PERSPECTIVE

Defensive Medicine, Cost Containment, and Reform

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The role of defensive medicine in driving up health care costs is hotly contended. Physicians and health policy experts in particular tend to have sharply divergent views on the subject. Physicians argue that defensive medicine is a significant driver of health care cost inflation. Policy analysts, on the other hand, observe that malpractice reform, by itself, will probably not do much to reduce costs. We argue that both answers are incomplete. Ultimately, malpractice reform is a necessary but insufficient component of medical cost containment. The evidence suggests that defensive medicine accounts for a small but non-negligible fraction of health care costs. Yet the traditional medical malpractice reforms that many physicians desire will not assuage the various pressures that lead providers to overprescribe and overtreat. These reforms may, nevertheless, be necessary to persuade physicians to accept necessary changes in their practice patterns as part of the larger changes to the health care payment and delivery systems that cost containment requires.

 $\ensuremath{\mathit{KEY}}$ WORDS: defensive medicine; medical malpractice; health care costs; health care reform.

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The link between medical malpractice reform and cost containment remains controversial. It is hard to find a physician in America who does not believe that defensive medicine, fueled by the present malpractice system, is a major driver of excessive health care costs. Yet at the same time, many health policy analysts argue that the total contribution of malpractice costs to health care cost inflation overall amounts only to a miniscule percentage of total health care costs, and thus that malpractice reform is unlikely to lead to substantial cost savings¹⁻³.

It is our perspective that both positions contain some truth, but ultimately are incomplete. Malpractice reform is a necessary but insufficient component of cost containment. Tort reform by itself will do little to reduce costs. But unless liability concerns are successfully addressed, it is unlikely that most physicians will be willing to adopt the systemic strategies needed for cost control.

Received September 30, 2009 Revised November 18, 2009 Accepted January 11, 2010 Published online February 9, 2010 First, we will define defensive medicine and identify problems in quantifying the practice. We will then examine and evaluate the strengths and weaknesses of the positions expressed by many physicians and health policy analysts by considering the available evidence concerning the role of defensive medicine in raising health care costs, the ability of tort reform to control defensive medicine practices, and alternate contributors to the problem. We will then discuss why we believe that tort reform, despite the inconsistency of the evidence supporting its ability to meaningfully contain health care costs, is a necessary component of cost control.

DEFINING AND QUANTIFYING DEFENSIVE MEDICINE

Defensive medicine is commonly (and, we believe, correctly) defined as the ordering of treatments, tests and procedures primarily to help protect the physician from liability rather than to substantially further the patient's diagnosis or treatment $^{4-12}$. While perhaps not "unnecessary" care, defensive medicine is meant more to offer economic and psychological benefit to the physician than to the patient.

It follows that defensive medicine is a very difficult thing to measure. Measurement would require quantification of a counterfactual state—an action the physician took that she would not have taken had she held different beliefs about what might help protect her from liability. It is also defined by subjective factors—the physician's beliefs—rather than objective ones. These subjective aspects of the definition, while perhaps intuitively clear to physicians, pose major obstacles for any future attempt to quantify defensive medicine. In our view, the definition renders reliable research nearly impossible, as we will discuss further below.

THE PHYSICIAN'S PERSPECTIVE

Physicians in the United States have long believed that they must practice defensive medicine to diminish litigation risk. Studdert and colleagues found in a 2005 survey that 93% of "high-risk" specialists in Pennsylvania reported practicing defensive medicine 11 . A 2008 study elicited a comparable reply from 83% of Massachusetts physicians 13 . The findings suggest that substantial costs must be associated with defensive medicine; for example, Massachusetts physicians stated that between 20% and 30% of plain film x-rays, CT scans, MRI studies, ultrasound studies, and specialty referrals and consultations were ordered primarily for defensive purposes 13 . Physicians commonly argue that tort reform must occur to reduce the overuse of expensive studies and procedures that reportedly add billions per year to health care costs $^{14-18}$.

THE POLICY ANALYST'S PERSPECTIVE

What seems obvious and undeniable to the practitioner has not appeared that way to many policy analysts. One problem is the misattribution of causal responsibility by physicians. Physicians concerned about rising insurance premiums may tend to blame plaintiffs, lawyers and juries rather than the exigencies of the underwriting cycle. The cause of periodic malpractice "crises," marked by sudden increases in malpractice insurance premiums, has been thoroughly studied, however, and is almost always due to cyclic changes in the insurance market 19,20. Crises rarely occur because of significant increases in either the number of successful tort suits or the magnitude of jury awards 19. A policy analyst who understands that the true cause of a crisis lies elsewhere may discount physicians' arguments about defensive medicine costs, even though these arguments may be generally true independent of whether any crisis happens to exist.

EXISTING EVIDENCE

What is the evidence, then, for the practice of defensive medicine? Studies surveying physicians about defensive medicine report a high incidence of such practices, consistent with the worldview of the average practitioner^{11,13}. But in the absence of any independent, objective standard of how the physicians behaved, the survey methodology, with total reliance on self-report, might reasonably be viewed as unacceptably weak. Skepticism is reinforced when some defensive medicine claims (e.g., certain allegations concerning diminished access to OB/Gyn services) are found to be unsubstantiated²¹.

Results of studies seeking to quantify the costs of defensive medicine are mixed. A seminal study by Kessler and McClellan has been widely cited for the proposition that federal damage caps and other tort reform could reduce health care costs by up to 10%22-25. The study examined Medicare expenditures and mortality and morbidity rates in all states for myocardial infarction and ischemic heart disease. It compared states that had instituted malpractice reforms with those that had not. It defined defensive medicine as what went away when malpractice reforms were introduced, but that did not lead to any increased mortality or morbidity²⁶. This definition is quite different from the one we discussed above, and is far removed from a physician's common-sense definition of "defensive medicine." The fact that these investigators strayed so far from the core definition in order to find something they could measure highlights the great difficulties in conducting reliable research on this subject.

Using this approach, Kessler and McClellan concluded that defensive medicine costs accounted for approximately 5-9% of total health care costs for patients with AMI^{26} . In a 2002 study that examined additional cost factors, however, they found that both tort reform and tighter cost control practices mandated by managed care had a similar but lesser effect on AMI and IHD costs – about 2-3% 27 .

If these results could be generalized to all health care costs, then defensive medicine might indeed account for substantial excess health care expenses. A recent, comprehensive study by Avraham, Dafny and Schanzenbach, however, suggests this is not the case. It confirmed Kessler and McClellan's 2002 finding that both managed care and tort reform reduce health care costs. Yet the total reduction when *all* health care costs are

taken into account is far smaller: only $1-2\%^{28}$. The Congressional Budget Office's most recent revised estimates come to a similar conclusion on the likely overall effect of tort reform²⁹. To be sure, a 1-2% reduction in health care costs would yield real savings over time. But the sum pales in comparison to the 30% that other studies suggest we could save by eliminating unnecessary care, whether related to defensive medicine or 100% not 100%.

Given difficulties in calculating defensive medicine costs, other policy analysts have focused solely on what is easy to quantify, specifically the total costs of the malpractice liability system. When one adds the costs of all insurance premiums to those of all court costs and all payouts, the total cost of the current malpractice liability system is approximately 1.5 percent of total health care spending 19,31,32 . Although this figure completely ignores defensive medicine costs, it is often cited as evidence that the impact of malpractice on medical costs is negligible $^{33-36}$.

ALTERNATIVE CONTRIBUTORS TO DEFENSIVE PRACTICES

Why might defensive medicine be associated with higher costs of care, *without* it being true that tort reform would necessarily reduce those costs? One possibility is that defensive medicine is only one among many causes for unnecessary care. Gawande, investigating excessive costs of care in one Texas community, describes a culture of practice driven by higher reimbursement for procedure- and technology-intensive management, among other factors. He also notes that these excessive costs have occurred despite major malpractice reforms in Texas³⁷.

Evolving clinical standards are another factor. Physicians may initially order additional, non-beneficial tests due to defensive medicine. Over time these tests become incorporated into the community's standard of care. If that is in fact the case, then tort reform would not necessarily result in a reduction in the number of tests ordered. Reform may also be less likely to yield a reduction in defensive practices if the likelihood and economic consequences of being sued are merely reduced, rather than eliminated.

TORT REFORM'S ROLE IN COST CONTAINMENT

The foregoing suggests that defensive medicine likely raises health care costs, and tort reform may help reduce defensive medicine practices. Yet it also shows that the evidence is not only far from conclusive, but that defensive medicine may, by its very nature and because of the variety of alternate contributors to it, elude useful quantification. We conclude, accordingly, that tort reform is a necessary but *insufficient* ingredient of cost containment. Defensive medicine will not disappear as a result of tort reform, but without tort reform, it is unlikely that physicians will accept substantial cost control measures impacting defensive medicine practices.

Reasons for Tork Reform. In addition to the psychological toll that it inflicts on physicians 38,39 , the present malpractice system is incredibly inefficient. There is minimal overlap between negligent acts that harm patients, and outcomes that prompt lawsuits 40,41 . The overhead costs are

enormous⁴². There is no evidence that fear of lawsuits does anything useful to reduce the rate of medical error, and indeed current leaders in the field on medical error prevention and quality improvement view the blaming of individual physicians as a largely counterproductive strategy for improving patient safety^{43,44}. If one were to deliberately try to design a bad system for compensating the victims of medical maloccurrences, it is hard to see how the present system could be exceeded.

Tort Reform is Necessary. As a matter of political reality, tort reform is essential if we are to seriously reduce the costs of medical care in the U.S. It is almost certain that meaningful cost control will require physicians to significantly reduce their use of high-cost tests and treatments that do little to benefit patients. As long as both physicians and patients in the U.S. are prone to believe that high-cost and high-technology care are superior to lower-cost alternatives in providing good care, physicians would reasonably refuse to comply with these cost-containment measures unless they can be reassured that they will not thereby expose themselves to increased liability risk. Some linkage between reducing risks of tort liability for physicians and cost containment is therefore necessary.

Tort Reform and Cost Control. Despite the fact that tort reform of some sort will be arguably necessary for cost containment, it will not be sufficient. As we have seen, defensive medicine may be shown modestly to drive up total costs, and it is possible that the full impact of defensive medicine is greater than what has so far been measured. However, defensive medicine is not the sole factor in driving costs, and is most commonly commingled with other forces, such as poorly aligned financial incentives and substantial regional variability in utilization norms³⁷. If tort reform were to occur in isolation while these other forces remained fully operational, we could well doubt whether significant cost containment would result.

Tort reform will instead need to occur as an adjunct to the revision of our health care payment and delivery systems. Physicians might justifiably hesitate to reduce their use of high-cost health care if they believe it will not only reduce their income but also expose them to higher risk of liability. Reducing that risk will be necessary as one step in bringing community practice in line with the best available evidence.

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