Research Brief

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Does Improved Patient Safety Reduce Malpractice Litigation?

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Abstract

This research brief examines the relationship between safety outcomes in hospitals and malpractice claiming against physicians. Focusing on county-level data from California, a large state where caps on damages and other aspects of tort law have been stable for decades, researchers found that patient safety outcomes were strongly correlated with the number of medical malpractice claims, within individual counties and over a number of years from 2001 through 2005. The implication for policy is that greater focus on improving safety performance could benefit both patients and medical providers.

In recent years, doctors and hospitals have become increasingly committed to improving patient safety. The publication of *To Err Is Human* in 2000, which trumpeted the scale of preventable injuries in the nation's hospitals, helped launch the patient safety movement and spur innovative practices and technologies to reduce such injuries. Improved patient safety should also help reduce malpractice risk for physicians and facilities, but this outcome has not yet been systematically demonstrated.

A new RAND study set out to do just that. Focusing on California, it examined administrative safety data for hospitals from 2001 through 2005 and related that data to the volume of malpractice claiming, by county and by year, over the same period. The researchers found a strong correlation: When risky incidents declined in a given county in a given year, so did the number of malpractice claims originating in that county. The reverse was also true: When risky incidents increased, so did the number of malpractice claims.

Trends in Patient Safety and Malpractice Claiming

To describe outcomes in patient safety, the team used the Healthcare Cost and Utilization Project's inpatient database for California, a comprehensive hospital encounter dataset, and applied the Patient Safety Indicators to that dataset. These indicators, which were developed by the Agency for Healthcare Research and Quality, capture 20 distinct classes of in-hospital events and complications with potential to harm patients. These "adverse events" range from obstetrical and postsurgical problems to infections originating in the hospital.

Researchers counted the occurrence of the indicators in each year and for each county in California, and compared the annual county total against the average for that county over the five-year period. Statewide, they identified more than 365,000 incidents associated with risk to patient safety in the study period, with a slight downward trend in frequency for the entire state over the five years. When analyzed by county and from year to year, the results showed considerable variation, with some counties improving and some declining in frequency of adverse events.

To identify trends in malpractice claiming, researchers constructed a database of malpractice claims from four of the largest physician medical liability carriers in California (Norcal, The Doctors Company, SCPIE, and the Cooperative of American Physicians), which account for substantially more than 50 percent of the market of physicians who are not self-insured in the state. The researchers collected approximately 27,000 claims based on alleged events that occurred from 2001 through 2005. As with adverse events, the researchers found a modest, statewide decline in malpractice claiming over that time period, but with considerable variation across counties within the general trend.

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Headquarters Campus
1776 Main Street
P.O. Box 2138
Santa Monica, California
90407-2138
TEL 310.393.0411
FAX 310.393.4818

www.rand.org

Relation Between Safety Outcomes and Malpractice Claims

The research team used a series of regression models to analyze the relationship between the annual frequency of adverse events and malpractice claims within California's counties while controlling for demographic differences across counties.

Results from the study showed a highly significant correlation between the frequency of adverse events and malpractice claims: A county that shows a decrease of *10 adverse events* in a given year would also see a decrease of *3.7 malpractice claims*. Likewise, a county that shows an increase of 10 adverse safety events in a given year would also see an increase of 3.7 malpractice claims. According to the research, nearly three-fourths of the variation in annual malpractice claims can be accounted for by the changes in patient safety outcomes.

The study also showed that the correlation holds true when breaking out results for surgeons, nonsurgical physicians, and obstetrician/gynecologists (OB-GYNs). Nearly two-thirds of the variation in malpractice claiming against surgeons and nonsurgeons can be explained by changes in safety. The association is weaker for OB-GYNs, but still significant.

Policy Implications

This study suggests that improvements to patient safety have the potential to reduce malpractice claiming, which in turn reduces the risk of malpractice liability to providers. The study also suggests that the traditional legal doctrine of malpractice, which emphasizes the deterrence of negligence, is at best incomplete in addressing the underlying problem of safety in health care facilities. The patient safety movement embodies the assumption that injuries sometimes occur because of complex system failures rather than negligence, and that provider efforts to improve the processes and quality of care can lead to better outcomes for patients.

The key policy implication of this work is that improving patient safety can benefit both patients and providers. Ultimately, research may be able to link specific safety practices to improved health outcomes and reduced malpractice claiming—a major objective of new large-scale demonstration projects called for by President Barack Obama. In the meantime, the focus on patient safety could garner support from both sides of the highly politicized debate about medical malpractice policy in particular and health care reform in general. ■

This research brief describes work done for the RAND Institute for Civil Justice documented in *Is Better Safety Associated with Less Malpractice Activity? Evidence from California*, by Michael D. Greenberg, Amelia M. Haviland, J. Scott Ashwood, and Regan Main, TR-824-ICJ, 2010, 38 pp. (available at http://www.rand.org/pubs/technical_reports/TR824/). This research brief was written by Laura Zakaras.

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