BOOK REVIEW

Medical Malpractice: Theory, Evidence, and Public Policy by Patricia M. Danzon

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Every few years, a new round of malpractice insurance premium increases occurs, and there are renewed pressures on public officials to "do something about the malpractice insurance problem." Although there is no consensus about the causes of the problem, views about the causes are strongly held. The views often depend on where the observer stands, and there is a regrettable tendency to identify a single culprit—"greedy lawyers" paid on a contingent fee, "careless doctors," "litigious patients," or "greedy insurers." Unfortunately, little is really known about the causes of the malpractice insurance crises and about the efficacy of alternative policy options. In part, lack of knowledge is the result of inadequate data—but there are also few serious theoretical studies on malpractice issues.

Research by Patricia Danzon, sometimes with coauthors, is an exception to this generalization about lack of useful studies. Her theoretical, empirical, and policy analysis in the malpractice area is imaginative and careful, making good use of best-practice economic techniques. Much of her work has been technical and is inaccessible to many noneconomists. Although Danzon's most recent book does not break much new ground, it is a welcome summary of much of her past research on malpractice, written and organized in a form that will be accessible to readers outside her field.

Danzon's theoretical analysis, both positive and normative, is based on the economist's neoclassical model. Each party in the transaction maximizes his or her well-being subject to constraints. Information is often difficult for patients to obtain. Because of asymmetric information, the doctor may be well positioned to take advantage of the patient; making the doctor liable for compensation in cases of injury due to negligence is one mechanism, albeit an imperfect one, for protecting the patient against abuse.

It is also possible for doctors to be too cautious, that is, to provide too much preventive care. The same neoclassical paradigm states that an efficient outcome is one that results in the sum of four types of costs being minimized—insured losses, uninsured losses, prevention cost, and overhead (cost of litigation, insurance overhead). Thus, a dollar of prevention is only

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worthwhile if it results in a dollar of saving in the other three types of cost. Using rather straightforward economic concepts, Danzon shows that, on theoretical grounds, it is not possible to say that too much is now spent on preventive care ("defensive medicine").

Nor, based on analysis with a neoclassical model, can it be said with certainty that compensating a plaintiff lawyer on a contingent fee basis will lead to more suits. Danzon argues that the number of suits filed is likely to be higher under contingent fee compensation, not so much because contingent fee compensation stimulates excessive cases, but rather because risk-averse plaintiffs are more likely to sue when they do not have to pay attorneys an hourly wage. Another useful application of the neoclassical model is Danzon's analysis (from an earlier article with Lillard¹) of the decision to settle malpractice suits out of court. Predictions from the model are largely supported by the empirical evidence presented in Danzon's book.

The book's empirical research ranges from simple presentation of facts to formal statistical analysis using regression techniques. Several facts stand out and are not generally known or discussed in policy debates on malpractice. For example, the vast majority of injuries arising out of apparently negligent care do not result in a suit. This means there are plenty of potential cases to draw from when the public's propensity to sue increases or the legal climate becomes more favorable to plaintiffs. These data run counter to the view that the number of suits exceeds the number of injuries due to negligence. Another widespread perception is that court awards are (almost) random. Danzon's data show relationships between severity of injury and size of award. Plaintiffs have a higher probability of winning in cases of obvious physician error. Hourly earnings of defense attorneys, who are paid by the hour, and of their counterparts, who work for plaintiffs and are paid on a contingent fee basis, are similar.

Regression analysis allows Danzon to investigate the effect of policy and nonpolicy factors on frequency of suits and size of awards. Although this work is competently performed, it yields few unambiguous findings. The number of physicians per capita in a state, included as a measure of exposure to iatrogenic injury, is a statistically significant determinant of claims frequency. Another comparatively good predictor of frequency is the percent of population living in urban areas. Danzon (like this reader) is not sure precisely which causal factors are represented by the urban variable. Most variables in her regressions do not have significant effects on claims frequency or severity (dollar amount) per claim.

Policymakers are particularly interested in the effectiveness of alternative policy options in controlling growth in claims and in awards. Unfortunately, the right empirical analysis is difficult to perform. Pertinent data are typically only available for a span of a few years, thus at best allowing an assessment of

^{1.} Danzon & Lillard, Settlement Out of Court: The Disposition of Medical Malpractice Claims, 12 J. LEGAL STUD. 345 (1983).

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short-run effects of policy changes. It is difficult to obtain precise information on policy changes that have been implemented. For instance, while information on states that place a dollar limit on awards is readily available, it is much more difficult to obtain data on the dollar values of these limits. If a study merely focused on limits, it would presumably not be difficult to find the information at the necessary level of detail. There are many policy options, however, and rather subtle dimensions of policy changes are difficult to quantify. Danzon measures policy variables in terms of the months the policy change was in effect during the observational period. This is at best a crude measure of "quantity." Many policy changes are interrelated, making it difficult to isolate the effects of individual changes. Also, the policy changes themselves are not exogenous, but rather reflect the experiences of individual states with malpractice insurance cost and availability. (Some analysis by Danzon of determinants of policy changes is a first step in examining the endogeneity of such changes.) Her regression results imply that post-1975 tort reforms had a stronger effect in 1976 than subsequently-an implausible finding.

Danzon finds that states (1) enacting a limit on awards experienced a nineteen percent average reduction in award size two years after implementation of the limit; (2) mandating offset of compensation from collateral sources had fifty percent lower awards within two years, but laws admitting evidence of collateral compensation without mandating an offset had no discernable effect; and (3) eliminating ad damnum reduced total claim cost (but had no effect on the individual components of total claim cost, frequency of claims, and payment per claim). Attorney fee limits, statute of limitations changes, pretrial screening, and restrictions on the use of res ipsa loquitur had little or no effect.

More useful on balance than the regression analysis is Danzon's analysis of specific institutional arrangements. What, for example, are effects of changing from an occurrence to a claims-made policy? More generally, why does malpractice insurance fail to meet any of the ideal conditions of an insurable risk, and how does this relate to insurers' seemingly erratic and irrational behavior in malpractice insurance premium pricing? What would be the effects of changing from the present system to private contracting or no-fault?

The author does not present a blueprint for change, but she does offer some specific suggestions. For instance, Danzon favors instituting scheduled benefits for pecuniary and nonpecuniary loss to replace the current system which bases compensation on the individual case and is open-ended with respect to award size. Long statutes of limitations are designed to protect victims of latent injuries, but they create nondiversifiable risk for insurers that issue occurrence policies in a volatile legal climate. Compensation for riskbearing must in turn be reflected in premiums. Danzon favors reducing the statute of limitations with reliance on private first-party insurance (health insurance) and public programs to compensate persons for whom the injury becomes evident after the limit. Latent injuries, with the exception of birth defects, appear to be rare.

This book covers a lot of territory on a subject that is not understood very well. It is "must reading" for researchers, policymakers, lawyers, and physicians working in the malpractice area.

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