



issue brief

Medical Malpractice: Strengthening the Evidence Base

For decades, the myriad issues associated with medical malpractice have been hotly debated by advocates, researchers, and policymakers alike. Historically, legislative efforts have focused primarily on tort reform and insurance regulation. More recent proposals have begun to explore alternative policy approaches such as apology-compensation programs, health courts, and patient safety initiatives.

Despite continued attention, most policy proposals are based on research findings facing the same drawbacks—data limitations and disparate methodologies. Missing and inaccurate data and poorly designed studies lead to inconsistent findings, which have made the malpractice debate vulnerable to exaggerated and invalid claims and ideological rhetoric.

The other significant barrier to successful malpractice reform is the failure of researchers and policymakers to be clear about which malpractice problem they are trying to address, since different problems can require very different solutions. Malpractice problems most often identified include high malpractice insurance rates, reduced physician supply, defensive medicine, increased overall health care costs, invalid lawsuits, lack of compensation for injured patients, and patient safety.

Confusion about malpractice problems creates an environment where research findings can be misinterpreted to support policy solutions

not investigated by the researchers. These disagreements are enhanced because there is limited consensus in the research on the underlying factors driving the various malpractice problems. The contentious nature of the malpractice debate has resulted in vague policy goals, misinterpretations of findings, and the selective use of research with questionable conclusions.

In order to provide policymakers with credible evidence required to develop policy reforms that can address clearly identified malpractice problems, researchers need better data and more rigorous methodologies. The Robert Wood Johnson Foundation, under its Changes in Health Care Financing and Organization (HCFO) initiative, conducted a small invitational meeting to provide an opportunity for researchers and other stakeholders to take a closer look at malpractice studies and to discuss why findings diverge, where there may be common ground, and how to overcome current research limitations.

In an off-the-record, facilitated discussion, participants reviewed the state of the evidence and explored whether and how research results support or call into question a variety of proposed policy solutions. The session was a positive step toward understanding the strengths and weaknesses of the underlying evidence in order to help policymakers as they develop workable malpractice reforms.



AcademyHealth

Advancing Research, Policy and Practice

AcademyHealth is the national program office for HCFO, an initiative of the Robert Wood Johnson Foundation.

Background on the Medical Malpractice Process

The vast majority of patients injured by medical care do not seek compensation. Research estimates that approximately 2 percent of patients injured by medical malpractice pursue legal recourse.^{1,2} Medical malpractice litigation is primarily governed by state law. While legal procedures vary from state to state, the overall process for adjudicating a malpractice claim is consistent across the country. When an injury occurs and the patient or family decides to pursue legal action, their lawyer files a claim with the court against the provider who in turn notifies the malpractice insurance carrier.

The discovery phase, which can last several years, follows with an exchange of information between the plaintiff and defendant, including expert opinions. There are several opportunities for a claim to be resolved prior to trial. Resolution can occur through mediation or arbitration, dismissal or summary judgment by the court, or early settlement between the plaintiff and defendant. If the claim moves to trial it will be decided by either a judge or, more commonly, a jury.

A trial can motivate the parties to reach a settlement, or may result in a verdict for the defendant or for the plaintiff, with the latter accompanied by an award of economic and/or non-economic damages. A jury award may be amended by the court in some cases, especially if it is very large. It may also be overturned if the defendant wins an appeal in a higher court.

A malpractice claim takes an average of four to five years to resolve, with the most difficult cases taking significantly longer.³ Approximately 50 percent of all claims are paid.⁴ In addition to any potential award, a significant amount of additional costs are incurred in the form of litigation expenses. High administrative costs for carriers generally mean that only 40 cents of every dollar paid in malpractice insurance premiums goes to the patient.⁵ Long resolution time, variation in awards, unpredictable returns on investment, and the insurance cycle are some of the factors that make it extremely difficult to predict and stabilize premium rates.

Research on Medical Malpractice is Challenging

The challenges associated with medical malpractice research make it vulnerable to unreliable, exaggerated, or misleading conclusions that are often used to support a

specific side of the debate. Experts agree that conducting malpractice research is exceedingly difficult due to limitations in the available data and an existing library of studies that lack methodological rigor.

One major problem with many studies is that they tend to compare states with different legal environments without controlling for other ways in which states may differ. Additionally, missing information from specific groups of physicians, settings, and/or regions can lead to invalid or overgeneralized findings. Recognizing and addressing the weaknesses in data and methodologies most commonly used in malpractice research will improve efforts to generate new and more sophisticated studies and provide more reliable support for policy reforms.

Limitations in Data Accuracy and Availability

In general, much of the most pertinent information needed to examine the severity, frequency, and causes of malpractice losses at state-specific levels is not collected. Examples of helpful data not currently available include the insured amounts covered by premiums and breakdowns of paid losses due to settlement and trial verdicts and economic and noneconomic damages. Available data include closed-claims, insurance company information, jury awards, physician surveys, and patient medical records.

Existing databases often suffer from shortcomings in completeness and accuracy. For example, researchers have reported that most closed-claims databases have significant limitations. The Government Accountability Office found that the National Practitioner Data Bank (NPDB), purportedly one of the better sources for malpractice data due to federal mandates that require reporting of adverse actions and malpractice payments, suffers from underreporting of claims, exclusion of institutional providers, and omission of legal and administrative costs associated with claims.⁶ Some states also collect closed-claim data, but variations in reporting requirements, definitions, and quality standards frustrate aggregation of data across states and complicate interstate comparisons. Other closed-claim data sources that are not publicly available include the Physician Insurers Association of America (PIAA) Data Sharing Project and the National Association of Insurance Commissioners (NAIC) Special Survey.

Information on jury awards is also problematic and limited. Jury verdict reporters, a primary source for verdict information, can contain significant inaccuracies, and may be more likely to include large verdict awards than small verdict awards.⁷ Other sources such as the RAND Institute for Civil Justice Jury Verdict Database and the Civil Justice Survey of State Courts collect information on court verdicts, but they do not track cases in every county, making it difficult to develop generalizable conclusions. Some researchers question the usefulness of jury verdict data because very few cases make it to verdict and often the initial amount awarded is not final.

The richest data on malpractice claims and the injuries that led to them are collected by insurance companies for business purposes. Unfortunately, they are rarely accessible to researchers. States require insurers to publicly report a limited amount of claims information, but data from a growing market of self-insured and physician owned-and-operated mutual companies may not be captured because these organizations are not held to the same reporting requirements as commercial malpractice insurers. For example, a data source like the NAIC databank, which primarily collects information for financial purposes, excludes information from self-insured groups.

Limitations in Methodologies and Standardizations

Further complicating sound research is the lack of standardization of databases and variations in study methodologies making it difficult to compare one study to another. Comparing data across states and between data sources is difficult since there is no standardized definition for events like injuries, claims, and settlements. Researchers also face difficulties analyzing the impact of changing laws and regulations. For example, establishing the effect of a tort reform is complicated since the date a law is put into place often does not create an immediate reaction. Rather, insurance adjusters and physicians may respond to a new reform only after a test case is resolved by the highest court. Changes in common law, which is not written into statute, can make significant differences on malpractice cases and are seldom assessed since they are difficult to track.

Different methodological approaches also can result in disparate findings. For example, different approaches are often taken to measure the effect of malpractice on defensive medicine. One study that surveys doctors to determine

their motivation for performing certain procedures will likely differ from another study that reviews patient medical records to determine if services rendered were medically necessary. Due to the limitations of any single study, it is essential to consider multiple studies with different approaches to ensure a comprehensive body of reliable evidence.

Consensus on Findings

One strategy to differentiate reliable studies has been to critically evaluate and summarize the current body of research on medical malpractice.^{8,9} The Synthesis Project at the Robert Wood Johnson Foundation (RWJF) recently focused on medical malpractice. Researcher, Michelle Mello, J.D., Ph.D. of Harvard University assessed an array of peer-reviewed studies as part of RWJF's synthesis. She examined research on the causes of the malpractice crises, its effect on health care delivery and costs, and the impact of state tort reforms. The synthesis clarifies which topics lack enough support to draw valid conclusions and corrects some widely held assumptions. Mello found that:

- ◆ There are no reliable estimates of the national costs of defensive medicine.
- ◆ Rising claims costs are driven by an increase in average payouts. The number of filed claims has stayed stable.
- ◆ The strongest studies suggest that the malpractice crisis has little or no effect on physician supply. No solid evidence has found that access to high-risk services has declined.
- ◆ There is very limited evidence that the medical liability system deters negligent care. Instead, the current system has perverse effects on patient safety initiatives.

Mello examined studies that analyzed a host of tort reforms and insurance regulations introduced to address less affordable and less available malpractice insurance. Many of these reforms are intended to address very different underlying causes for the increased costs associated with malpractice. Parties in the debate argue that premium growth is due to either an increased number of claims and higher awards *OR* insurance cycles that fluctuate based on investment returns and pricing decisions. Evidence gathered by Mello suggests that both arguments have merit.

Premiums are sensitive to returns on financial investments *AND* reward size.

Mello's review found that caps on non-economic damages reduce award size but do not affect claims frequency. Caps induce a modest decrease in premium growth and slight increase in physician supply but disproportionately burden the most severely injured patients. Though caps on awards can take some pressure off physicians by reducing premium growth, it is uncertain whether savings generated from tort reforms have any effect on total health care costs. Other state tort reforms, including attorney contingency-fee reforms, collateral-source rule reforms, and pre-trial screening panels, had no significant impact.

Alternative Approaches to Reform

A host of alternative reform approaches are being explored by researchers who are redefining the malpractice problem. Several of these reforms include administrative courts or health courts, full disclosure programs, and patient safety initiatives. Health courts would use judges with health care expertise and expert witnesses to adjudicate malpractice claims.¹⁰ A schedule of damages would be established to guide reward allocation. Full disclosure and "early offer" programs support doctors who apologize for medical errors and offer compensation to families.^{11,12} Full disclosure programs have been implemented in several hospital systems including those in Illinois, Michigan, and Minnesota. Many patient safety initiatives have begun to focus on fixing organizational systems and facilitating physician action.^{13,14} One example of a successful patient safety initiative is the collective physician efforts of anesthesiologists in the mid-1980s to successfully reduce medical injuries and deaths.¹⁵

Role of Researchers

How researchers can most effectively address the "noise" that surrounds the medical malpractice debate remains an important question. A critical starting point is better access to pertinent, accurate, and complete data. While there will never be a perfect dataset, improvements are possible. Researchers can highlight limitations of existing data and, when possible, advocate that more states collect essential claims level data and make it publicly available. It is also necessary to ensure accurate data through audits, a very labor intensive activity.

Strategies researchers can take to improve the quality of information in the public domain include promoting generally accepted research principles and holding others accountable for following these principles. One way policymakers who use this information can be better informed about the quality of the research is if a score for quantitative policy research were formulated based on research principles and other key attributes.

Some are worried that no matter how good the data or how much consensus is formed, there will never be a compromise between special interests on each side of the debate. While there are very different opinions on medical malpractice, a concerted effort to improve the data, ensure rigorous methodologies, and clarify the problem specific reforms are able to address can make a significant contribution to informing the debate and moving closer to a workable, effective solution. Despite the hesitancy of many researchers to get involved in a contentious political debate, many policymakers and scholars recognize the value of additional independent voices. Researchers are in an optimal position to distinguish between reliable and unreliable studies, educate policymakers on where there is consensus in the evidence, and clarify how different policy options can fulfill a policy goal.

Recommendations

Researchers need high quality malpractice data that are complete, accurate, standardized, and comprehensive in order to produce superior research that accurately represents the causes and effects of medical malpractice. This requires an investment in establishing guidelines and practices that either create or augment data collection systems that can be used for cross regional and interstate analysis. Researchers should also meticulously consider and acknowledge their assumptions and the strengths and weaknesses of their data and methodological approaches. In the face of such varying quality in the data and research, researchers can facilitate the responsible use of high quality, peer-reviewed findings through increased participation in the education of policymakers.

There exists a great deal of confusion about the goals of tort, insurance, and patient safety reform. It is important for researchers and policymakers to clarify what goals different reforms are meant to accomplish. Many policy goals focus on the overall cost of the malpractice sys-

tem and how to lower these costs. Some goals focus on identifying a better system to compensate individuals injured by adverse medical events, while others try to improve patient safety and reduce medical errors. Whatever the objective, researchers and policymakers should be clear and specific about the problems they are addressing and the goals of the interventions they are discussing. Finally, the national research agenda needs to include targeted demonstrations and evaluations to test the effectiveness of different approaches.

About the Author

Christal Stone is an associate with the HCFO initiative. She can be reached at 202.292.6700 or christal.stone@academyhealth.org.

Endnotes

1 Localio A.R., et al. "Relation between Malpractice Claims and Adverse Events Due to Negligence. Results of the Harvard Medical Practice Study III," *New England Journal of Medicine*, Vol. 325, No. 4, 1991, pp. 245-51.

2 Studdert, D.M., et al. "Negligent Care and Malpractice Claiming Behavior in Utah and Colorado," *Medical Care*, Vol. 38, No. 3, 2000, pp. 250-60.

3 Studdert, D.M., et al. "Claims, Errors, and Compensation Payments in Medical Malpractice Litigation," *New England Journal of Medicine*, Vol. 354, No. 19, 2006, pp. 2024-33.

4 *ibid.*

5 Danzon, P.M. "Liability for Medical Malpractice," In: Culyer AJ, Newhouse JP, eds. *Handbook of Health Economics*. New York: Elsevier, 2000.

6 *ibid.*

7 Medical Malpractice: Implications of Rising Premiums on Access to Health Care, Report GAO-03-836. Washington, DC: Government Accountability Office, August 2003. (no author given) Also see: <http://www.gao.gov/new.items/d03836.pdf>.

8 Mello, M.M. "Medical Malpractice: Impact of the Crisis and Effect of State Tort Reforms," Robert Wood Johnson Foundation, Research Synthesis Report No. 10, May 2006. Also see: http://www.rwjf.org/publications/synthesis/reports_and_briefs/pdf/no10_researchreport.pdf.

9 Bovbjerg, R.R. and R.A. Berenson. "Surmounting Myths and Mindsets in Medical Malpractice," The Urban Institute, October 2005. Also see: http://www.urban.org/UploadedPDF/411227_medical_malpractice.pdf.

10 Mello, M.M., et al. "Health courts' and accountability for patient safety," *Milbank Quarterly*, Vol. 84, No. 3, 2006, pp. 459-92.

11 O'Connell, J. "Offers That Can't be Refused: Foreclosure of Personal Injury Claims by Defendants' Prompt Tender of Claimants' Net Economic Losses," *Northwest University Law Review*, Vol. 77, 1982, pp. 589-632.

12 "COPIC's 3Rs Program: A Success Story," COPIC Insurance 3Rs Program Newsletter, Vol. 3, No. 1, June 2006. Also see: <http://www.callcopic.com/resources/custom/PDF/3rs-newsletter/vol-3-issue-1-jun-2006.pdf>.

13 Kohn, L.T., J.M. Corrigan and M.S. Donaldson, eds. *To err is human: building a safer health system*. Washington, DC: National Academy Press, 2000.

14 Schoenbaum, S.C. and R.R. Bovbjerg. "Malpractice Reform Must Include Steps to Prevent Medical Injury," *Annals of Internal Medicine*, Vol. 140, No. 1, January 6, 2004, pp. 51-53.

15 Cheney F.W. "The American Society of Anesthesiologists Closed Claims Project: What Have We Learned, How Has It Affected Practice, and How Will It Affect Practice in the Future?" *Anesthesiology*, Vol. 91, No. 2, August 1999, pp. 552-556.



1801 K Street, NW, Suite 701-L
 Washington, DC 20006
 tel: 202.292.6700
 fax: 202.292.6800
 e-mail: hcfo@academyhealth.org
 web: www.hcfo.net

Nonprofit
 Organization
 U.S. Postage
 PAID
 Permit No. 3999
 Washington, DC