



Policy matters

Maternity Care and Liability: Pressing Problems, Substantive Solutions

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Article history: Received 20 September 2012; Received in revised form 2 November 2012; Accepted 7 November 2012

A B S T R A C T

Background: This paper summarizes a new report presenting the best available research about the impact of the liability environment on maternity care, and policy options for improving this environment. Improved understanding of these matters can help to transcend polarized discourse and guide policy intervention.

Methods: We used a best available evidence approach and drew on more recent empirical legal studies and health services research about maternity care and liability when available, and considered other studies when unavailable.

Findings: The best available research does not support a series of widely held beliefs about maternity care and liability, including the economic impact of liability insurance premiums on maternity care clinicians, the existence of extensive defensive maternity care practice, and the impact of limiting the size of awards for non-economic damages in a malpractice lawsuit. In the practice of an average maternity caregiver, negligent injury of mothers and newborns seems to occur more frequently than any claim and far more frequently than a payout or trial. Many important gaps in knowledge relating to maternity care and liability remain. Some improvement strategies are likely to be more effective than others.

Conclusions: Empirical research does not support many widely held beliefs about maternity care and liability. The liability system does not currently serve well childbearing women and newborns, maternity care clinicians, or those who pay for maternity care. A number of promising strategies might lead to a higher functioning liability system, whereas others are unlikely to contribute to needed improvements.

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Introduction and Background

This paper provides highlights from a new report assessing both the impact of the professional liability environment on maternity care in the United States and strategies for improving this environment (Sakala, Yang, & Corry, 2013c). Traditional aims of the liability system are to deter harm and compensate those who sustain negligent injury. A major segment of the health care system, maternity care impacts the entire population at the beginning of life and 85% of women who give birth once or, more typically, multiple times (Martinez, Daniels, & Chandra, 2012). Combined care of childbearing women and newborns is the most costly hospital condition for all payers, private payers, and Medicaid (Agency for Healthcare Research and Quality, 2012), and these payments include the costs of liability. Major liability concerns include the tragedy of a perinatal death or newborn

with lifelong impairment, and of harm in a relatively young and healthy childbearing woman.

Professional liability issues are persistent sources of concern among policy makers and discontent among maternity care providers. These providers' elevated level of liability reflects the longer, often 12-year period for filing a claim after an event that may have harmed a newborn versus the typical 2-year "statute of limitations" period for other patients (Shea, Scanlan, Nilsson, Wilson, & Mehlman, 2008), the high cost of compensation for lifelong care needs or loss of life at the beginning of life, and the fact that obstetrician-gynecologists are at elevated risk as practitioners within a surgical specialty. It is crucial to ensure that the liability system fosters access to and the quality of all vital maternity services, including those of general obstetrician-gynecologists, maternal-fetal medicine subspecialists, family physicians, midwives, and care in hospitals and freestanding birth centers.

A broad investigation of maternity care liability issues has not been carried out since the Institute of Medicine issued a report in 1989 (1989a, 1989b), when limited sound quantitative data with few maternity-specific investigations were available to inform

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liability matters (Zuckerman, Koller, & Bovbjerg, 1986) and the health care system differed in many respects from present conditions.

Methods

We used a best available evidence approach to examine both the impact of the liability system on maternity care and the effectiveness of strategies to foster a high-functioning liability system. Finding no systematic reviews or experimental studies, we preferred studies that took into account potential competing predictor variables and confounding factors within empirical legal studies and health services research traditions. We preferred studies specifically about maternity care and liability, and considered more general studies when maternity-specific research was unavailable. We preferred results from the current or previous liability cycle but, when unavailable, consulted earlier studies. We preferred national or multistate studies to state-level studies. We excluded studies from other countries. We searched PubMed and LexisNexis, with widely varying search terms owing to the diverse topics. The search results themselves, health care news sources, journal table of contents notification services, and referees also pointed to relevant studies.

The new report provides an update of maternity care and liability in the context of the evolving health care, legal, and liability insurance systems (Mello & Zeiler, 2008; Struve 2004). Medical malpractice policy making frequently has not been guided by best evidence; such focus can help the various stakeholders to move beyond polarized discourse, competing beliefs, and gridlocked decision making to better understand the issues and identify and move toward substantive solutions (Mello & Zeiler, 2008).

Results

Impact of the Liability Environment on Maternity Care

Background: Underwriting for maternity providers professional liability insurance

As the traditional medical liability insurance business has contracted, and physician, hospital, and health system affiliates have increasingly offered liability insurance policies, obstetrician-gynecologists seem to have ready and relatively stable access to liability insurance coverage (Berenson, Kuo, & May, 2003; Mello, 2006b). However, liability insurance cycles, characterized by ebbing and flowing of premium levels, have been volatile and are impacted by litigation costs, broader economic conditions, and insurer industry business decisions (Mello, 2006b; Studdert, Mello, & Brennan, 2004). Obstetrician-gynecologists and other health professionals in specialties that are at higher risk for experiencing liability claims can perceive high and fluctuating premiums and rate increases during hard segments of the cycles as capricious and distressing. Although the extent of interference with clinical decision making is unknown, some policies impose surcharges for or do not cover evidence-based care, such as vaginal birth after cesarean section, obstetrician collaborative practice with midwives, and family physician provision of maternity care (Benedetti et al., 2006; Hale, 2006).

Liability insurance for maternity caregivers

The cost of professional liability insurance premiums to obstetrician-gynecologists varies widely across geographic areas and time (Medical Liability Monitor, 2011). Although

obstetrician-gynecologist liability insurance premium levels tend to be higher than those of most other specialists, their premiums amount to a relatively small portion of overall practice expenses. National data from the American Medical Association, for example, revealed that malpractice premiums of self-employed obstetrician-gynecologists were 13% of total practice expenses in 2000. Further, other practice expenses have grown sharply over time, in contrast with premium expenses: Adjusted for inflation, from 1986 to 2000 average obstetrician-gynecologist premiums declined by 15% as practice expenses rose by 32% (Rodwin, Chang, & Clausen, 2006). Although national data were not available after 2000, analysis of Massachusetts data yielded similar results thereafter (Rodwin, Chang, Ozaeta, & Omar, 2008). Within the high level of compensation for physicians generally, the average income of obstetrician-gynecologists exceeds that of most other specialties and seems to have outpaced inflation up to the onset of the global economic downturn (Robeznieks, 2011).

Discussions of liability premium levels frequently do not consider adjustment for inflation, premium declines in soft phases of liability cycles, premium discounts, or use of unreliable data sources (Mello, 2006b; Rodwin et al., 2008). Surveys of maternity care professionals frequently identify the affordability of liability premiums as a salient concern, yet fail to examine the size and growth of other practice expenses, impact of tightened reimbursement, and other potential sources of economic pressure. These discussions also do not recognize that the Resource-Based Relative Value Scale, which sets a national standard for physician payment, includes a component for liability insurance that is adjusted in consideration of specialty and geographic area for every fee schedule service code (Grimaldi, 1991). The best current evidence suggests that liability insurance premiums do not threaten the economic viability of obstetrician-gynecologists.

With trends of health professionals consolidating into larger clinical groups and being employed within health systems, and strong incentives for younger physicians to embrace this model (Kocher & Sahni, 2011; O'Malley, Bond, & Berenson, 2011), clinicians increasingly receive liability insurance premium coverage as a benefit of employment. However, the extent to which maternity care professionals no longer have individual responsibility for paying liability premiums is unknown. Research is needed to understand the implications of this trend for liability matters, including traditional provider concern about liability insurance premium levels, improved potential for implementing effective risk reduction programs, and the extent to which previous studies apply to this evolving environment.

Finally, as practice expenses have grown and reimbursement has tightened, physicians generally (Ginsburg & Grossman, 2005), and obstetrician-gynecologists specifically (Mehlman, 1994; Pauly, 2006), seem to have successfully increased revenue through a procedure-intensive practice style with, for example, high rates of labor induction and cesarean section, with concerns about implications for quality, outcomes, and cost (Gregory, Jackson, Korst, & Fridman, 2012; James & Savitz, 2011). The growth of ancillary outpatient services may also be a factor in income trends (Ginsburg & Grossman, 2005).

Claims and lawsuits relating to maternity care

Obstetrics and gynecology is an outlier among medical specialties with respect to rates of ever being sued, of being sued two or more times, and of claims per 100 physicians (Kane, 2010). It is also an outlier among specialties with respect to the large number of closed (resolved) legal claims, the high rate of payouts (either settlements before a trial award or trial awards)

to compensate for losses among closed claims (with most occurring in the obstetrics area of practice), and the high level of payouts (Carroll & Budenbaum, 2007; Yates, 2012).

Closed claims analyses reveal that maternity care claims involve many health outcomes and care practices (e.g., Angelini & Greenwald 2005; Clark, Belfort, Dildy, & Meyers, 2008; White, Pichert, Bledsoe, Irwin, & Entman, 2005). Although the use of many different classification systems in these analyses makes a broader summary of trends difficult, more claims are for newborn than maternal injury.

The best current estimate about the claims experience of obstetrician-gynecologists found that, on average, a physician had a claim after 11 practice-years, a settlement after nearly 40 practice-years, and an actual trial after 70 practice-years (Chauhan et al., 2005). Maternal-fetal medicine subspecialists may experience higher rates of claims, trials among claims, and trials resolved in favor of parties claiming injury than general obstetrician-gynecologists (Cohen et al., 2005).

Data from the Physician Insurers Association of American suggest that, within the obstetrics and gynecology scope of practice, the number of claims paid out, the percentage of payouts (settlements or trial awards) to defendants among claims, and the total cost of those payouts have been declining substantially over time. For example, when adjusted for inflation, payouts in this category declined by \$138 million between 1986 and 2010 (Yates, 2012).

Incidence of negligent injury and compensation for claims

A carefully conducted study with a random sample found that about 0.6% of childbearing women and about 0.2% of newborns sustained negligent injury, the legal standard of medical malpractice, while receiving care in U.S. hospitals (Brennan et al., 1991). That study and a replication study found that the negligent injury rate in hospital labor and delivery units was in the range of 0.8% to 1.8% (Leape et al., 1991; Thomas et al., 2000).

These results suggest that childbearing women may be about three times as likely to sustain negligent injury as newborns. Further, across 10 clinical areas, mothers experienced the highest rate of negligence among adverse events: Fully 38% of their adverse events were attributed to negligence (Brennan et al., 1991). However, the overall severity of newborn injuries seems to be worse, and they receive more compensation.

Although estimates from these classic studies have subsequently been found to substantially underrepresent true rates of medical error and injury (Classen et al., 2011; Leape & Berwick, 2005), we did not find parallel, large-scale validation studies for maternity care. These figures would most certainly overestimate rates of error and injury in the environment of rigorous quality improvement programs (on the great potential to reduce baseline rates of injury, see the companion paper in this issue on recommended interventions for strengthening the maternity care liability system [Sakala, Yang, & Corry, 2013b]).

Available evidence, not separately reported for maternal-newborn populations, suggests that the rate of filing claims by or on behalf of those who experience negligent injury is low, about 2% (Localio et al., 1991), with payments for damages going to less than 1% of those with negligent injury (Brennan, Sox, & Burstin, 1996). A multivariate analysis found that whereas neither negligence nor an adverse event predicted payment, permanent disability was predictive of payment (Brennan et al., 1991). Furthermore, most money awarded to plaintiffs across clinical areas seems to go to lawyers, experts, and courts: Administrative

costs consumed 54% of payouts in a study of closed claims from five insurers in four regions of the country. In the same set of claims, 37% did not involve errors, but most received no payment and these consumed 16% of all costs (Studdert et al., 2006). Injury to an infant, however, predicted payment for non-meritorious claims and was highly correlated with obstetric claims and greater severity of injury (Studdert & Mello, 2007). Others have similarly found that the presence of major newborn neurological injury predicted payment (Bors-Koefoed et al., 1998).

Practicing physicians and defense lawyers judge about 75% of paid obstetric claims to involve injury from substandard care (Clark, 2009; Clark et al., 2008).

Defensive maternity care practice

Defensive maternity care practice is a deviation from sound practice primarily to reduce risk of liability. There are two broad types: "Avoidance" of risk of liability, such as limiting or withdrawing services, and "assurance" practices to demonstrate efforts to avoid adverse outcomes, such as ordering a test, performing a cesarean delivery, or making a referral primarily to demonstrate a cautionary approach.

Surveys and commentaries of maternity professionals (e.g., Klagholz & Strunk, 2009) raise concerns about the impact of liability pressure (such as high premiums or high rates of claims) on defensive behavior, but are difficult to interpret if the diverse drivers of practice decisions are not considered and response rates are low. Concerns have been raised about the accuracy of the estimates and about incentives to overstate defensive behavior as justification for tort reform (Klingman et al., 1996; Mello, Studdert, Schumi, Brennan, & Sage, 2007). Considerable gaps have been documented between self-predictions (e.g., about defensive avoidance behavior) and actual practice decisions (Rittenhouse, Mertz, Keane, & Grumbach, 2004).

Although surveys and commentaries of maternity professionals raise concerns about the impact of liability pressure on avoidance defensive behavior, investigations to corroborate those reports (Public Citizen, 2005; U.S. General Accounting Office, 2003) and surveys exploring competing explanations (e.g., Dresden, Baldwin, Andrilla, Skillman, & Benedetti, 2008; Smits, Clark, Nichols, & Saultz, 2004; Xu, Lori, Siefert, Jacobson, & Ransom, 2008) clarify that decisions about providing maternity services are multifactorial. The highest quality studies, at both national and state levels, did not find an association between various measures of liability pressure and avoidance behavior or found a relationship under limited circumstances, such as in decisions about where to establish an initial practice and about provision of maternity care in rural areas (e.g., Baicker & Chandra, 2005; Yang, Studdert, Subramanian, & Mello, 2008; Zhao, 2007). (The *Maternity Care and Liability* report [Sakala et al., 2013c] summarizes the full set of relevant studies.) This is consistent with medical studies overall on the impact of the liability environment on the supply of physician services (Mello, 2006a).

Surveys and commentaries describe extensive use of assurance behaviors in maternity care. Many national and state-level studies have examined the relationship between malpractice pressure and cesarean section (and, in some cases, vaginal birth after cesarean section). Malpractice pressure has generally been measured as premium level and/or claims experience. Study results within the last two decades find no relationship to a modest one, with a small positive relationship most common (e.g., Baicker, Buckles, & Chandra, 2006; Kim, 2007; Yang, Mello, Subramanian, & Studdert, 2009). (The *Maternity Care and Liability* report summarizes the full set of relevant studies.) The

multivariable maternity care studies present a different picture from medicine in general, where defensive assurance behaviors seem to be widespread (Mello, 2006a).

At most, the association accounts for a small portion of the substantial increase in the cesarean rate since the mid 1990s. Performing increased cesarean deliveries in the face of high premiums could reflect perceived financial pressure to generate increased revenues and/or liability risk aversion given support in the legal system for performing this procedure.

Just a few other maternity practices have been examined for a possible relationship with various measures of liability pressure. Although these studies lack the breadth of the corpus examining cesarean section, preliminary results are consistent with the cesarean studies (Kim, 2007; Sloan et al., 1997a; Thomas, Ziller, & Thayer, 2010).

Liability, career satisfaction of maternity caregivers, and maternity care quality

The adverse impact of the liability system on obstetrical caregivers is a persistent concern in their professional discourse (e.g., Hankins, MacLennan, Speer, Strunk, & Nelson, 2006; Lockwood, Auerbach, Scott, & Strunk, 2005; Lockwood, Strunk, Scott, & Auerbach, 2004). General concerns for health professionals include processes that often place exclusive blame on individuals, even though systems failure often plays a role (Mello & Studdert, 2008), and lack of support for the health professional as the “second victim” when medical errors occur (Wu, 2000). Fear of liability has been described as a “dread risk,” the tendency to overestimate rare and fearful events that may be out of control and have severe repercussions (Carrier, Reschovsky, Mello, Mayrell, & Katz, 2010). Obstetricians’ views of liability may be subject to “anchoring” and “priming” cognitive biases that intensify perception of vulnerability (Minkoff, 2012).

Studies comparing the career satisfaction of physicians by specialty suggest that obstetrician-gynecologists are more dissatisfied than nearly all others, including gynecologists, family physicians, and perinatologists/neonatologists (Kravitz, Leigh, Samuels, Schembri, & Gilbert, 2003; Leigh, Tancredi, & Kravitz, 2009). Reports have documented disruptive behavior (e.g., outbursts, insults, eye-rolling) among maternity caregivers (Chervenak & McCullough, 2005; Simpson, 2007; Veltman, 2007) and among health professionals generally (Leape & Fromson, 2006). Relationships among liability concerns, dissatisfaction, and unprofessional behavior, if any, are unknown.

Liability and maternal and newborn health outcomes

A successful liability system would deter harm to mothers and newborns. Existing data generally show no relationship between liability pressure and health outcomes, but they are sparse and inadequate for clarifying the impact of the liability environment on maternal and newborn health (Dubay, Kaestner, & Waidmann, 2001; Yang, Studdert, Subramanian, & Mello, 2012).

An appendix to the full *Maternity Care and Liability* report identifies many important questions about the impact of liability matters in maternity care that cannot be answered at present and warrant research. These include current rates of negligent injury in mothers and newborns; the extent to which such negligent injury is compensated; many basic liability questions about effects on family physicians, midwives, and birth centers; the impact of liability matters on disparity populations and safety net providers; and the gaps as noted (Sakala et al., 2013c).

Policy Interventions for Achieving the Aims of the Liability System

Policy framework for liability system improvement

Persistent gaps between the aims of the liability system and its achievements in maternity care lead us to propose seven aims as criteria for designing and instituting liability policy interventions and addressing needs of diverse stakeholders (Table 1).

Policy interventions that have been implemented or proposed fall into four broad categories: Conventional malpractice tort reforms, tort alternative reforms, liability insurance reforms, and health care system reforms. Relatively few specific reforms have been well tested in maternity care. The new report and companion articles in this issue rate reforms by their demonstrated or plausible contribution to the seven proposed aims, in consideration of maternity care and overall health care (Mello & Kachalia, 2010) evidence. Those with the potential to impact multiple, diverse aims are priority candidates for demonstration and evaluation. Many reforms that have received great emphasis in the context of maternity care in the past have focused narrowly on the aim of keeping professional liability premiums low (Hyman & Silver, 2005; Mello & Zeiler, 2008), and most have not been shown to be clearly effective in this regard. A high-functioning liability system must also address such concerns as reliably providing safe, high-quality care and helping those who are harmed.

Interventions likely to offer limited or no benefit

Evidence to date suggests that reform of tort law relating to medical negligent injury is unlikely to have any impact on most liability system aims listed. When measured in the maternity context, such reforms have had limited impact at best.

Two national, multivariable studies of the combined impact of multiple tort reforms in jurisdictions focused on the outcome of obstetrician-gynecologist supply and found no impact or one that is modest relative to other clinical areas (Kessler, Sage, & Becker, 2005; Yang et al., 2008).

National, multivariable studies have measured the maternity-related impact of caps on non-economic damages on such measures as award sizes, physician supply, access to hospital maternity services, maternity care interventions, and health outcomes liability premiums. Although such caps have proven to be the tort reform with the greatest calming effect in medicine generally (Mello, 2006a) and have probably been the reform most advocated by maternity care providers, the best available research indicates that the impact of caps on non-economic damages in the maternity context has been weak to nonexistent (e.g., Currie & McLeod, 2008; Encinosa & Hellinger, 2005;

Table 1

Policy Framework for Liability System Improvement in the Context of Maternity Care: Aims of a High-Functioning Liability System in Maternity Care

Promote safe, high-quality maternity care that is consistent with best evidence and minimizes avoidable harm.
Minimize maternity professionals' liability-associated fear and unhappiness. Avoid incentives for assurance and avoidance defensive maternity practice.
Foster access to high-value liability insurance policies for all maternity care providers without restriction or surcharge for care supported by best evidence.
Implement effective measures to address immediate concerns when women and newborns sustain injury; and provide rapid, fair, efficient compensation.
Assist families with responsibility for costly care of infants or women with long-term disabilities in a timely manner and with minimal legal expense.
Minimize the costs associated with the liability system.

Yang et al., 2008, 2009, 2012). (The *Maternity Care and Liability* report summarizes the full set of relevant studies [Sakala et al., 2013c].) Empirical support is lacking for further use of this strategy to improve maternity care.

A more limited evidence base of national multivariable studies has evaluated impact in the maternity arena of several other tort reforms: Collateral source rule (Currie & McLeod, 2008; Klick & Stratmann, 2007; Yang et al., 2008, 2009, 2012; Zhao, 2007), attorney fee limits (Klick & Stratmann, 2007; Yang et al., 2012), periodic payment of awards (Yang et al., 2008, 2009, 2012; Zhao, 2007), expert witness rule (Yang et al., 2008, 2009, 2012), joint and several liability rule (Currie & McLeod, 2008; Klick & Stratmann, 2007; Yang et al., 2008, 2009, 2012), and pretrial screening (White, Pettiette, Wiggins, & Kiss, 2008; Yang et al., 2008, 2009, 2012). This research provides no compelling support for these strategies.

Similarly, liability insurance reforms such as rating and investment regulation and patient compensation funds may be expected to have a limited impact on the range of aims that warrant attention. One state-level program for malpractice premium subsidy to maternity care providers was not effective in increasing the supply of providers (Smits, King, Rdesinski, Dodson, & Saultz, 2009). Joint underwriting associations may provide liability coverage and foster access to crucial forms of care with small insurance pools; evaluation of current joint underwriting associations would help to clarify the potential contribution of this model. Arbitration and mediation do not seem to have been studied in the maternity care context; limited evidence for these strategies more generally found disappointing results. Mediation may have a role in combination with more promising strategies, such as disclosure. (For more details, please see the companion article in this issue on interventions that are unlikely to be fruitful ways to strengthen the maternity care liability system [Sakala, Yang, & Corry, 2013a], as well as the full *Maternity Care and Liability* report [Sakala et al., 2013c].)

Substantive interventions with potential to improve multiple aims

Effective policy interventions are needed both to prevent adverse events and to assist those who experience them. Interventions for averting harm that have demonstrated or plausible impact on multiple liability system aims, in order of ratings against the seven named criteria, are: Quality improvement programs; enterprise liability; leverage of insurance, accreditation, credentialing, and other health care system mechanisms; shared decision making; alignment of legal standards with best evidence versus current alignment of the legal standard of care with behavior of peers and current alignment of standards for admission of evidence with existing standards in the field under scrutiny; and liability insurance coverage regulation.

A series of recent reports suggests that rigorous maternity care quality improvement programs can sharply reduce liability claims, payouts, and premiums (Clark, Meyers, Frye, & Perlin, 2011; Grunebaum, Chervenak, & Skupski, 2011; Iverson & Heffner, 2011; McCarthy, 2007; Simpson, Kortz, & Knox, 2009; Smith & Berry, 2007). By addressing the 75% of paid claims that are consistently found to be related to substandard care (Clark, 2009), this strategy provides both a crucial prevention solution to liability concerns and a business case for rigorous quality improvement (Hyman & Silver, 2005).

Interventions that might assist those who experience adverse events and have demonstrated or plausible impact on multiple liability system aims, in order of ratings, are disclosure/empathy/apology programs, health courts, administrative compensation

systems, and liability insurance coverage regulation. Administrative compensation programs have a demonstrated favorable impact in maternity care (Sloan, Whetten-Goldstein, Entman, Kulas, & Stout, 1997b; Studdert, Fritz, & Brennan, 2000). All of these strategies are good candidates for demonstration and evaluation at state, hospital, health system, or other appropriate levels. (For more details about promising programs to prevent or assist with maternal and newborn injury, please see the companion article in this issue on recommended interventions for strengthening the maternity care liability system, as well as the full *Maternity Care and Liability* report.)

Discussion

This investigation has found that more reliable research does not corroborate many widely held beliefs about maternity care and liability.

- We did not find evidence of the severe adverse impact that this system is believed to have on premium affordability.
- We did not find evidence of extensive avoidance defensive practice or, with respect to mode of birth, extensive assurance defensive practice.
- Despite widespread concern about the vulnerability of maternity professionals to legal action and non-meritorious suits, in the practice of an average obstetrician-gynecologist, negligent injury of mothers and newborns seems to occur more frequently than any claim (warranted or not, obstetric or gynecologic), and far more frequently than any payout or trial.
- Although liability attention is particularly focused on newborn harm and newborn harm may be more severe, mothers may be several times more likely than newborns to experience negligent injury.
- Although maternity-specific data are not available, just about 2% of the overall population that experiences negligent injury seems to make a claim, about half of those receive any compensation for damages, and most payouts seem to go to legal expenses rather than plaintiffs.
- Despite professional support for caps on non-economic damages, empirical maternity care studies find that they have at best minimal impact of limited scope.

Other notable maternity-specific concerns include the following.

- Some liability insurance policies restrict access to essential maternity services through exclusions (e.g., vaginal birth after cesarean) or surcharges (e.g., for physician collaborative practice with midwives or family physician maternity care), but the extent and implications have not been measured at the national level.
- An abundance of rigorous systematic reviews are available to guide maternity practice, but the legal standards for health professional practice and for admission of evidence frequently do not align with best clinical evidence.
- The legal system seems to compensate some seriously injured newborns facing long-term, high-cost care when the negligence standard is not met.
- Liability matters are distressing to many maternity clinicians, who experience the fluctuation of liability insurance premiums as capricious, may be singled out as individuals when systems have failed, and are poorly supported in the face of adverse events.

Few studies specifically characterize the impact of the liability system on maternal–fetal medicine subspecialists, family physicians, midwives, and birth centers. This uncertainty includes a lack of comparative data on the affordability of liability insurance, on claims and lawsuit experiences, and on rates of avoidable adverse events and negligent injury. These groups seem to experience less liability-associated discontent and greater professional satisfaction than general obstetricians. There are concerns, but no strong data about access to affordable insurance products for groups with smaller risk pools that may be greatly impacted by one or a few claims.

Various remedies for deficiencies in the current liability system have been proposed, and many have been implemented, with some evidence from application in the maternity context. A number of strategies, both to avoid adverse events and to assist those who experience them, have the potential to address multiple aims and improve persistent problems. It would be optimal for states, health systems, and other entities to pilot and evaluate these potentially substantive strategies.

Acknowledgments

The authors are grateful to the Milbank Memorial Fund for financial support to prepare the full report from which this paper is derived and to the many individuals named in that report and the referees of this paper who provided feedback that helped us to strengthen the analysis and reporting.

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