ARE WE DRIVEN BY DATA?: THE PROBLEM OF BAD DOCTORS

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I wanted to start by expressing my appreciation to the staff of the Denver Law Review, particularly Zoe Verhoeven, whose tireless efforts have made this exceptional conference possible—and made it run as smoothly as it has.

I am going to talk about a couple of different things very briefly. First, I will talk about some projects that I’ve already completed, and then talk in greater depth about a current project focusing on “bad doctors.” I do a lot of work in medical malpractice, so it was an understandable transition from thinking about isolated examples of malpractice, involving particular physicians, to whether there are physicians who cause bad things to happen—making them magnets for litigation.

I mostly don't do theory. Instead, I do quantitative empirical work. But because this is a conference on being driven by data, and I’m a law professor, I thought I’d also give you a few “big thoughts” about some of the challenges of being driven by data.

In the work I’ve done so far with a series of co-authors—including Charlie Silver, who you will hear from later this afternoon—we have used closed claim data, almost all of which involves medical malpractice cases from three states (Illinois, Indiana, and Texas). Additionally, we have information from two of those states (Illinois and Indiana) on state licensing practices and disciplinary sanctions, as well as when somebody was licensed, how long they’ve been in practice, and lots of demographic information.

We also use federal data. The National Practitioner Data Bank (NPDB) is a repository that insurers, hospitals, and other entities submit information to on physician’s closed medical malpractice claims, as well as information on “adverse actions.”¹ We’ve used this data over the last fifteen years to study a broad array of topics, including time trends in claiming and payouts; jury verdicts; the effect of caps on damages; the impact of policy limits on payouts—a variety of things within the medical malpractice system. More recently, we have studied plaintiffs’ lawyers

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and how they screen cases, and the market structure of the plaintiffs’ bar. For today, I am going to focus on bad doctors.

About a year ago, USA Today had an article stating that the Veterans Administration (VA) knowingly hires doctors with past malpractice claims and disciplinary sanctions for providing low-quality care.2 What the headline does not tell you is that when there is a bad event in the VA, there is a substantial underreporting of that information to the NPDB. But the reason I show this to you is not because there was an article a year ago. It is because the front page of today’s USA Today has a follow-up article about the quality of care at the VA. Some of the problems they identify involve bad doctors.3 And then, on page three of the same paper there is another article about plastic surgery clinics in Florida where there has been an epidemic of deaths that can be attributed to not particularly qualified physicians and, in some instances, affirmatively bad doctors doing surgery on an assembly-line basis in outpatient clinics.4

If real life isn’t sufficient, consider fiction. The well-known book House of God has a marvelously descriptive case study of a bad doctor named Donowitz:

“If it hadn’t been for Donowitz that guy would be going home tomorrow. Now, if he lives, it’ll be weeks. And if he knew about this, it would be Malpractice City.”

At this thought the [medical students] . . . wanted to tell the patient so he could sue.

“It won’t work,” said Fats, “cause the worse the Private, the better the bedside manner, and the higher the patient’s regard. If a doctor buys the TV illusion of ‘the doctor,’ so does the patient. How can the patient know which are the ‘Double O’Privates? No way.”

“Double O’?” I asked.

“Licensed to kill,” said Fats.”5

Bad doctors are also found on TV. On the first episode of Grey’s Anatomy, an intern named George is told he will be performing surgery on...

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his first day on the job. Things do not go well for him or for the patient—
causing the rest of the interns to label George “007.” George ultimately
turns things around before he is killed off (this is a TV show after all)—
but the nickname sticks. Although George is completely unrecognizable
when he is brought to the hospital after jumping in front of a bus to save
someone he doesn’t know, he lets one of his fellow physicians know who
he is by tracing “007” on her palm.

So much for fiction and TV. Let me show you a couple of real bad
doctors, all of whose cases are described in greater detail in a book that I
co-authored with Charlie Silver titled Overcharged: Why Americans Pay
Too Much For Health Care.

First is Dr. Najam Azmat. The federal prosecutors referred to him as
“Doctor Hazmat.” Dr. Azmat was a surgeon licensed by three different
states. He had a sixteen-year record of causing terrible outcomes for his
patients: deaths, lots of paid malpractice claims, a 23% complication rate
(which is off the charts), and several hospitals that restricted his
privileges. Two of the three states eventually yanked his license to
practice medicine—but not before he had caused significant harm to
multiple patients. The third state only pulled Dr. Azmat’s license after he
was arrested and held without bail for operating a pill mill. This case
study suggests that the state licensing authorities are not putting in a
particularly great effort at setting minimum quality standards.

Our next example of a bad doctor is Dr. Christopher Duntsch, a
neurosurgeon from Texas. He had an equal number of victims to Dr.
Azmat over a much more compressed timeframe. There were multiple
complaints to the Texas Medical Board (TMB) about Dr. Duntsch from
other physicians, all saying various versions of “Dr. Duntsch is a menace
and that you need to get him out of practice.” One doctor told the TMB
“it seems like Dr. Duntsch had learned everything perfectly just so he
could do the opposite.” Another doctor compared Dr. Duntsch to

https://abc.go.com/shows/greys-anatomy/video/most-recent/VDKA0_kvty6v4k.
7. Grey’s Anatomy: Here’s to Future Days (ABC television broadcast May 19, 2009),
https://www.youtube.com/watch?v=4KRBxC1hfc.
8. CHARLES SILVER & DAVID A. HYMAN, OVERCHARGED: WHY AMERICANS PAY TOO MUCH
9. Id. at 95.
10. Id. at 97.
11. Id.
12. Id.
13. Id.
14. Id.
15. Saul Elbein, Anatomy of a Tragedy: The Story Behind ‘Sociopath Surgeon’ Christopher
Duntsch, TEXAS OBSERVER (Aug. 28, 2013, 2:01 PM), https://www.texasobserver.org/anatomy-
tragedy/.
16. See id.
17. Id.
Hannibal Lecter. Unfortunately, the TMB was not in any real hurry to yank Dr. Duntsch’s license—which allowed him to continue to harm patients. Dr. Duntsch was ultimately prosecuted and is currently serving a life sentence for aggravated assault.

Finally, there is Dr. Jacques Roy, who was also from Texas. Dr. Roy had multiple paid malpractice claims. Indeed, he was so bad at practicing medicine that the Dallas county jail fired him. You have to be a truly awful doctor for the jail not to want you. But, Dr. Roy still kept his license.

What ultimately brought Dr. Roy down was that he got caught engaging in health care fraud, by running a home health care certification mill. For Medicare patients that need home health care, physicians must sign a piece of paper certifying that the care is required. The average doctor signs about fifty of these certifications a year. Dr. Roy was an overachiever. He signed five thousand certifications in a single year—more than any other doctor in America. The federal government finally caught up with him—but not before he, and the home health care agencies he was conspiring with, took the Medicare program for $400 million.

As these three cases exemplify, there are plenty of doctors with multiple paid malpractice claims where the disciplinary system is late to the game, if it shows up at all. To be sure, the extent to which we should expect overlap of these two systems is far from clear. That said, the obvious policy question is what should we do to try and make things work better?

To make the issue more concrete, and to pick on my own institution, this fall 198 newly minted first-year medical students enrolled at Georgetown. How many of them will end up licensed to kill? What, if anything, should we be doing about it? How should we be designing our policies and our legal system to deal with this issue?

In fairness, I can tell similar stories about bad lawyers, bad architects, and so on—and they cause plenty of harm as well. But, what we have in medicine that we do not have in lots of other areas is good research indicating that a small number of doctors are responsible for a massively disproportionate share of medical malpractice claims and payouts. That

18. Id.
19. Laura Beil, A Surgeon so Bad it was Criminal, PROPUBLICA (Oct. 2, 2018, 5:00 AM), https://www.propublica.org/article/dr-death-christopher-duntsch-a-surgeon-so-bad-it-was-criminal.
20. SILVER & HYMAN, supra note 8, at 229.
21. Id.
23. Id.
24. SILVER & HYMAN, supra note 8, at 229.
25. Id.
26. Id.
does not mean they are responsible for the same share of low-quality care—or that eliminating them will get rid of the problem of malpractice. There will still be medical errors. But if you are trying to look for problem children, so to speak, or things that, if you fix them, could make a big difference, identifying bad doctors is an excellent way to start.

Now, there are two important caveats. First, even if we’ve figured out how to identify bad doctors, it does not follow that we know what to do once we find them. Second, just because we can find outliers does not mean that the rest of the system is doing a great job either. There is very good evidence that the quality of healthcare in this country is not where it should be, and that lots of doctors continue to practice suboptimally, without the kinds of consequences that you see in other sectors of the economy.

The first question is where we should look to identify bad doctors, and doctors that we should take a harder look at. Complaints from patients are an obvious place to start. They are the people who are immediately affected. The difficulty is that you can get impressions that are highly skewed by one’s perspective.

Focusing on professors rather than doctors, there is a site called ratemyprofessor.com where this problem is quite evident. Austin Sarat is a professor at Amherst who co-authored one of the canonical articles in the law and society literature. I routinely cite this article in my own work. If you go to Professor Sarat’s ratemyprofessor.com page, you will find two reviews from the same class taught by Professor Sarat in 2014. The first review says, “Sarat has a wonderful style in class. He really invests in his students and is clear and really interesting. Every professor should be like him. Rating 5.0 (Awesome).” The second review says, “Worst professor I have ever had. Utterly terrible in every regard. Disrespectful to students. Rating 1.0 (Awful).”

If you look up my reviews on ratemyprofessors.com and you will find some divergence of opinion as well. The point is, that patient complaints may give you something worth looking at, but unless you know something about the patient, the problem, and the base rate of unhappiness in the world, it is not all that reliable.

How about other sources of information? Well, obviously other healthcare professionals make complaints—they complained about Dr. Duntsch, the Texas neurosurgeon. The difficulty is that they may be complaining because someone is a terrible doctor or they may be complaining because they do not like his personality, they do not like the

competition, or they think that he is a bad doctor—but he is not actually a bad doctor. The signal to noise ratio with this type of complaint is similar, though not identical, to the problem with consumer complaints.

You can also look at hospital privileges decisions, as reported to the NPDB. The difficulty with doing that is that there is evidence of under-reporting (i.e., many facilities do not report their adverse decisions to the NPDB, even though they are legally required to do so). This suggests a problem with whether there is an adequate penalty and likelihood of detection for noncompliant facilities.

Much of the work that has been done has involved using medical malpractice claims and medical licensing board disciplinary sanctions to try and identify bad doctors. Then the obvious question becomes: How bad do you have to be? Are two malpractice claims enough for us to pay attention to you? Is five decisive? It is sort of a Goldilocks problem. Second, what process should we use to figure out what to do next—to decide if this malpractice case is a false positive or not? Should it matter how many of these claims are paid, and how much they were settled for? And, are there other doctors that are sneaking under the radar because our selection criteria are missing something fundamental about what they are doing?

In Florida, part of the reason there is an epidemic of deaths due to plastic surgery in outpatient clinics is because nobody was paying attention. Simply stated, there was not much in the way of regulatory oversight of surgery being performed in outpatient clinics. And, there was a lot of money to be made by doing plastic surgery in Miami. The combination had predictable consequences.

So, what process should we use to identify bad doctors and deal with them once we have identified them? At some level, these are both empirical questions—but they are also questions that involve our attitudes about what it is that we want out of the medical system and out of the legal system’s attempt to police it.

The first question is: If you have had a medical malpractice claim in the past, are you more likely to get one in the future? Are past malpractice claims a useful signal of subsequent malpractice? A careful paper by David Studdert and his co-authors in the New England Journal of Medicine finds that the more claims you have had in the past, the higher the likelihood of having claims in the future. The likelihood of a future paid claim over a five-year period approaches certainty if you have had six prior claims, but it is around 18% if you have had one prior claim. 6% of

29. See Perez & Sallah, supra note 4.
31. Id. at 358, 360.
doctors in their data set had one or more paid claim over a ten-year period, and the 1% of doctors who had two or more paid claims are responsible for 32% of paid claims.\textsuperscript{32} Stated differently, a small number of doctors are responsible for a heavily disproportionate share of paid malpractice claims.

With some co-authors, I have a paper that is going to come out in a couple of months where we study the same issues, but we use a simulation to try and assess if malpractice claiming is random—what is the likelihood of a doctor having a paid claim.\textsuperscript{33} Many doctors believe that malpractice is essentially random, so this is just a way of setting some parameters on, if that is correct, how often you would expect to see a doctor with one paid claim, two paid claims, three paid claims, or four paid claims. It assesses doctors who have zero through six paid claims and the likelihood of an additional claim using a five-year pre- and post-period. Our findings are consistent with the Studdert study: the more claims you have had in the past, the more likely you are to have claims in the future. The other interesting and important finding is that, if claiming is completely random, you would expect 4.3\% of doctors to have one or more paid claims. If the physicians did not have any paid claims at all in the pre-period, only 3.3\% of them actually have paid claims in the future period. But, we find among physicians with one claim in the pre-period, 12.4\% of them have claims during the future period. This means we are looking at essentially a quadrupling of the risk if you have one prior claim, compared to physicians with no claims in the pre-period. This means there is an important signal embedded in the fact that a doctor has had one prior paid claim with respect to his or her likelihood of having a future paid claim. The medical malpractice system certainly isn’t perfect—but it isn’t random.

For doctors who have had five or six prior paid claims, their likelihood of having another paid claim in the subsequent five years is about 40\%. Their likelihood of having two or more subsequent claims is lower, but it is still on the order of 20\%–25\% in the post-period. By comparison, the simulated random chance of having two or more paid claims is very close to zero.

Of course, there are a couple of complications in using these findings to come up with rules to identify bad doctors. First, there is good evidence that the longer you are in practice, the more likely you are to have a paid claim. In some sense, you have to have treated enough patients to have somebody who is going to bring a claim.

That said, at the outer end of the distribution you can imagine circumstances in which doctors are too old to practice. The \textit{New York}

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\item \textsuperscript{32} Id. at 356.
\item \textsuperscript{33} Bernard Black et al., \textit{Physicians with Multiple Paid Medical Malpractice Claims: Are They Outliers or Just Unlucky?}, 58 \textsc{Int’l R. & Econ.} 146 (2019).
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Times recently had an article about an eighty-year-old doctor who fell asleep in the operating room and started asking himself whether he was too old to operate, and immediately responded, “Of course I’m not.”34 But let’s just say when it comes to commercial aviation, we do not have the same approach to when we ought to have pilots no longer flying, making life or death decisions for several hundred people. Those rules for enforcing that assessment are inevitably both overinclusive and underinclusive, just like any other rule. Whether the cut-off is sixty or seventy, or any other number we come up with, we will inevitably keep people from piloting a plane who are perfectly capable of doing it. And, the same cutoff will not catch people who should have been pulled out of the cockpit much earlier. So that is an obvious complication.

This complication is particularly important because, for doctors, practicing medicine is tied up with their identity. It is what they have spent their life doing, and telling them that we think they are too old to continue doing is going to create lots and lots of pushback. And, saying to them not only that we think you are too old but that we think you are bad as well is going to create even more pushback. These disputes will create jobs for lawyers—making it clear that it is hard to come up with a bullet-proof rule to identify bad doctors.

A second complication is that malpractice risk varies greatly by specialty. If you are a surgeon, particularly in a higher risk area, your likelihood of being sued over the course of your career approaches certainty. A paper by Jena et al. in the New England Journal of Medicine used private insurance data that shows paid and unpaid claims by specialty.35 Neurosurgery, cardiothoracic surgery, general surgery, and orthopedic surgery lead with the most claims per year over the study period.36 Psychiatry and pediatrics had the least claims over the study period.37 If you do not want to get sued, go into psychiatry and pediatrics. You will not get paid a lot of money, but the likelihood of getting sued is not very high.

These findings indicate that when using malpractice claims to identify bad doctors we should take account of specialty. The number of claims that would make a psychiatrist or a pediatrician a bad doctor is going to be much lower than the number we would want to use for neurosurgeons and other surgical specialties.

We did something similar to Jena et al., and we basically find the same patterns using a different data set. The likelihood of a paid malpractice claim is very high for the surgical specialties and very low for

36. *Id.* at 362.
37. *Id.*
things that are less invasive, which makes perfect sense. There are other factors that we should take account of, but it seems clear our decision rule should probably take account of not only how old you are and how long you have been in practice but also what your specialty is.

There are also additional complications. Different states have different medical malpractice risks. About thirty states have capped damages, while the other twenty have not. That is going to impact the likelihood of a claim being brought. And, once again, you want to compare apples to apples if you are going to identify someone as a high-risk doctor. The number you are going to use in a high-risk state should be different than the number in a low-risk state.

Gender matters as well. Women physicians are less likely to be sued. It is a little difficult to disentangle that from specialty, but one can do it, and after there is still a residual impact.

What about interpersonal skills? When I teach medical students, I tell them that there is a four-letter word that predicts whether they will be sued. That word is “jerk.” Patients do not want to sue their doctor even when things do not work out, but they can tell whether they were treated well or poorly in the sense of an interpersonal relationship—especially after something bad has happened. That is often enough to get people to tip over from one side (I love my doctor, and I trust him to do his best) to the other (I hate my doctor, and I want him to burn in hell). The absence of interpersonal skills does not necessarily make someone a bad doctor, but it dramatically affects the likelihood of a claim being initiated. Depending on your point of view, this might be an important aspect of what makes someone a bad doctor. We ought to think harder about that issue, because it affects the inputs we are going to be using in deciding whether someone is, in fact, a bad doctor.

And, finally, many people have been concerned that physicians who went to a foreign medical school (i.e., International Medical Graduates or IMGs) provide lower quality care. Of course, it is ultimately an empirical question whether IMGs are more likely to be sued in the first place, and whether juries will find them less appealing, conditional on their being sued and the case not settling. Physicians, by and large, fare very well in front of juries, up until the jury decides the doctor has it coming. But, the complication with IMGs is national origin discrimination. If we are labeling some people as bad doctors because the jury thinks they have a “funny accent,” that is something we ought to be very concerned about.

39. See John E. Rolph et al., Identifying Malpractice-Prone Physicians, 4 J. EMPIRICAL LEGAL STUD. 125, 141–42 (2007) (showing that older, male physicians are likely to have more medical malpractice claims filed against them).
The idea we ultimately came up with was to put together the medical malpractice and disciplinary data to try and identify a small number of doctors that are causing sufficient havoc that we ought to target them for early identification and intervention—ranging from education, supervision, probation, and in the limiting case, revocation of one’s license to practice medicine. To do our analysis we used longitudinal data from Illinois and Indiana. In both states, we had about forty years of data. In Illinois, our data covered about eighty thousand physicians. For Indiana, our data covers about thirty thousand physicians. We don’t have data for the other forty-eight states, but it turns out there is not a nationwide public repository of data on these subjects, so you cannot do this study nationwide.

In both states, we find that the overwhelming majority of doctors are not subject to discipline, while a modest percentage have paid medical malpractice claims. But there are a small number of doctors that come to the attention of both systems and a small number of those are repeat players in one or both systems. These “frequent flyers” present an obvious target of opportunity for intervention.

Of course the two systems do not overlap perfectly, nor should we expect them to do so. There are plenty of doctors who have paid claims that the disciplinary system does not do anything about, and there are a smaller number of doctors that come to the attention of the disciplinary system but the medical malpractice system never sees them at all.

We also studied whether there is a correlation by specialty in the likelihood of malpractice risk and disciplinary risk. We saw relatively quickly that specialties segregate into different risk levels. Some specialties (e.g., neurosurgery and obstetrics) have a high risk of both malpractice and disciplinary sanctions. Other specialties (i.e., psychiatry) have a very low malpractice risk but a high risk of disciplinary sanctions. And, some specialties, like pathology, do not have much risk of either malpractice or disciplinary sanctions. This is not to suggest that pathologist cannot commit malpractice—they can misdiagnose things and so on—but relative to other specialties, many fewer of them come to the attention of either system. These findings highlight the importance of developing tailored rules if we are going to try and identify who these bad doctors are.

The other question I became interested in, because I had data about where all of the physicians in Illinois had privileges, is whether there were some places that were much better or much worse than others. Do birds of

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a feather flock together? Do all the bad doctors end up in some bad hospitals?

It turns out that there are a handful of hospitals in Illinois, most of them in Chicago, where all of the bad doctors seem to be. In terms of causal explanation, we do not suggest that if you go to that hospital you become a bad doctor. Rather, we think it much more likely that these are the hospitals of last resort. When you have lost your privileges somewhere else, this hospital will take you in. So we end up with hospitals where the patients have absolutely no idea that the likelihood that their doctor has both a paid medical malpractice claim and a disciplinary offense is ten times that of anywhere else in the city—including hospitals that are just a short Uber ride away.

There are some obvious quality and consumer protection issues raised by these findings. Ask yourself: What are the incentives of the hospital administrator? It is easy to understand what they are for the administrators with good doctors, but it is harder to explain for those with doctors who have both malpractice and disciplinary records, unless these are the only people they can get. And, if these are the only people they can get, you should not count on the hospital administrator to actually do anything to fix this problem.

The other issue that this raises is how much quality information is out there is for ordinary consumers. Everyone has seen a disclosure of information—whether it is on your Starbucks cup that warns you it is hot, or if you stopped and filled up your car, there is a disclosure about the octane rating. We are constantly bombarded with this kind of information. For us, the question was can we actually learn anything about how much information there is on bad doctors?

To do that, we identified what we call the “Hall of Shame”—the worst doctors in Illinois and Indiana, judged by their medical malpractice and disciplinary records. You have to be really bad to make it into this group. We matched each of these Hall of Shame doctors with control doctors—matched on every relevant demographic attribute (i.e., age, gender, specialty, and years in practice), except the control doctors had completely clean records. Then we went and found out what information was available on each of these doctors using four highly regarded physician ranking websites: Healthgrades, Vitals, RateMDs, and WebMd—plus, we also looked at Yelp.

It turns out that, whether you are a treatment or a control doctor, none of these physician ranking websites had great coverage. If you look each of these doctors up, it turns out to be difficult to find out anything at all about most of them—no matter whether they have a clean record or really awful record. That suggest consumers are going to be some problems in using physician ranking websites to learn anything about their doctors—even the truly awful ones.
In ongoing work, we find that the good news is that the Hall of Shame doctors have modestly lower star ratings on these five websites than the control doctors. The bad news is that the Hall of Shame doctors have only modestly lower star ratings than the control doctors on these five websites. Given that we have selected the worst of the worst doctors to be in our Hall of Shame, the differences are far smaller than one might have expected—or hoped for. To give you a sense of the dynamics, the worst physician in the state of Illinois has eleven paid medical malpractice claims and two disciplinary actions. He has an online rating of four-and-a-half out of five stars. One person who bothered to write out a review said, “He’s an amazing doctor! He delivered all of my kids. I wish he still delivered babies. I would recommend him to everyone I know.” If you are trying to find a good doctor online, you ought to worry a lot about the quality of the information that is available to you.

So, how should we identify the truly bad doctors? One possible decision rule is provided by notorious Bond villain Auric Goldfinger. The rule, as articulated by Goldfinger in the book (but not the movie), is that “Once is happenstance. Twice is coincidence. The third time is enemy action.” So, maybe physicians with a combined total of three or more paid medical malpractice claims or disciplinary actions should presumptively be considered a bad doctor until proven otherwise. The second decision rule is from Oscar Wilde’s The Importance of Being Earnest, in which the Lady Bracknell observes “to lose one parent may be regarded as a misfortune; to lose both looks like carelessness.” Carelessness sure sounds like negligence—so maybe a combined total of two or more paid malpractice claims or disciplinary actions should be the decision rule for identifying who should presumptively be considered a bad doctor until proven otherwise.

Finally, I will close by talking a little about being driven by data. The first issue is whether the data is available. When it comes to medical malpractice, the NPDB is a great source of data. It does not include everything you might want, but it covers all fifty states, and has a lengthy time series. Unfortunately, we shouldn’t assume the data will always be available. The NPDB was offline for several months, after a very unhappy doctor hired a lawyer to pressure the responsible government agency (HRSA) to do so. What made the doctor so mad? The Kansas City Star had used the data in the NPDB (along with other publicly available information) to write an article about that physician’s large number of paid medical malpractice claims. HRSA eventually put the NPDB back online, but if you want to use the NPDB now, you have to promise to not use it to identify any physician.

What about individual states? Lots of states have some data available, but most do not. Likewise, most private insurers do not make their data available. You can generalize this observation across the entire field of studies of the civil justice system. Part of the reason we study medical malpractice is because it is easier to get data there than in lots of other areas. But, if we want to be driven by data, we need the data.

The second issue is whether we will get directions from the data on a timely basis. We just went through a malpractice crisis which started in 2000, and was over by 2005. The crisis made the cover of both Time and Newsweek. Empirical studies did not start coming out until the fourth and fifth year of the crisis, at which point many of the state legislatures had already done whatever it was they were going to do. Part of the challenge in being driven by data is whether the data analysis can be done on a timeframe that is consistent with the policy agenda of state and federal legislators who have lots of other things on their plate.

The third issue to worry about is whether the directions we are going to get from being driven by data are actually reliable. There is a replication crisis in several fields, including psychology. The Reproducibility Project took about a hundred studies, published in very fine journals by well-established authors. They could only reproduce around 36% of them, and of those that they could reproduce, the effect sizes were smaller. Brian Wansink, formerly a Professor at the Cornell Food Lab is an important cautionary lesson. Professor Wansink was absolutely ubiquitous in telling people the findings of his research on “how our environment shapes how we think about food, and what we end up consuming.”42 It turned out that there were huge problems with the studies he was doing—many of which have now been retracted. In some ways Professor Wansink offers a master class on how not to do empirics. He just kept running regressions and doing the analysis until he got publishable results, and then he reported those results. But, if you run enough regressions you are going to get some results. Critics described his approach as strategic data crunching, p-hacking, and HARKing (i.e., “hypothesizing after the results are known”).43 It is really easy to explain things after you know what the results are, but it is not a great way to do empirics.

The final issue is, even if we have the data, and the necessary analysis is both timely and trustworthy, how much are we actually driven by data? The unfortunate reality is that lots of people are not driven by data. In Pennsylvania, the malpractice crisis caused doctors in white coats to show up on the statehouse lawn in 2003, demanding the enactment of caps on damages. However, the best evidence is that malpractice claims had been declining in Pennsylvania and elsewhere since about 1999—suggesting

43. Id.
that maybe caps were not the best strategy to address the observed premium spikes. There are plenty of other examples of this phenomenon, where the facts are ignored or discounted if they do not fit into a speaker’s worldview.

One of my favorite cartoons from the *Wall Street Journal* sums up the problems. The cartoon shows a bunch of people sitting around a conference table. The caption (clearly attributed to the person who is sitting at the head of the table) reads, “It’s not that I think a fact-finding committee is necessarily a bad thing, I’m really just not that interested in facts.” Unfortunately, this turns out to be a widely shared view.

If we want to be driven by data, all of these issues will need to be addressed. Good luck with that.