

Physicians' Experience With Allegations of Medical Malpractice in the Neonatal Intensive Care Unit

William Meadow, MD, PhD*‡; Anthony Bell, MD*; and John Lantos, MD*‡§

ABSTRACT. *Objective.* To assess the personal experience of all practitioners of neonatal intensive care unit (NICU) medicine in the United States with the medical malpractice system; in particular, to assess the circumstances of malpractice allegations in which they themselves had personal experience, and to extrapolate from their individual experiences to the field of neonatology in general.

Design. Written survey of all MDs practicing NICU medicine in the US.

Participants. Two thousand four hundred ninety-eight NICU physicians as determined from three sources: a) the American Board of Medical Specialists; b) the American Academy of Pediatrics Section of Neonatal/Perinatal Medicine; and c) a listing of neonatologists provided by Ross Laboratories.

Main Outcome Measures. Responses to survey questions.

Results. We received 1813 responses, representing ~75% of all physicians practicing NICU medicine in the US. Overall, 43% of respondents had experienced at least one claim of malpractice against them. The probability of a malpractice allegation increased with years in practice, from ~20% for NICU physicians in practice < 5 years (65/337), to ~60% for NICU physicians in practice > 15 years (276/469). Men and women were equally likely to have been sued, accounting for years in practice. Physicians practicing in community NICUs were more likely to be sued than those in university settings. On a scale of 1 to 4 (4 being most reasonable) the median assessment of the reasonableness of malpractice allegations was 1, mean 1.2. On a scale of 1 to 4 (4 being the highest) the median assessment of effectiveness of the current system in identifying true malpractice was 1, mean 1.4. The respondents believed that approximately 80% of malpractice allegations were inappropriate; conversely, they believed that approximately 80% of true medical malpractice escaped detection. On a scale of 1 to 4 (4 being the highest), the median assessment of the detrimental effect of the present malpractice system on health care was 4, mean 3.4.

Conclusions. Most NICU physicians will be sued if they practice long enough. In this context, efforts to use malpractice claims to seek out evildoers (such as underlie

the National Practitioners Data Bank) appear ill-conceived. Similarly, exhortations for physicians to become either more educated or more sensitive are unlikely to reduce malpractice claims. Our data suggest that malpractice in the NICU appears to function more like a lottery than like a mechanism for either quality assurance or just retribution. *Pediatrics* 1997;99(5). URL: <http://www.pediatrics.org/cgi/content/full/99/5/e10>; *medical malpractice, NICU, standard of care, neonatologists.*

ABBREVIATIONS. NICU, neonatal intensive care unit; US, United States.

In a broad theoretical framework, three paradigms for medical malpractice allegations can be envisioned. In the first, the so-called evildoer hypothesis, most malpractice allegations result from the actions of a small coterie of rogue physicians who are immoral, unprofessional, and deserve to be punished. In the second, the evil-deed hypothesis, true medical malpractice is relatively rare, occurs virtually at random, and is widely distributed across most physicians' practices. In the third view, malpractice allegations are essentially unrelated to improper medical activities, and reflect instead an imperfect compensation scheme for bad outcomes, whether those outcomes result from negligence or not.

In the past, attempts to distinguish among these conceptual models have taken the form of extensive chart reviews to determine whether negligent actions lead to malpractice, or, conversely, whether malpractice claims or settlements are more likely to occur in cases where impartial review determines that there was actual negligence.¹⁻³ In this article, we describe a different approach. We asked practitioners of neonatal intensive care unit (NICU) medicine to assess the circumstances of malpractice allegations in which they themselves had personal experience, and to extrapolate from their own experiences to the field of neonatology in general. We then attempted to utilize these assessments to classify malpractice allegations in the NICU according to the schema outlined above.

METHODS

Sample Population

We attempted to sample the experience of all attending physicians (as opposed to residents or fellows) caring for infants in NICUs in the US in 1993. We were unable to find a single list of names that would serve this admittedly ambitious purpose. Instead, we compiled lists of NICU physicians from three sources: a) the American Board of Medical Specialists listing of Neonatologists for 1992; b) the American Academy of Pediatrics Section of Neonatal/Perinatal Medicine; and c) a listing of neonatologists

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The complete database of responses to this survey is available on MS Excel software from William Meadow, MD, PhD, Department of Pediatrics (MC6060), University of Chicago, 5825 S Maryland Ave, Chicago, IL 60637; e-mail: wlm1@midway.uchicago.edu.

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graciously provided by Ross Laboratories. After eliminating duplications, these sources yielded a total of 2498 physicians who provide care in the NICU in the US, and from whom we desired responses.

Survey Questionnaire

We sent each of the 2498 physicians a survey questionnaire that attempted to garner information regarding three aspects of their experience with the medical malpractice system: a) demographics (gender, age, years in neonatal practice, location of NICU); b) personal experience (number of allegations of malpractice, disposition of each claim, frequency of physician's testimony at trial, distribution of testimony for defense versus plaintiff, reimbursement); and c) reflections (justness of malpractice allegations overall, effectiveness of the current systemic in bringing to light episodes of true malpractice, likely reasons why claims are filed, overall effect of current malpractice system on provision of medical care).

Each physician on the survey list was mailed one copy of the questionnaire with a cover letter describing our objectives in performing the study, and an offer to share the results and raw data when compiled. Three successive mailings were required to achieve our predetermined desired response rate of >70% of our survey population.

RESULTS

Demographics

We received 1813 responses to our survey, representing, as best we can determine, approximately 75% of all attending physicians practicing NICU medicine in the US in 1993. Although not every respondent answered every question, each individual question had >1500 (out of a possible 1813) responses.

Sixty-nine percent of our survey population was male. Sixty percent practiced in a self-described community as opposed to a university setting. The median number of years in practice was 11, with a mean of 11.7 years and a standard deviation of 6.6 years. Men had been in practice slightly longer than women (median 12 vs 10 years; mean 12.6 vs 10.9 years).

Experience With the Medical Malpractice System

Overall, 43% of respondents had experienced at least one claim of malpractice against them. The probability of a malpractice allegation increased with

years in practice, from approximately 20% for NICU physicians in practice ≤ 5 years (65/337), to approximately 60% for NICU physicians in practice >15 years (276/469). Fifty-four percent of the 915 physicians who had practiced for >10 years had been sued at least once.

The interaction of gender and years in practice with the number of malpractice allegations is presented in Fig 1. Overall, men and women were equally likely to have been sued, accounting for years in practice.

We next attempted to determine the likelihood of being sued a second time, given that a physician had been named at least once in a malpractice allegation. The interaction of number of allegations versus years in practice, for the subpopulation of physicians who had been sued at least once is presented in Fig 2. Of NICU physicians who had been sued, the percentage sued more than once rose from approximately 20% for NICU physicians in practice ≤ 5 years (14/63), to approximately 60% for the NICU physicians in practice >10 years (290/489).

Physicians practicing in self-described community settings were slightly more likely to have been sued than their self-described university counterparts. Figure 3 depicts the interaction of NICU locale and years in practice on the likelihood of being named in a malpractice allegation.

Reflections on the Existing Malpractice System

NICU physicians believe that the large majority of cases brought are inappropriate. When asked 'what percentage of alleged malpractice cases represent true malpractice?', the median response was 20%, mean 21%. There was no significant difference in this estimate when respondents were divided into physicians who had been sued and those who had not ($20.3 \pm 15.1\%$ [SD] vs $21.6 \pm 16.2\%$). When the same question was asked in another way, on a scale of 1 to 4 (4 being most reasonable) the median assessment of the reasonableness of malpractice allegations was 1,

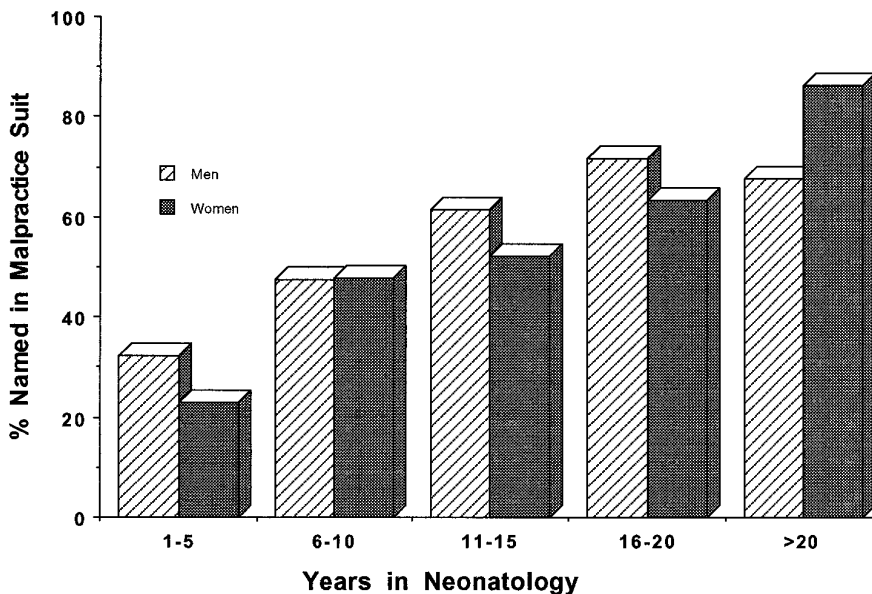


Fig 1. Probability of malpractice action versus years in neonatology comparing men and women MDs.

Fig 2. Probability of a second malpractice action versus years in neonatology for physicians already named in one malpractice action.

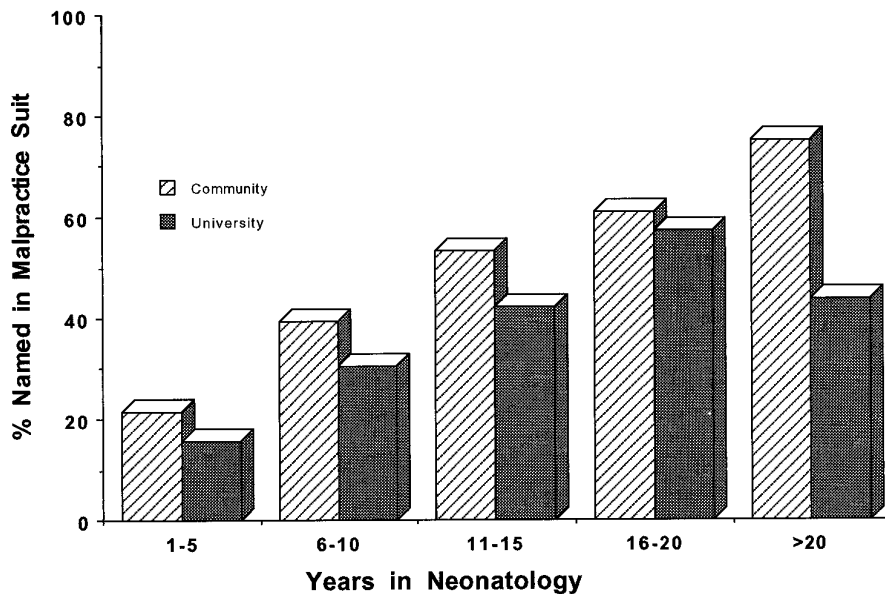
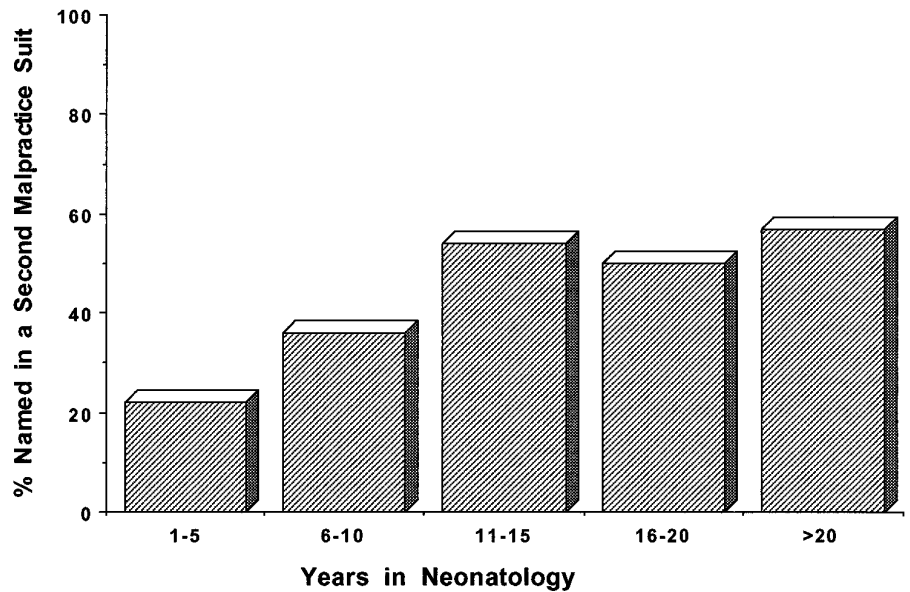


Fig 3. Probability of malpractice action versus years in neonatology comparing community and university bases.

mean 1.2. The distribution of these responses is presented in Fig 4.

Conversely, respondents believed that only a small minority of true malpractice enters the legal system: median, 20%; mean 26%. When the same question was asked in another way, 'on a scale of 1 to 4 (4 highest) how effective is the current system in identifying true malpractice?' the median response was 1, mean 1.4. The distribution of responses to this assessment of effectiveness is presented in Fig 5. There was no significant difference in this distribution when respondents were divided into those who had been sued and those who had not.

Figure 6 displays physicians' assessments (on a scale of 1 to 4; 4 being the highest) of the detrimental effect on overall health care of the current malpractice system; the median assessment was 4.0, mean 3.4. Again, this dissatisfaction did not appear to be influenced by whether or not a physician had been sued.

When surveyed about potential remedies to the current malpractice system, 72% of NICU physicians preferred a no-fault system of malpractice resolution. Ninety-six percent of respondents preferred a peer review process to identify legitimate malpractice cases. In addition, dissatisfaction with the current system of expert testimony was expressed. Only a minority of expert witnesses were considered truly expert (median 50%, mean 41%), and almost as many were labeled unethical (median 30%, mean 35%).

When asked their views about likely causes of true malpractice, NICU physicians were able to identify a clear hierarchy from, in their view, most to least likely: 1) negligence; 2) conflict of information; 3) difference in standard of care by locality; 4) poor standard of care for the entire field; 5) experimentation; and 6) physician malice. In contrast, when asked about likely causes of patient lawsuits, physi-

Fig 4. How reasonable are medical malpractice actions?

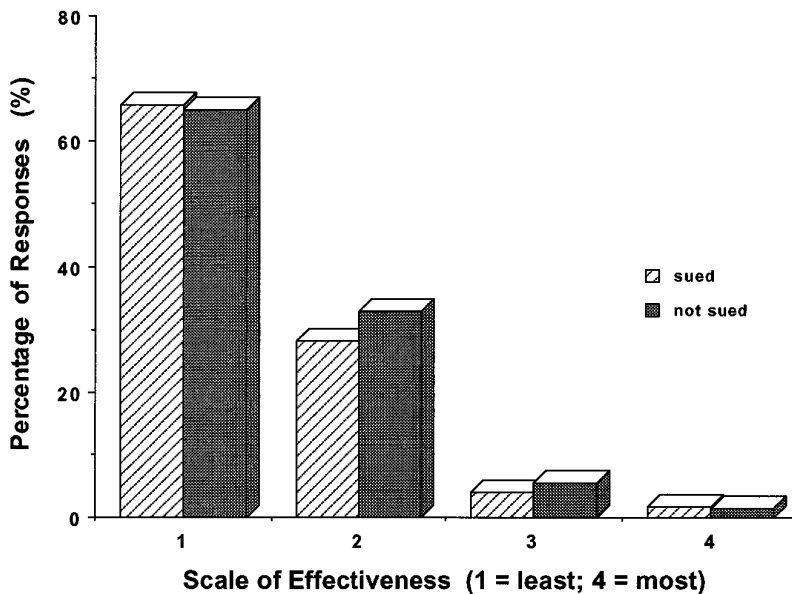
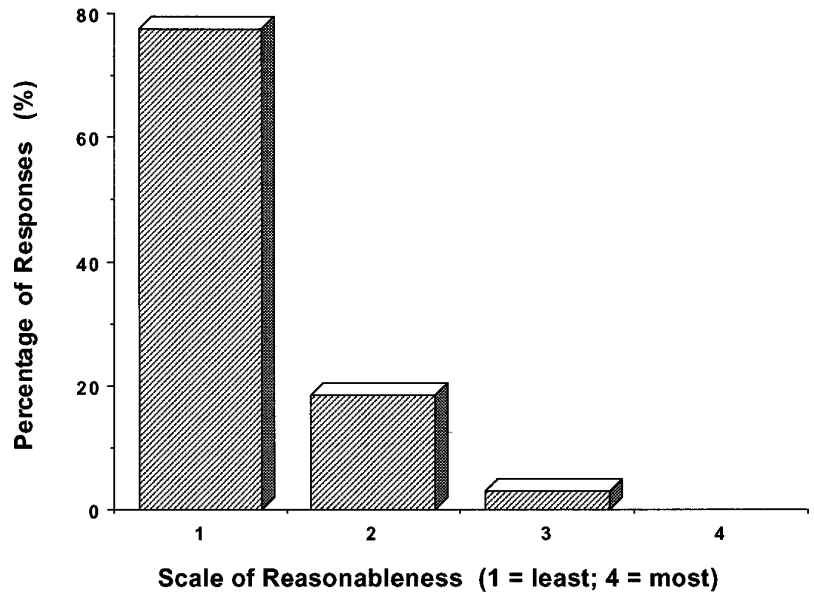


Fig 5. How effective is the current system for identifying true malpractice?

cians identified a different hierarchy: 1) poor outcome; and 2) conflict of information, followed by no clear-cut order among the rest of the options presented.

CONCLUSIONS

We have attempted to collate the experience of all attending physicians who care for critically ill neonates in NICU settings with the medical malpractice system. Although we have obviously not captured the opinions of the entire target population, we believe we have gathered the opinions of approximately 3 out of 4 attending physicians who were practicing NICU medicine in the US in 1993. We now attempt to apply these data to various theories of the relationship between malpractice allegations and true medical malpractice.

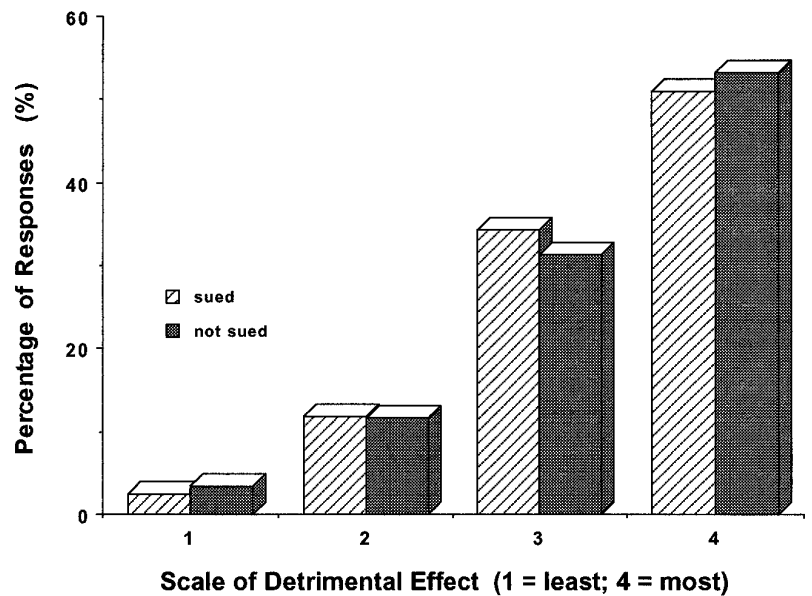
Our first observation is that the evildoer hypothesis does not appear consistent with the data. The relationship between likelihood of malpractice suits

and duration of practice is essentially linear. Over half of all NICU physicians will be sued if they practice 10 years or more. Whatever malpractice allegations are doing in the NICU, they are not identifying a small coterie of bad apples. If the metaphor were appropriate, most NICU physicians would appear to be rotting slowly, and more than half the barrel would spoil each decade.

Although the overall incidence of medical malpractice claims has risen dramatically over the past 30 years,⁴⁻⁷ the distribution of these allegations appears to vary greatly by medical specialty. In 1990, the overall rate of malpractice allegations was estimated at 7 in every 100 physicians.⁸ This figure is roughly six times lower than the incidence reported by NICU caregivers in our current survey.

Previous studies of physicians practicing internal medicine, surgery, anesthesiology, and obstetrics have been unable to associate a greater likelihood of malpractice claims with poorer quality medicine

Fig 6. How detrimental is the current malpractice system to health care?



practiced by individual physicians.^{2,3,7,9} As we had no independent measure of the quality of neonatal care offered, we were unable to test the validity of this hypothesis in our NICU population.

However, several other reports have suggested that the likelihood of malpractice allegations can be correlated with physician practice styles. On this view, bad interpersonal skills, not bad technical care per se, are the cause of more frequent lawsuits.¹⁰⁻¹² Conversely, physicians with better interpersonal skills have been shown less likely to be sued, even in the context of objectively worse medical outcomes.⁵ In this regard, Sloan et al¹³ noted a gender-associated difference in the rate of malpractice allegations for practitioners of obstetrics/gynecology, internal medicine, and surgery—women were sued significantly less often than men, all other things being equal. These authors hypothesized that, on the whole, women may have a patient-physician practice style less likely to generate conflict than do men. In contrast to adult subspecialties, a gender-related difference in malpractice allegations was not observed in the NICU. In our sample population, female gender did not reduce the risk of being sued once years in practice was taken into account. We can only speculate about the reasons for this apparently discrepant observation. It may well be that bad baby cases are qualitatively different from other types of medical malpractice allegations, a phenomenon that swamps the otherwise consistent effect of gender in this area. In any event, to the extent that gender serves as a proxy for practice style, kinder/gentler practice did not alter the incidence of malpractice allegations in the NICU.

Community locale, as opposed to a university setting, has at times been associated with a more personalized style of medical practice; ie, closer physician-patient ties, more first-hand knowledge of a patient's medical history, lifestyle, and family values. However, this did not translate into a smaller number of lawsuits in our survey. If anything, the community NICU physicians were more likely to have

been sued, especially considering the smaller patient load usually associated with community NICUs. We believe that the traditional centripetal formulation of perinatal regionalization may underlie this phenomenon; that is, the failure to transfer a patient to a tertiary center is much more commonly alleged than its converse.

In our view, one of the more remarkable aspects of our survey data is the concordance of opinions of our respondents with previously published data supporting the twin notions that malpractice allegations are both inappropriately filed (Fig 4), and inappropriately *not* filed (Fig 5). These intuitions echo the observations of the now-classic reports derived from the Harvard Medical Practice Study to the state of New York.^{1,6,14,15} In that impartial, blinded review of >31 000 medical records in New York State during the mid-1980s, both the accuracy (identifying true malpractice) and appropriateness (not making a false claim) of the extant malpractice system were estimated at approximately 1 in 5 either way—very closely approximating the median estimates of our NICU physicians to each of these questions (20% and 21%, respectively). In other words, our respondents (those who have not been sued as well as those who have) and the impartial reviewers of the Harvard Study believed that roughly 4 out of 5 claims of medical malpractice were unfounded, *and* that 4 out of 5 actual instances of malpractice were unclaimed.

In sum, we present what we believe to be the first survey of experience with the medical malpractice system for the large majority of physicians caring for NICU patients in the US. We were not surprised to find that NICU physicians are greatly dissatisfied with the medical malpractice system, believing that, on balance, it punishes those who do not deserve to be punished and fails to identify those who do. However, our data carry several implications for suggested reforms of the current malpractice crisis beyond mere documentation of physician dissatisfaction.

First, efforts to use malpractice claims to seek out evildoers are not likely to work. Such efforts will

generate far more false positives and false negatives than useful information. Most NICU physicians will be sued if they practice long enough, and the longer they practice the more often they will be sued. In this context, suggested reforms along the lines of the National Practitioners Data Bank appear ill-conceived and are likely to prove counterproductive.

Second, variations in either medical expertise or interpersonal skills do not appear to account for the majority of malpractice claims. Extrapolating from these data, exhortations for physicians to become either more educated or more sensitive may improve overall medical care, but they are unlikely to reduce medical malpractice claims substantially.

Finally, physicians perceive the process of adjudication of malpractice allegations to be corrupt. Expert witnesses are felt to be essentially unaccountable, either to good scientific information or to their peers.

Our data suggest that malpractice today appears to function more like a lottery than like a mechanism for either quality assurance or just retribution. Patients and their families are likely to win at random, but those who win can win big. The costs of this lottery are enormous—doctors are increasingly demoralized, patients are increasingly suspicious, and the lottery payouts are, inevitably, passed on to consumers or taxpayers. One obvious limitation of a study such as ours is that it relies, at least in part, on physicians' perceptions. Such perceptions, in isolation, might be deemed suspect and unreliable. It is striking, however, to note how closely our respondents' perceptions match the hard data available from authoritative chart review studies.⁶ It would be even more interesting to see whether the perceptions of others involved in the malpractice system, such as judges or patients, are similarly skeptical. If so, we might begin to ask who, if anybody, really benefits from such a system.

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