstrated that a broadly directed, integrated approach focused on patient safety and the avoidance of adverse obstetric outcomes was associated secondarily with a dramatic reduction in obstetric malpractice losses.⁹ With the current report, we sought to narrow our focus and examine specific practice patterns that might contribute additionally to such loss improvement. This effort is a continuation of an approach based on the conviction that malpractice-loss reduction is best accomplished through primary avoidance of adverse outcomes and good documentation rather than through attempts to make unusual or substandard care more defensible, a conclusion also suggested by the data of Ransom et al.¹⁰

A complete review of all medical records may have revealed pertinent facts not evident on initial medical-record review by the involved defense experts and/or litigation teams. In addition, facts not evident in the medical records affecting compliance or deviation from standard of care could have been present. However, we feel such inaccuracies would be uncommon because the available information was compiled by experienced professionals whose accuracy affects decisions regarding hundreds of millions of dollars. Nevertheless, conclusions regarding preventability are, by their very nature, subjective; thus, the quantitative results presented must be regarded as approximate. In addition, these data should not be implied to represent a comprehensive analysis of the quality of care given during this timeframe; cases dropped for technical reasons or won at trial despite substandard care would not be included in this review. Rather, these data are intended to address a single, specific issue—what practice patterns actually lead to malpractice payments and what changes in

practice might avoid such payments? Despite our narrow focus, this is a question of singular importance. In a similar manner, although these cases arise from claims in 21 states from New Hampshire to California and from Alaska to Florida, it is possible that different practice patterns or malpractice defense results would arise from analysis of results from a different insurance carrier.

Our data suggest three important conclusions. First, even when judged by treating providers or defense consultants, most money currently paid in conjunction with obstetric malpractice cases is a result of actual substandard care resulting in preventable injury. Thus, the main key to addressing litigation costs involves improvement in practice patterns and adherence to current standards of care. Efforts to bring uniformity to select high-risk procedures, a pattern utilized with great success in other high-reliability organizations and physical systems, also have been associated with improved outcomes and malpractice-loss reduction in obstetrics.^{9–13}

Second, as indicated in Table 1, the variation in cost associated with similar categories of injury is staggering. Certainly some of this variation is due to different degrees of injury within a given category. However, the fact that such variation commonly exceeds two orders of magnitude also may be interpreted as further evidence of a flawed system of determining compensation in birth-related injury cases in which both overcompensation and undercompensation may occur because of facts unrelated to either the care given or the degree of injury. Such issues have been discussed previously for other types of litigation.^{14,15}

Third, we identified the existence of four distinct fact patterns linked to almost two thirds of all malpractice-case loss. Three of these patterns are associated with avoidable adverse outcomes. The fourth involves charting. We emphasize that many of these cases involved compliance with the standard of care as it currently exists in the United States—this secondary analysis examines preventability rather than quality of care per se.

The first pattern involves the use of three specific medications: oxytocin, misoprostol, and magnesium sulfate. Although used safely and with beneficial effects in millions of women annually, the first two agents have the potential to cause uterine hyperstimulation with resultant fetal asphyxia or maternal uterine rupture. Magnesium sulfate has been associated with maternal respiratory arrest in cases of overdose. We previously have published checklist-based protocols for administering and monitoring these three



drugs.^{9,13} When used according to these highly specific protocols, the likelihood of harm is remote. In 65% of all cases involving malpractice payment, a review of the facts of the case suggested that strict adherence to these protocols would have avoided the injury that led to litigation.

The second pattern involved deterioration in fetal status requiring expeditious cesarean delivery. In these cases, a review of the facts suggested that a more timely cesarean likely would have avoided the adverse outcome and could have been accomplished had an obstetrical provider capable of performing cesarean delivery, anesthesia support, and an operating room team been in the hospital at the time the fetal heart rate pattern deterioration was manifest. Violations of standard of care were not always involved in these cases because the provision of such in-house services currently is available in a minority of hospitals in the United States.

The third pattern involved the management of VBAC. Both misinterpretation of signs of uterine rupture and lack of immediate physician availability played a role in these cases. After the introduction of VBAC in the 1980s, the number of women choosing this option rose rapidly, peaked in the mid-1990s, and subsequently has fallen.^{16,17} This decline is largely due to an increased recognition of both the dangers of uterine rupture in women undergoing a trial of labor and the relative safety of repeat cesarean delivery in developed countries.^{16,17} Few issues are more controversial in current obstetric practice. Despite voluminous literature on the subject, key questions regarding the safe conduct of trial of labor after cesarean persist. These include the safety of labor induction and the appropriate approach to active-phase or second-stage arrest disorders in women with a uterine scar.¹⁸⁻²⁰ In addition, although variable decelerations are common and generally benign in women with an unscarred uterus, they are often the harbinger of scar separation in women with a prior cesarean, and few data exists to assist the clinician in distinguishing the two. Finally, current guidelines mandating "immediate" availability of personnel who can perform an emergent cesarean may appear to allow broader latitude to clinicians than they do to juries, especially after an injury has occurred.¹⁶ Our review suggests that a more conservative approach to trial of labor would result in significantly fewer uterine ruptures and adverse neonatal outcomes. Such an approach includes 1) limitation of trial of labor to women entering labor spontaneously, 2) allowing VBAC labor to continue only as long as a normal, nonaugmented labor curve is followed, and 3) allowing VBAC labor to continue

only in the absence of repetitive moderate or severe variable decelerations or more standard indicia of fetal compromise. We emphasize that these observations are more stringent than currently required by the standard of care in the United States. In addition, such practice patterns likely would reduce the number of women who undergo successful trial of labor after cesarean. However, given the current rapid and continuous fall in the rate of VBAC delivery in the United States, such clear, unambiguous, and conservative guidelines may assist in saving the procedure from complete oblivion as well as in reducing litigation.

The final pattern concerned shoulder dystocia. In only one quarter of cases resulting in payment could violations of the standard of care be identified from the medical record. However, in 54% of cases in which payment was made, the issue driving payment was lack of clear documentation of events surrounding the management of shoulder dystocia. In such circumstances, missing data may erroneously be supplied by nonmedical personnel in attendance at the delivery or must be assumed by expert witnesses on either side. In such cases, experience dictates that the theoretical presumption of innocence does not apply to health care providers, who, in reality, must document that their care could not have caused the injury. More complete documentation of events that did or did not occur is often the key to litigation avoidance in these cases.⁹

Although adherence to these practice patterns represents one approach to acceptable care in the United States today, we emphasize that none of these observations set the standard of care nor reflect an exclusive standard of care. Further, our observation regarding 24-hour in-house availability of an obstetrician clearly will never be practical in all, or perhaps even most, circumstances. Nevertheless, we feel these observations may be of assistance to obstetricians in evaluating their practice priorities and in reducing adverse outcomes and litigation. In situations in which such practices could be fully implemented, significant malpractice premium reductions may be possible.

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