I. THE INDEFATIGABLE MR. RIBSTEIN. I did not know Larry Ribstein as well as I should have, nor as well as many participants at this Conference. Sadly, however, it is now past the time that I can repair that gap in my own personal relationships. But one did not need to know Larry all that well to know of his huge output, his legendary work ethic, and his unrivalled knowledge of his field of business organizations, broadly conceived. He was a careful, meticulous, and inventive scholar who left no stone unturned, and who produced a dizzying array of articles, treatises and blogs that left everyone agog. His command of his subject matter was second to none. Find a topic on which he had paid his dues, and you could be sure that all the relevant literature was absorbed, understood, applied, and extended in his writing. Being well aware of his encyclopedic knowledge and output, it is a risky venture to attempt to write anything on a topic on which he has opined. Nonetheless, the occasion calls for efforts in this direction, and I shall hope to comply.

One of the major areas Ribstein mastered is the study of the modern big law firm, on which his attitudes had altered over time. In his 1998 article, *Ethical Rules, Agency Costs, and Law Firm Structure*, Ribstein stressed the legal constraints that prevented law firms from getting larger. He duly noted that the inability of firms to admit nonlegal partners limited their ability to acquire the equity capital needed to grow; he further noted that the nonwaivable duties of supervisory liability further limited firm size; and that their inability to enforce noncompete covenants tended to
limit their ability to develop their brand-name capital. He might have added that the need to avoid conflicts often shrinks the size of law firms so that they tend to take sides in the kinds of work they do, as with plaintiff and defendant firms in tort cases.²

That article was written at the onset of the large growth cycle for major law firms that extended over the following decade, where its growth has far exceeded the growth levels in the general economy, even after some of the adverse since the financial implosion of 2008.³ That last event has of course wrought major changes in large firms, which have on balance worked hard to maintain their general position even at the cost of shedding lawyers to do so. These changes, however, did bring forth from Ribstein a decidedly less optimistic response on the stability of large law firms, by pointing to certain long term difficulties with that firm structure that in all likelihood will persist even after the economy perks up. The change in the legal landscape was accurately chronicled in his elegant Wisconsin Law Review article, grimly entitled The Death of Big Law.⁴ There, he sets out the many pressures that he believes have led, and will continue to lead, to the steady and near inexorable decline in big firm practice of the past decade, which he has documented with his relentless thoroughness.⁵ In dealing with this issue, Ribstein combines work from a


³ See Daniel Currell & M. Todd Henderson, Will Lawyers Be the Prime Contractor?, this issue, at 9 (noting that legal salaries for both partners and associates, which have advanced in tandem, have far outstripped the growth in other price and wage indices).


⁵ With his usual thoroughness, Ribstein writes:

According to an annual survey concluded at the end of September 2009, the top 250 law firms lost 5,259, or 4 percent, of their lawyers, including 8.7 percent of their associates; 15 of the top 75 law firms dropped more than 100 lawyers each. It was by far the worst decline in the thirty years of the survey. Law firms disclosed that they laid off 12,196 people in 2009, including 4,633 lawyers and 7,563 staff. Another survey at the end of 2009 found that 40 percent of big law firms had reduced associate starting pay, 44 percent were considering doing so in 2010, while 60 percent of the firms had deferred associate start dates in 2009, and 43 percent expected to do so in 2010. Law firm instability reached the partner ranks, as a
large number of separate fields to help explain why the practice of big firm law has changed as much as it has.

To set the stage for my analysis of the deprofessionalization of both law and medicine, it is useful to mention just some of the factors that Ribstein advances to account for the phenomenon. He notes that the increased competition from legal providers of all sorts has placed a real pressure on the high fee structures that these firms have needed to support their overhead. He understands that the brand name value of a firm falls under pressure when potential users of legal services can get reliable information about the quality of individual lawyers, independent of firm reputation. That phenomenon in turn leads to fewer bulk purchasers of legal services such that the days where X law firm did all the work for Y major corporation are now over. Legal services in major corporations have become profit centers of their own, which transforms whether, and if so how, a corporate general counsel staff hires outside lawyers.

The exact determinants of the choice to stay inside or go outside are hard to pinpoint. But it is surely the case that it is often easier, especially with modern communications and transportation, to bring in-house work of a somewhat routine (and thus repetitive) nature, where the firm’s full time lawyers can easily carry over the skills that they acquire from one case to the next. Outside lawyers are thus reserved for those large, unique, and complex cases that inside staff is not equipped to handle on its own. That new allocation of responsibility has worked well for firms like Cravath, Swaine & Moore because of its “go-to” status for complex litigation. But there are few firms that enjoy that status, and even in those firms, the clear message is that expertise and experience matter the most. The large bonus awards

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record number of 2,775 partners left or joined Am Law 200 firms in 2010, a 10.6-percent increase in partner mobility over the previous year.

*Id.* at 751 (internal citations omitted).

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*Id.* at 764.

*Id.* at 760.

were given to the senior associates, for it appears that “Clients are no longer interested in paying for first and second-year associates,” for the simple reason that they are not seen as sources of potential value to them. The tough-minded attitude from clients in turn puts greater pressure on big firms who now have to deal with peak and valley problems that arise when one piece of major litigation settles, perhaps unexpectedly. To give but one recent illustration, the winding down of the BP litigation that resulted from the oil spill in the Gulf of Mexico resulted in major layoffs (so I have been told) at Kirkland & Ellis, which had defended these cases.

Indeed, somewhat to my chagrin, Ribstein noted the phenomenon that I will write about in this paper in the section of his Big Law article that he entitles, “The Deprofessionalization of Law Practice.” In dealing with this topic, Ribstein stresses the constant pressure that multijurisdictional practice places on the traditional state function of licensing laws. As large clients are constantly involved in litigation that crosses jurisdictions, local licensing laws constantly force firms to engage in the inefficient practice of hiring local lawyers (which may well be needed for all sorts of reasons) for appearances in local courts. The effort to circumvent these costs contributes to the pressure to hire in-house lawyers “for important legal advice,” which in turn “erodes lawyers’ distinct professional status.” I have no doubt that Ribstein is correct in the general observation that local licensing laws create ever greater dislocations with the rise of national, and even global, legal practice.

In this article, however, I do not use the term deprofessionalization of law, and the parallel phenomenon in medicine, in the same sense as Ribstein. In this instance, I have yoked medicine because the comparisons between the two fields are instructive. Law and medicine differ so much in their modes of organization, the reliance on technical advances, and the nature of their client base that it is tempting to expect that there are few common themes that touch both fields. One gaping difference relates to the competence level of clients and patients. Lawyers,

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9 Id.
10 2010 Wis. L. Rev. at 767.
11 Id. at 768.
particularly big firm lawyers, deal with individual employees of major corporations all of whom are at the top of their game. Anyone with personal problems exits the scene either voluntarily or involuntarily so that a person with greater competence takes his or her place. That option is effectively foreclosed in medical situations. In some cases, people who need care have never been competent to take care of themselves. In other instances, difficult decisions are forced inexorably upon individuals whose competence has been impaired by illness, old age, or both. In some cases, they have foreknowledge of the situation, and have to choose some mix of specific advance directives, or the creation of revocable powers of attorney. Ultimately, some authority can and must be delegated down, but the entire system of medical ethics takes on a very different cast as people struggle to figure out what kind of agency relationships should be put in place for individuals who today know that they might not be fit to handle matters tomorrow.

Nonetheless, in spite of all these differences on the consumer end of the market, the providers of legal and health care services depend, as Ribstein has noted, on the ability of firms to substitute in inputs of lower costs for the higher professional talent in question. Ribstein hit that phenomenon on the head for legal services by noting, “At the low-cost end of the legal services market, legal software and other new technologies are squeezing small law firms and sole practitioners.”

Those trends have been documented in some detailed by Benjamin Barton in his discussion of how new technologies invoked by new companies such as LegalZoom, which advertises “Affordable. Personalized. Protection.” and RocketLawyer, promising “Everything you need to make it legal.” are altering the practice of law at the bottom end of the market. But these innovations are not likely to influence

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15 Benjamin H. Barton, A Glass Half Full Look at the Changes in the American Legal Market, this issue.
either the transactional or litigation work of the major law firms, which are at the opposite end of the market. In any event, these changes address only a small portion of the topic that I wish to discuss, which is how deprofessionalization profoundly influences all segments of professional services, from the top to the bottom.

In order to pursue these themes, I shall proceed as follows. In Part II of this paper, I shall offer some brief remarks about the definition of a professional and the circumstances under which their services are demanded. In so doing, I shall posit a model that has to respond to two competing pressures. The first of these is the constant effort to deprofessionalize services that are currently provided. The second is the constant effort to innovate with new services for which professionalization is, at least in the early stages of the cycle, necessarily required. As Daniel Currell and Todd Henderson note, in one sense the key question is whether Big Law firms will remain the Prime Contractor or whether they will be reduced to commoditized services for which they can only recover a relatively low competitive rate, which would profoundly upend their market.¹⁶

The major law firms in the United States are well aware of the risk, and thus continue to take strenuous efforts to update their portfolios so that they can deal with a wide range of scientific and technical issues that would have fallen outside their scope years ago. Benjamin Barton quotes the historian Norman F. Cantor (my own legal history teacher at Columbia College in 1963) for the proposition that “A London barrister of 1500 would need only a few months of remedial education to step into an American courtroom to today.”¹⁷ That might be true if the question is the extent to which actions for conversion and detinue overlap, but it misses entirely the essential role that modern lawyers have to play in understanding the complexities of modern business and preparing expert witnesses on subject matter areas that were completely unknown at that time. In one sense only does the profession of law remain as it was in 1500—a field that gives ample scope to general

¹⁶ Currell & Henderson, supra note 3, at 14, 21.

intelligence. But it is hardly a field that can practice on an information base that is over 500 years old.

The pace of change in the external world does not leave the practice of law unaffected. Rather, the result is an equilibrium in which the professional class constantly absorbs new functions as it is displaced from older ones, so that the key question is the relative strength of these two phenomena. In Part III of this paper, I shall look at the pressures for deprofessionalization in medicine, and then reject the proposition that the cost savings standardization devices identified in Part II pose any undue risk of monopoly power that calls for new layers of government regulation. In Part IV, I apply the same analysis to the legal services. Part V then addresses the implications that deprofessionalization has on medical and legal education. Part VI concludes by arguing that however momentous these changes, they require no distinctive form of government intervention to either strike down or boost up firms whose position has been altered by the deprofessionalization process.

II. THE CYCLE OF PROFESSIONALISM. The first written assignment for my freshman English Composition Class with Professor A. Kent Hieatt, a fine teacher, was to give a definition of the word “professional.” As I recall, no one in the class did very well with this assignment. Since that time I remain bothered by my youthful inability to provide a workable definition of the term even though I have spent my entire life in one of the learned professions: the law. My Microsoft Word On-line Thesaurus gives as the equivalents to “professional” the terms “expert” and “specialist,” and surely there is some overlap between the two sets of terms. But that connection is less than precise. It is possible to be an expert in cooking or woodcutting and while many would regard these fields as professional, none, I think, would classify them as learned professionals. It is also possible to specialize with great proficiency in all manner of manual trades that no matter how laudable, no one would regard as professionals, learned or otherwise. The same level of

imperfect overlap goes to such words as “qualified,” “proficient,” “skilled,” and “trained,” all of which pertain to the notion of profession, but never quite define it.

So what else is needed to capture the term? The first observation seems simple, almost trite: the professional is one who professes to know something. That term too can easily have negative connotations, but in its positive sense the only people who can profess are those who have something to say about a given field, so that they do more than practice it. They also can explain to both students and general audiences how their particular field is put together. The second part of that definition is that there must be something to profess about. If a field is cut and dried so that a clear protocol can displace the element of judgment in working on a particular problem, then the field will start to decline in prestige and lose some of its professional aura. Put otherwise, the notion of a profession carries with it the implication that the professional is someone who can bring critical judgment to solve a problem that has never quite been presented in that form before. We do not trust amateurs to make these kinds of judgments, which is one reason why we pay the professionals to do their work. A professional who never gets paid for his or her services is something of a rarity, albeit not a contradiction in terms.

It is therefore a fine state of affairs for any person to be able to command the respect and income that comes with excelling in a particular profession. But at the same time, what is good for the professional is in one sense bad for the society as a whole. As Benjamin Barton puts it: “America as a whole will be significantly better off if we spend less on legal services.” Someone else must pay the hefty fees that professionals demand for their exercise of skill and judgment. That individual or firm in turn has to incorporate those fees in their costs for goods or service in some downstream market. If there is no alternative, it is better to pay a large fee to a professional than to suffer a greater loss by making the wrong decision. But in the long term, what markets try to do is to reduce professional judgment to standardized commodities that can then be bought and sold at low prices, with no loss in reliability.

Putting all the pieces together, we come up with this complex process that new technology and external shocks always leave in a continuous state of partial disequilibrium. At one point in the cycle, professionals are critical to the development of new fields and disciplines that would otherwise be outside the circle of human knowledge. In these areas, the level of data is thin, the technology or practice is in a rapid state of flux, so that professional judgment is needed to apply a body of principles to a particular case in its own distinctive setting. But later on in the cycle, that form of innovation is no longer needed, so that the second wave of innovation takes over with very different purposes. Those activities that at one time could only be done by professionals become targets of opportunities for other individuals who commoditize those services so that, by definition, they receive only a competitive rate of return off a far lower cost basis. At this point, the nature of the next business task is to find a way to reproduce with reliability the new advantages of the innovation in mass markets. In order to do this, some high level of standardization becomes key to make the model work.

In many legal circles the term “standard” often has undeservedly negative connotations, as in the phrase “standard form contracts,” which then get derided as contracts of adhesion, which is the process whereby standardization becomes an issue of monopolization. But it is wrong to begin the analysis with a concern with monopolization, which can only arise when there is collusion between parties of sufficient market share. Standardization also has immense benefits in in competitive markets, where the ease the burdens on customers in comparing potential trading partners.

It is therefore important to note that this move toward commoditization produces such large gains in virtually all sectors of the economy, of which the professions are only one. The first of these advantages is that standardization reduces the costs of implementation for similar and repetitive tasks. Put in other terms, any standardized improvement is likely to be scalable, so that its

\[20\] See, for the classic statement of this position, Friedrich Kessler, Contracts of Adhesion—Some Thoughts About Freedom of Contract, 43 Colum. L. Rev. 629 (1943), discussed infra, at 26.
effectiveness is not reduced as the institutions or practices to which they apply increase in size. Think of the costs of training as a fixed cost that could be spread out over large numbers of separate units. As that number gets sufficiently large, as it does with products used in mass markets, the costs of setting up the standard or protocol become an ever smaller portion of the total cost of the total operation. Standardized techniques allow for more uniform treatment of customers and clients, which reduces uneasiness about favoritism. At the same time, the per unit savings on each of the standardized outcomes become ever larger, so that the standardized firm is now in the enviable position of having, as volume increases, fewer costs and greater benefits on a per piece basis. More specifically, standardization reduces the cost of training personnel to do particular procedures, because many people can be trained at one time. Since the procedures in question are standardized, it leads to a higher level of interoperability of personnel who are assembled into teams, such that if one person becomes sick or unreliable, someone else who is trained to do the same functions can replace the ailing team member. Thus standardization carries with it reduced costs for equipment and supply, by allowing for volume purchases, which almost always carry with them a volume discount as well.

The advantages of standardization are not only relevant to the static situation, but they have positive dynamic consequences as well. Let one portion of a complex set of interactions stabilize, and it reduces the uncertainty for the operation of a larger system as a whole. In addition, once the standardization has taken place, it is easier to make piecemeal improvements of the overall scheme by replacing one separable element in the current system while leaving other pieces of the process unchanged. This form of modularization is ever more potent in system designs for intellectual property or indeed for other processes as well. The ability to make improvements in one area without compromising the effectiveness of other areas removes the management problems dealing with indivisibilities,\textsuperscript{21} thereby making it

\textsuperscript{21} By way of example, land divided over time between a life tenant and a remainderman has unfortunate indivisibilities in that any change in asset use or configuration by the tenant for life while in possession necessarily influences the values retained by the remainderman who is out of possession, but who will take the land at some future time. Deciding how to distribute authority
possible to keep overall improvements in a system where there are uneven rates of improvement in the various constituent components of the overall program.

This process of innovation has powerful implications for the distribution of knowledge within a system that operates on these standardized insights. The key point here is that standardization leads to a concentration of expertise at the highest levels where these systems are designed, tested, and implemented. The very decision to adopt a single standard for an entire system is not without a substantial downside. Any single common mode error can now take down large numbers of otherwise separate operations. The risk of kind of failure cannot be dismissed out of hand, for all it takes for a program to fail is for it to miss some “unknown unknown” over which it is no longer possible to check against risk.

Thus one source of the financial meltdown in the mortgage market doubtless stems from this area. Securitization of standardized interests offers an effective way to allow for local origination of mortgages which can then be sold off in pools in the secondary market. The standardization of the terms allows not only for the aggregation of mortgages, but also for their division into tranches, related to their anticipated maturity, so that the buyers in the financial markets can match the standard pieces that they receive from sellers to the particular needs that they have in balancing their own portfolios. That mixing and matching is only possible through a strong standardization process. The problem that arises is that if the failures of the different mortgages are positively correlated, pooling does not lead to diversification with respect to the missed risk, but only makes sure that the danger will become viral. In this context, diversification means that local changes in weather or economic conditions will not infect an entire portfolio. But if the dangers have to do with money supply issues regulated on a national basis by the Federal Reserve Board, pooling does not lead to diversification, but to the risk of major

between these two parties is a difficult task, which can be avoided by converting tangible property into cash, which can then be invested separately by the two parties. But that alternative requires deep liquid markets with various capital assets—think stocks and bonds—that are themselves standardized for easy incorporation into larger portfolios.

failure. The same risks are possible in dealing with all other kinds of standardized
to software programs to professional work dealing with either law or
which only puts a greater premium on the need for real expertise at the
center to stress test the various new protocols to the extent that is humanly possible.
But once this is understood, it only reinforces the need to get top-drawer talent at
the center in order to devise and install simpler techniques that can be used by less
expensive personnel on the ground.

III. PROFESSIONALISM IN MEDICINE. The forces of deprofessionalization are at
work inside medicine for reasons that closely follow those that work elsewhere in
the economy. Put otherwise, professionals always like to define themselves in
opposition to business or industry, because by their own lights professionals are not
bound in their daily lives by the grubby norms of the marketplace in which people
deal with each other at arm’s length and have no compunction about looking out
solely for their own interest. But that short analysis is wrong in both directions, for
there are parts of the professional’s life that are run by business norms, and part of
the business person’s life that are run by professional norms, chiefly those that
relate to fiduciary duties—an evocative but indispensable term in dealing with
human relationships. Thus it is clearly correct for professionals to deal at arm’s
length with potential patients when negotiating salary or terms of employment with
a practice, hospital, or clinic. In many cases, they will have agents or assistants to do
that part of the job so that they can devote their personal energies to the caretaking
side of the relationships, and, increasingly, only to the most difficult and delicate
parts of that job. It is, of course, not correct when people are in positions of
dependence to recommend unnecessary surgery in what would otherwise be a
manifest case of self-dealing. But it is important not to overstate the point, for
exactly that distribution of interest arises in the corporate context, where persons
who have taken a position of trust—a director or officer or a corporation, for
example—lose the protection of the business judgment rule when they engage in
self-dealing transactions, that is transactions between related parties. In those cases, the correct standard for evaluating the transaction is one of “entire fairness,” which means that the burden is on the defendant to show that the transaction must is advantageous to each side if one person is in a conflict of interest position by sitting on both sides of the table. The relative importance of these fiduciary duties may differ between medicine and business, just as they differ within business types, but the central principles used in sorting different cases apply with equal force to both fields of endeavor.

In particular, there is nothing about work in professional settings that is at variance with the two-stage process of innovation set out above. The advent of any new technology brings with it risks and opportunities that only experts can handle. In this early stage, they iron out the bugs in the new technique; they find new applications for their use; and they train support staff to help and work with suppliers and ancillary personnel to improve quality control on key inputs; and they train other experts to follow in their footsteps. The success of the first period initiative, moreover, quickly leads to the second stage response, as the demand for their services is reduced precisely because the new and improved information and skills they possess are more likely to be shared by others. Medical professionals, in a word, are not immune to the pressures of standardization that apply everywhere else in the economy. The ability to reduce complex tasks to routine tasks, which can be performed at lower cost and with greater reliability, by machines or nonprofessionals, if possible, is an essential part of the innovation cycle in all lines of endeavor.

Here is one simple example. Over fifty years ago, all tests were done on an individualized basis, which led to subtle forms of inaccuracy that came from the variation of performance standards in such routine tests as pipetting and diluting solutions. The technicians who did this work therefore had to have solid and consistent skills in order to control for the subtle errors—sometimes fatal—that

23 For a recent discussion of the applicable principles, see In re Synthes, Inc. S’holder Litig., 50 A.3d 1022 (Del. Ch. 2012).
could creep into the system out of inattention and fatigue. The rise of larger machines that could collect and process blood and urine samples radically transformed that portion of the business by allowing institutions to hire at lower salary workers to operate the new equipment that, as it were, did the thinking for them. That form of deprofessionalization did not intrude on the prerogatives of the medical establishment as such because the displaced persons never had a powerful seat at the highest levels of management in hospitals, clinics, and medical offices around the land.

The threat to the professional stature of physicians became more direct now that management skills and technical prowess progressed to the point where it made it possible to standardize other tasks which were traditionally reserved for the professional judgment of senior medical personnel—people who typically enjoy the kind of political clout within their organizations that enable them to resist managerial oversight. It is also under greater pressure because it is likely that the anticipated expansion of government involvement will place enormous pressures on doctors to delegate out some tasks to non-professional sources. It would, however, be wrong to think that the introduction of government controls is the only problem in this area. There are frequent cases of medical resistance to all sorts of innovation, even on matters far removed from modern cost-containment efforts. Thus, this type of tension is an old one in medicine, dating back at the very least to the days of Ignaz Semmelweis (1818-1865) who met with fierce and diabolical resistance from professional surgeons for his insistence on antiseptic procedures in hospitals, most particularly in childbirth, that reduced mortality rates from about 10 to 35 percent to 1 percent when consistently employed. The reason for the

24 See David W. Hilgers & Sidney S. Welch, Physicians Post-PPACA: Not Going Bust at the Healthcare Buffet, 24 THE HEALTH LAW., no. 3 (2012), at 1 (describing the trend toward consolidation in medical services and the new pressures on doctors in the wake of the Affordable Care Act); see also Julie Creswell & Reed Abelson, A Hospital War Reflects a Bind for Doctors in U.S., N.Y. TIMES (Nov. 30, 2012), http://www.nytimes.com/2012/12/01/business/a-hospital-war-reflects-a-tightening-bind-for-doctors-nationwide.html (discussing the economics of the healthcare industry and the drive toward consolidation).

successful resistance stemmed in large measure from the collective stupidity of the medical profession, especially in Europe, brought on, I suspect, in large measure by its rigid hierarchical system of authority.

One might hope that such overt resistance to technical change would be taboo today, but in fact it is not. In one of the great accounts of the resistance to medical innovation, The Checklist,26 Atul Gawande, a gifted professional surgeon and medical commentator, chronicles in great detail the vivid contrast between two forms of medical intervention. The first involves a set of unimaginable heroics done to bring back, almost literally, from the dead a person who developed raging sepsis in hospital. But such dramatic episodes can misdirect thinking about patient care.

Why? Because, at a tiny cost, the routine sterilization of catheters could stop these infections in the first place, just as in Semmelweis’s time. Here is Gawande’s take: “I.C.U.’s put five million lines into patients each year, and national statistics show that, after ten days, four per cent of those lines become infected.”27 That works out to 200,000 cases of infection that can be prevented by following simple precautions, which when implemented drive the infection rate from that source to close to zero. That cost-benefit ratio is a lot better for modest systemic improvements than for heroic medical interventions, most of which fail even, as it were, when they succeed to keep a patient alive.

The moral here offers an objective lesson on the critical difference between the management and legal approach to medical malpractice. Lawyers, like folk heroes, gravitate toward examining the ins and outs of complex cases up on appellate review, which make it that far solely because they are so close to the line.28 But the real task in the management of medical malpractice lies in developing a set of protocols in the hospital or clinic setting, which, at very low cost, prevents these


28 For the classic discussion of selection effects, see George Priest & Benjamin Klein, The Selection of Disputes for Litigation, 13 J. LEGAL STUD. 1 (1984).
events from occurring in the first place. The correct management response to malpractice, therefore, is to institutionalize standard protocol at the lower levels of staffing to prevent against dumb errors that occur all too often for routine procedures (like inserting lines, dosing patients, or typing blood), where even a single error has disastrous consequences.

It is in just this situation that two elements come together: protocol and management reversal of the professional hierarchy. Both these were at the center of Gawande’s account of the evolution of the checklist. The practice began in aviation, with a test of the Boeing Bomber that eventually became the Flying Fortress, or B-17, a mainstay in the air war against Germany in World War II. The initial trial of the plane in 1935, then called the Model 299, resulted in disaster when the plane crashed shortly after takeoff, killing two out of five on board, including its expert pilot Major Ployer V. Hill.29 Here was a case where expertise failed under novel conditions. Yet more intensive pilot training was unlikely to lead pilots to make better snap judgments during flight. It is not just a question of getting most of the steps right most of the time. If there is one mistake in the sequence, further compensating adjustments become necessary on the spur of the moment. No one has instincts strong enough to prevent disaster even in a small fraction of cases.

Enter the checklist. Since there is no way to correct an airplane once it has entered its death cycle, it is imperative to make certain that it does not deviate from its true course at all. The checklist in effect required the pilot to follow strict instructions for all critical transitions. Do the same thing every time, so as to avoid the need to improvise at the back end. Keeping to protocol increases safety in flight in the short run. In the long run, it influences both the selection and training of pilots in accordance with the maxim, “There are old pilots and bold pilots, but there are no old, bold pilots.” The checklist, which depends on the centralized creation of a standard operating procedure, thus displaces pilot intuition on how best to fly

airplanes. Once in place on the prototype of the B-17, it reduced the error rate during testing to 0.0 percent over 1.8 million miles, all back in the 1930s.\(^{30}\)

The same dynamic happens in medicine, where the restless ghost of Semmelweis still walks hospital corridors at night, given that compliance rates with hand washing are still low. Gawande tells of the tireless efforts of Dr. Peter Pronovost to introduce simple protocols into Sinai-Grace Hospital, a huge facility located in Detroit which serves an enormous inner city population. Sinai-Grace ran a high infection rate until Pronovost got management to implement a simple and relentless set of rules on cleanliness. Critically, their enforcement was not left to the whims of doctors, but to the nurse staff, which had the power to call in top management to stop any procedure when doctors did not comply.\(^{31}\) The result was the drop in the ten-day infection rate from 11 per cent to zero, and similar levels of improvement in all other standard statistical measures.\(^{32}\)

For changes of this sort, there is no need to resort to complex statistical models to weigh the effectiveness of the change. The difficulties here are not cognitive. They are institutional. And if the correct protocols are consistently followed, as a first approximation, the demand for emergency room doctors should fall, while the demand for the purveyors of routine services should increase. The one counter effect in this story is that the reduction of infection could induce physicians to attempt risky procedures that might have proved futile if the infection risk had remained uncontrolled. But even if that point is true—and I expect that it is—the general effect should be regarded as positive, for a risky procedure is better than a certain death. In any event, the impact of these cases on overall safety risks is likely to be vanishingly small. The relative magnitudes tell the institutional tale. The routine cases of infection that due care will eliminate dominate exotic ones by a

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\(^{30}\) See id. at 33-34.

\(^{31}\) For an analogous system of standardized protocols for the commercial flight industry, see MALCOLM GLADWELL, OUTLIERS 177-223 (2008) (describing the circumstances under which a co-pilot may wrest control from a pilot failing to adhere to proper protocol).

\(^{32}\) GAWANDE, THE CHECKLIST MANIFESTO 38.
1000 to 1 ratio. On that assumption any increased demand to undertake risker procedures in this safer environment will be tiny compared to the savings from getting routine cases right. And as an institutional matter, the rate of return from washing hands and gloving are so much higher than those from hi-tech rescue operations that it becomes pretty clear where the balance of convenience should lie.

The deprofessionalization of medicine influences other types of standardized procedures that are in use, even before physicians enter the scene. Thus the success rate in saving lives on the battlefield during the recent Iraqi war depended heavily on the protocols that medics used in dealing with patients. Red blood is a sign of danger, and the natural intuition is to stanch the bleeding first. Big mistake. The loss of oxygen kills a lot more rapidly than the loss of blood, so that the key instruction is to introduce an invariable protocol first to secure the airway before dealing with any vivid loss of blood.\textsuperscript{33} It sounds simple once you say it, but the point was missed in countless wars because no one at command central took it upon himself to think about the question and then spread the right protocol down the chain of command, in ways that military operations can do far better than hospitals.

It should not, however, be supposed that the deprofessionalization of medicine only deals with the standard operating procedures that lurk at the heart of medicine. They also deal with many key questions of diagnosis that are quite amenable to the same centralization of knowledge and the creation of protocol.\textsuperscript{34} In unpacking this relationship, it is critical to understand the tripartite relationship among intuition, custom, and protocol. The common thread among the three lies in their approach to imperfect information. Rather than embark on an exhaustive review of the large number of factors that go into making complete and accurate judgments, these three techniques share the common premise that the isolation of a few key features will tend to produce more accurate decisions by economizing on decision costs. The intuitionist focuses in on one or two features and makes


\textsuperscript{34} For my discussion of these issues, see Richard A. Epstein, Intuition, Custom, and Protocol: How To Make Sound Decisions with Limited Knowledge, 2 N.Y.U. J. L. & Liberty 1 (2005).
judgments about what diagnosis to make or what procedure to follow. The rest of the information is left on the cutting room floor. The system of custom depends, as it were, on the collective judgments of many individuals through their pattern of interactions. The use of custom thus represents an accumulated deposit of wisdom that allows people to coordinate their behavior with each other even when there are no direct relations among themselves. The constant hit and miss technique allows for constant corrections from the original pattern without centralized coordination. It is easy for people like Hayek to praise this decentralized system as the best way to organize complex commercial markets.35

The key defect of these techniques is that they resist systematic verification, so that the intuition and custom could easily lead to high error rates that resist rapid corrections. The system of protocol shares the fundamental belief that the best decisions are made by focusing on a small set of the relevant variables. But far from resting on intuition, the choice of variable from a very long list depends heavily on close review of outcomes in closed files to measure which combination of variables produces the reliable result. In this sense, a well-chosen protocol depends on a centralized evaluation that is missing in both custom and intuition.

The question then arises whether this technique puts to shame the decentralized system of judgments praised by small government types. The answer to this question is no. Centralized authority only means that a complex organization collects and analyzes the data. But that agency need not be a government. It could be a single hospital with a large set of cases, or an HMO or other voluntary organization that has the same access to multiple cases. Different institutions can compete over the choice of protocols like they compete on any other dimension. Indeed it could well be that with different populations, the protocol that works with one institution need not do as well with a second, so that some variation could emerge especially at the earlier stages of the process.

These private protocols, moreover, will normally be protected to some degree at least by trade secret law, which normally would not be invoked to protect any government data base that is seeking to establish in some way, such as through the Independent Payment Advisory Board, which has to consider just which treatments to authorize under the Medicare program and why. The balance of advantage between these two approaches is not easy to determine. The private system will spur the creation of new information, and it could easily be widely deployed pursuant by sharing agreements between various private health care organizations. In addition, some inventors of other similar technologies will choose to place them in the public domain, if only to prevent others from patenting them. Public use of protocols will get more rapid dissemination, but their judgment may be made on collateral cost considerations of the sort that have prompted so much unease with the use of these proposals in the first place. My own view is that the perils of government are on this matter greater than those on the private side, so I would be reluctant to put all the eggs in the government-side basket. The use of trade secret law, moreover, always allows the government through independent discovery to publish its own protocols, even if they duplicate down to the last degree, the trade secret protocols of private firms. A mixed strategy of private innovation couples with government oversight therefore seems preferable to any nation-wide takeover of the entire intellectual property space by federal officials.

Given these multiple pathways of developing uniform standards, it is a mistake to conflate, as Hayek often did, the use of systematic techniques of data analysis with government planning, which can fall prey to so many other political forces. Within a private setting, new protocols can be both developed and tested, and, with suitable caution, successful ones can be imitated, just like those put into place in Sinai-Grace. The important point here is never to underestimate the gains


from following these protocols, in the domain where they are first developed and often beyond.

Malcolm Gladwell offered one key example of how successful the right protocol can be in his 2005 book *Blink*, which has the wrong subtitle, *The Power of Thinking Without Thinking*. The mistake in this title is that it assumes that intuition, which does work without thinking, and protocols are cut from the same cloth, when they are not. The individual who follows the protocol is barred from independent thought, but the party who designs the protocol has thought and tested long and hard before settling on the right protocol for a given occasion. One example that Gladwell gives is the efforts of Drs. Brendan Reilly and Lee Goldman of Cook County Hospital to devise a set of protocols to decide which patients who present themselves in an emergency room with apparent heart problems to send home, and which to admit to the ER, often to intensive care. The choice here is a matter of life and death, with high error costs each way, for admitting a patient who is not in distress not only imposes high treatment costs, but it also diverts staff and beds from patients in need of prompt medical intervention. After hundreds of dry runs, they relied on a three-part test—whether the patient's pain was unstable angina; whether there was fluid in the patient's lungs; and whether the patient's systolic blood pressure was below 100. A decision tree, based on the patient’s ECG and which, if any, of those three risk factors were positive, determined whether the patient admitted. The protocol outperformed the intuitions of experienced doctors in both directions, yielding both fewer false positives and fewer false negatives. The implications of this result are profound for the practice of medicine, not only for the short term costs that it saves but also for the long term staffing issues in ERs, where the level of training needed may (other things being equal) trend down because the level of diagnostic accuracy goes up. To be sure, the treatment of dangerous cases still requires immense skill, but even here the introduction of yet other protocols could replicate the advantages of those used to make the initial patient screening.

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The rise of these protocols, generated as they are by large data sets, has set off extensive ripples within the medical profession. One reason for the rise of the Health Maintenance Organization (HMO) is that they can organize this data in ways that individual physicians cannot. The greater knowledge at the center of the firm leads to a larger insistence for more control over the decisions made at the physician level, which in turn leads to strong pressures by physician groups to resist that encroachment on their traditional zones of autonomy. That result in turn has led physician groups to sue their own HMOs to seek to impose heavier liabilities on these organizations to the extent that they take over the control of day-to-day operations. In one such instance, *Petrovich v. Share Health Plan of Illinois, Inc.*, the Illinois State Medical Society filed an amicus brief in which it alleged that the HMO’s right to make decisions for prospective treatment, and to withhold payment when its dictates are not followed, should expose it to liability for any wrongs of the practice groups over which they exert control. To be sure, the centralization of control within a complex firm structure may lead to some incorrect decisions—although ironically there was no evidence of that in *Petrovich*. But these health-care decisions cannot be judged by looking solely at the suits selected for litigation; one must also take into account the overall performance levels, where it seems clear that the shift in the delivery of health care services, concomitant with the decline of individual fee for service medicine indicates that deprofessionalization (which is always a matter of degree) is taking place already. Clearly this tussle has no easy resolution because the relevant knowledge base is divided between the two sides. But what drives the physicians is the knowledge that shared control leads to a

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39 719 N.E.2d 756 (Ill. 1999).

reduced professional status, which they sought to counter by joining forces with patients in suits against HMOs.

In principle, the best way to deal with all these issues of divided control is to allocate risk and control through contract, at least in a competitive market. But there is much political opposition to that. In the last presidential campaign, Mitt Romney attacked the ACA on the ground that it “puts the federal government between you and your doctor.” It is an open question whether Romney would have been equally opposed to the interposition of the HMO between you and your doctor, by the similar erosion of physician authority. While the ACA has so many features that are antithetical to a competitive market, the HMOs do not, which suggests that the fact of intervention in the long run may be less important than the nature of that intervention. Some oversight is necessary for two reasons: first, physicians have less information than do the plans on key protocols; second, it is all too easy for patients and physicians to decide to make expenditures that are beneficial to both, but which impose excessive costs on the plan, given the inevitable presence of serious physician-patient conflicts.

The ability to work an effective contractual solution is limited so long as judges take the position that “[m]arket forces alone “are insufficient to cure the deleterious [e]ffects of managed care on the health care industry.” The situation will not get any easier so long as licensing rules allow the physicians to exert monopoly control over key portions of their practice. Indeed it may well be that HMOs are not the only, or perhaps not even the right model, through which to work the transfer of power away from professionals. It is well known that emergency room bottlenecks are often acute because the ER has become the place of last resort for uninsured persons seeking health care. The solution may well be the use of


corporate providers of medical services that can use protocols at the center to
decide which persons can be treated on-site and which need referral to more
intensive modes of examination and treatment.43 Most people will fall into the first
category. If these logistics could work out—and with good protocols there is every
reason to think that they can—it could lead to a welcome deprofessionalization of
medicine on a grand scale as a full complement of physician assistants, technicians,
nurses aids, and others not yet invented help convert expensive medical care into
cheaper health care. The key point here is that these changes cannot be made within
the current regulatory system, so that major circumvention that requires political
action against entrenched interest groups is necessarily required to realize these
savings.44

The use of major structural reforms to speed the process of
deprofessionalization does not only arise in the private sector. Indeed, one area in
which this form of control is urgently needed concerns the operation of the large
government programs of Medicare and Medicaid, which seem to have lost any ability
to run large systems by breaking complex tasks down into simpler ones. Gawande
addresses this topic too in his recent essay Big Med (a nice opposition to Ribstein's
Big Law), where he asks why it is that large health care programs cannot run with
the same efficiency as the Cheesecake Factory whose operations he came to
admire.45 The simplest explanation for this is that neither Medicare nor Medicaid
are organized as private firms that have centralized control over their internal
operations, which they exercise in ways to maximize profits. They are large
government programs whose own guidelines are easily gamed by the hospitals,
physicians, and firms that do business with them. The key distinction, as noted in

43 See William M. Sage, The Wal-Martization of Health Care, 28 J. LEGAL MED. 503 (2007);
Richard Bohmer, The Rise of In-Store Clinics—Threat or Opportunity?, 356 NEW ENG. J. MED. 765, 765,
767 (2007).

44 For other possible reforms, see Richard A. Epstein & David A. Hyman, Fixing Obamacare: The

the discussion of protocol, is between centralization within the firm, which makes sense, and centralization within government, which never does. Even work done through public institutions can have great value, as with the studies done at Cook County Hospital, which succeeded because it acted as a more or less autonomous operation.

Most critically on this matter, size is never the determinant of how innovation grows. It is whether any market actors face systematic competition from either new or future forms in deciding when and how to innovate. Gawande, who is no political economist, misses that point when he introduces a note of pessimism on the broader implications of the Cheesecake Factory. He thus writes, somewhat fearfully: “Essentially, we’re moving from a Jeffersonian ideal of small guilds and independent craftsmen to a Hamiltonian recognition of the advantages that size and centralized control can bring.”46 At this point, the lurking danger is as follows:

We have no guarantee that Big Medicine will serve the social good. Whatever the industry, an increase in size and control creates the conditions for monopoly, which could do the opposite of what we want: suppress innovation and drive up costs over time. In the past, certainly, health-care systems that pursued size and market power were better at raising prices than at lowering them.47

There are never any guarantees in life. But there are better and worse understandings of organizational behavior. There is, of course, no question that monopoly drives up costs and reduces the overall level of consumer surplus and with it, social welfare. But no monopolist has the desire to suppress the innovations that help it maintain its own position against possible entrants. Nor does any monopolist reject any new cost-saving devices that allow it to simultaneously reduce price and increase profit by bringing additional customers into the fold. The risk of a monopoly is that it contracts output below the competitive level in order to

46 Id.
47 Id.
raise prices above the competitive level, which can be done through collusion no matter what the level of technological innovation.

In making this mistake, Gawande oddly enough repeats the same error made nearly seventy years ago by my own teacher at the Yale Law School, Friedrich Kessler, who so feared standard-form contracts, despite all their evident efficiencies, that he branded them as the devil’s best friend:

With the decline of the free enterprise system due to the innate trend of competitive capitalism toward monopoly, the meaning of contract has changed radically. Society, when granting freedom of contract, does not guarantee that all members of the community will be able to make use of it to the same extent. On the contrary, the law, by protecting the unequal distribution of property does nothing to prevent freedom of contract from becoming a one-sided privilege. Society, by proclaiming freedom of contract, guarantees that it will not interfere with the exercise of power by contract. Freedom of contract enables enterprisers to legislate by contract and, what is even more important, to legislate in a substantially authoritarian manner, without using the appearance of authoritarian forms.48

The numerous but highly influential errors packed into this short passage have given rise to many misdirected fears. There is, first of all, no “innate tendency” toward monopoly. So long as legislation does not block free entry, new firms will always gravitate to the areas of greatest potential advantage, which monopolists create when they provide a price umbrella against new entrants. Nor is it the case that freedom of contract favors the rich and privileged—today’s top one percent. That institution allows all persons to withhold their services in a competitive market, which means that they can never be forced to take deals that leave them worse off. The only parties who under orthodox doctrine are under a duty to serve are common carriers and public utilities that do have monopoly power, which requires them to serve customers on reasonable and nondiscriminatory (RAND) terms precisely because of the want of credible alternatives for customers (rich or

48 Kessler, supra note 11, at 640.
poor) in these settings. Finally, it is always a grievous error to compare the market power of a monopolist to the legislative power of the government. Monopolists still face downward-sloping demand curves so that any price increase is coupled with a loss of customers. Legislatures have the power of conscription and punishment that no monopoly firm has, and thus have a lot more leverage when the price for nonacquiescence is a fine or a jail sentence, and not just the loss of services.

Given these systematic realities, the correct response to standardization is to ask specifically whether there are any monopoly risks that cannot be effectively controlled by antitrust law, a question that also arises in other contexts. In these cases, standardized protocols by firms acting alone pose no such risk, at least no more than any other cost-saving unilateral practice. Yet the need to collect and organize this information often requires cooperation between firms in order to encourage the efficient spread of information, which includes the creation of more extensive data collection that allows firms to reach definitive results more quickly. The correct answer is to allow for partial sharing of information subject to a constraint against the standardization of prices or the division of territories. It is just unwise to think that additional constraints are needed. The march toward standardization has many powerful consequences that are adverse to the short-term financial position of many established players in the market who are all too quick to use license and permit restrictions to keep out innovators. The loose talk by Gawande and others actually plays into their hand by propping up restrictions that keep small but inefficient market participants in place. The social response to

49 For discussion, see RICHARD A. EPSTEIN, PRINCIPLES FOR A FREE SOCIETY: RECONCILING INDIVIDUAL LIBERTY WITH THE COMMON GOOD ch. 10 (1998)

50 For the defense of this view in patent law, see HERBERT HOVENKAMP, THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION 272-273 (2006), attacking efforts to develop an independent doctrine of patent misuse that goes beyond that found in the antitrust laws: “[T]he Federal Circuit’s position seems incredible to someone familiar with the expansive body of antitrust doctrine,” given that “§ 2 [of the Sherman Act] reaches every act that monopolizes or dangerously threatens to do so.” Id. at 273.

51 See, for an example of the antitrust response to this problem, United States v. Citizens & S. Nat’l Bank, 422 U.S. 86, 113 (1975), noting that “the dissemination of price information is not itself a per se violation of the Sherman Act.” The key point in that case is that the information sharing was
deprofessionalization is to welcome it, but only if it can prove itself in the marketplace. That the phenomenon will exist seems beyond doubt. The only questions that remain are how it will manifest itself in an unregulated environment.

IV. DEPROFESSIONALIZATION IN LAW. The cycle of deprofessionalization that is observed in medicine takes the same pattern in law, albeit for very different reasons. There are two major determinants for the need for legal services. The first are the ordinary private disputes that take place between individuals of the sort that have been around from the beginning of organized society. There are disputes over the ownership of land and chattels. There are constant contract disputes that arise out of both business and social life. There are the harmful interactions that result in bodily injury or property damage. But, in addition to these, there is the huge amount of legal work that arises through government regulation at all levels. These two spheres of action are not unrelated, for today much of the expansion in legal activity derives from the interaction of the two. The class of external harms that has long been within the province of the tort law now expands to cover all sorts of aesthetic issues like the blocking of views, and economic issues like competitive harms, both of which were not actionable under the earlier common law doctrines. This expanded definition of private harms has in turn fed the creation of regulatory devices intended to deal with them, whether through local zoning laws, the Environmental Protection Agency, the Food and Drug Administration, the Securities and Exchange Commission, or the Equal Employment Opportunity Commission, all of which share so broad and diffuse a definition of harms which cannot be attacked in only one way. To respond to these harms, the new legal regime contemplates regulation and litigation at both the federal and state level, which requires everyone

necessary for running a check-clearing operation that necessarily required cooperation across the entire banking network.

52 For a defense of this broad definition of the police power, see Berman v. Parker, 348 U.S. 26 (1954), which in turn leads to allowing state intervention, without compensation to emerge under both the zoning and environmental statutes. See, e.g., Creative Env’ts, Inc v. Estabrook, 680 F.2d 822, 833 (1st Cir. 1982) (treating protection of the character of the neighborhood as an interest that the state can advance without compensation.
involved with the legal system to master four separate systems of social control and the complex interactions among them.

This multiplicity of action in turn leads to a change in the form of legal rules, marked chiefly by a decline of the bright-line rule and the rise of the many-factored test that is invoked on questions both of permits and licenses on the one hand, and liability on the other. These multi-factorial decision rules in turn place greater pressure on both public and private institutions that are charged with implementing these rules. The procedures that are now required under both the Administrative Procedure Act and specific substance (or in this arcane world, organic) statutes, on the one hand, and by discovery in litigation, on the other, are far more complex than anyone had imagined when both these systems were put into place in the great reforms of the New Deal. The Federal Rules of Civil Procedure date from 1938, and the Administrative Procedure Act from 1946, but in reality they are far closer in time if one accounts for the relative lack of major activity on this front during the Second World War.

It would, however, be wrong to think that the only source of increased legal work arises from the outgrowth of traditional activities. Hand-in-hand with the changes in the private economy are the major expansions of various welfare and transfer programs, most specifically Social Security, Medicare, and Medicaid, at the federal level, and the increased expenditure on education at both the federal and the state level. These programs require intensive dealing with individual cases, but they also present major structural disputes that themselves call into play the same kind of professional expertise that has to do with the more traditional forms of government agency.

The advent of these developments was a great boon to the legal profession because it brought to the fore the very kinds of skills that command a professional’s premium: the ability to master complex bodies of technical, scientific, and economic material in order to gain the foundation to make educated judgments about how to handle litigation and negotiation in the shadow of the law. In-house counsel are not

suitable for dealing with these bet-the-company type issues. Indeed, even today, one of the serious institutional barriers to dealing effectively with these issues is that the corporate insiders that have to make the initial round of personnel decisions are unaware of the demands that complex litigation places on the traditional lawyers on which they rely. One reason, for example, why product liability cases were so difficult to deal with in the 1970s when the expansion first took place in design and warning cases\(^{55}\) was that the major companies thought of them as negligence cases to be treated in the same way as intersection collisions, where the wealth of scientific, engineering and technical information that is needed to resolve a modern design defect case dwarfs in complexity the question of which car had the right of way at the intersection, just as the knowledge requirement for the modern duty to warn case involves more than the failure to put a skull and crossbones on a bottle of poison.

As the pace of legislation continues, this ability to assimilate continues to pose a major challenge, as is surely the case today with both the Patient Protection and Affordable Care Act and the Dodd-Frank legislation, such that compliance work has blossomed into a field of its own in recent times. There is little doubt that the great rise in legal salaries over the past half-century, especially at the top of the market,\(^ {56}\) is in some large measure attributable to the innovation in firm practice needed to respond to these major initiatives at every step in the process, from legislation, through rulemaking, through adjudication. That trend is accelerated, if anecdotal evidence is correct, by the segmentation of the market into different service groups. I have heard more than one lawyer say that he or she left a large national firm because of the insistence that they charge high rates that their more modest local client base could not afford. That reconfiguration allows them to generate more billable hours, and thus, ironically, to increase their annual take-

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\(^{54}\) See, e.g., Larsen v. Gen. Motors, 391 F.2d 495 (8th Cir. 1968) (crashworthiness).

\(^{55}\) See, e.g., Borel v. Fibreboard Paper Prods. Corp., 493 F.2d 1076 (5th Cir. 1973) (involving asbestos and the duty to warn).

\(^{56}\) For details, see Currell & Henderson, supra note 3, at 12-13.
home pay by charging less, and at the same time it is likely to increase the already high average rates at the larger firms. In fact, there is no credible story of the American political economy that points to a rapid shrinkage in overall levels of legal service.

In light of all these changes, how should we view the nature and extent of the decline of Big Law. Part of the explanation lies in the overall decline in business during the past recession and slow recovery. The reduced level of activity means that fewer firms form, the firms that do form engage in fewer transactions, and the transactions in which they engage are usually less dramatic in scope and ambition than those in other times. But, recall that Ribstein predicts, perhaps too pessimistically, the decline in Big Law even after the economy returns to growth mode because the same structural factors are at stake in this area as they are everywhere else. There are constant efforts by large corporations and other heavy consumers of legal services to reduce the level of discretion needed in dealing with legal matters. In part this is driven by the change in pricing practices that tends to alter the provision of health care services. Gone are the long associate memos that offer exhaustive reviews of precedent, none of which gets used in any particular case. In their stead, firms that are often asked to put some fraction of their compensation contingent on output now converge on the key issues much earlier in the game than they did before. In addition, all complex litigation involves a huge level of grunt work that is no longer done by regular law firm partners and associates. The rise of the “contract attorney” who works for far less than ordinary associates, often in cheaper locations that are away from the main firm offices, is now an accepted part of the legal system. Occasionally there are “temp-to-perm” programs, but many only offer a lifeline to a comparatively small fraction of persons. What has happened in effect is that large law firms have adopted the same response to peak-load issues as their clients: keep a smaller coherent core with the regular firm and go for outside help on a spot contract basis, which of course subjects contract lawyers to far higher risk levels than before.

57 Id. at 15-17 (noting the strongly positive correlation between firm size and lawyer salaries).
The strategy of shrinking the professional base of the firm continues. Just as the use of health care personnel who are not physicians is likely to transform health care delivery, law firms have also resorted to paralegals and technical assistants to cover much of their work. The issue of document review, which can be so costly, is increasingly turned over to complex computer programs that can link across documents in ways in which no human being can. Indeed, these systems can often trace phone calls and e-mails to see where the latter disappear and the former pick up, which is a good sign that sensitive matters were discussed. Outsourcing to foreign lawyers for routine searches of statutes, regulations and cases (much like having foreign radiologists read studies done in the United States) is yet another technique to lower the demand in major firms.

At the same time, the routine transactions performed by lawyers (e.g., house closings) have become heavily automated, often by title insurance companies, so that the cost of closings has dropped dramatically as well. The rise of computer applications to handle taxes, wills, leases, gifts, and other standard family transactions has transformed the market as well. No one can be sure as to how far this movement will go; nor is there any reason of policy that requires a definitive answer, so long as regulators do not intervene to prevent the orderly implementation of policy. The bottom line is this: Big Law will survive, but it will be a leaner and more resourceful big law than before. The bottom line on little law is more difficult to predict, but my guess is as follows. The corporate practice of law is only one step removed from the LegalZoons and RocketLawyers of this world. Allow those firms to flourish, and they will intermediate between customers and lawyers by hiring those individuals whom they think can best fit into their generalized system of doing business in ways that are as yet only dimly understood.

V. The Feedback on Professional Education. These profound shifts in the demand for medical and legal services will surely exert some pressures on the educational institutions that feed all sectors of both professions. On the medical side, it is best for an outsider to be diffident, but my own limited experience in teaching doctors comes from the University of Chicago, where I have taught physicians and other health care professionals from a large range of students. Obviously, I am in no
position to question their professional competence in their chosen areas of expertise, but what is most apparent from those sessions is how little time they have spent in their education and practice in thinking about how, to pick just one topic, to make decisions under conditions of uncertainty. Terms like expected value, marginal cost, and two kinds of error are wholly foreign to their vocabulary (but not necessarily to all aspects of their practice). Yet knowledge of these principles seems indispensable for designing the various protocols that will govern medical education, especially an education that treats the reform of the health care system as one of its topics.

At one time, it may well have been necessary to have an encyclopedic knowledge of a wide range of medical facts, but the data sources today are so much more powerful and more readily available that dealing with probabilities and uncertainty is more important than memorizing the names of all the cranial nerves.58 To an outsider, it is always striking how uneasy the fit is between the comprehensive examinations for entering the profession and the high degrees of specialization in research and practice for most specialists within the field. Other features about medical education are more troublesome. It looks as though there will be a sharp cleavage between the highly paid specialists at the top and the vast run of primary care physicians who will provide the huge bulk of health care. Quite simply, the promised salaries under government rationing with Medicare and Medicaid may make it impossible for future doctors to finance their education out of their future earnings,59 which could lead to a shortage of primary care doctors when

Which are: I - Olfactory nerve; II - Optic nerve; III - Oculomotor nerve; IV - Trochlear nerve/Pathic nerve; V - Trigeminal nerve/dentist nerve; VI - Abducens nerve; VII - Facial nerve; VIII - Vestibulocochlear nerve/Auditory nerve; IX - Glossopharyngeal nerve; X - Vagus nerve; XI - Accessory nerve/Spinal accessory nerve; XII - Hypoglossal nerve. The information takes 2 seconds to acquire at http://en.wikipedia.org/wiki/List_of_mnemonics_for_the_cranial_nerves, complete with the mnemonics ‘On Old Olympus’ Towering Top, A Finn And German Viewed Some Hops.” The knowledge is obviously important, but easily acquired.

they will be even more in demand with the recent expansion of Medicaid and the other costly reforms of the PPACA.

Whatever the situation on the medical side, the legal position is grim. There have been a number of high-profile accounts of why it is that law schools now face what Lincoln Caplan has termed “an existential crisis for law schools,” given the weak job market, in which “[o]nly 55 percent of 43,725 graduates in 2011 had a law-related job nine months after graduation.”® Needless to say, there is a sharp drop in the number of applications to law school as well.® There have also been multiple efforts to respond to these difficulties, including a decline in theory and an emphasis in the kinds of skills, like filling out corporate forms, that lawyers will need in practice. The implicit assumption behind many of these accounts is that law schools will only survive if they change.® The more accurate account is that the changes that they make will not in some cases be sufficient to support their survival. To teach lawyers how to do routine work will be of no value to law students at the top of the market who will, if anything, need to be more versatile than ever before to serve their elite clients in those areas in which nothing less than the best professionals will do. Yet at the bottom end, the competition from non-legal personnel will cap fees so that law school will remain a terrible investment, unless the rise of market intermediaries changes what people with what training work at the mass end of the market.

The one clear prediction from these developments is that there will be some contraction of the market which will result in the shrinkage of some schools but not returns on their investments, while Rheumatologists, general pediatricians, and endocrinologists experience the lowest returns.”


others. This contraction will probably hit the top schools as well, with less of an effect on top students and top professors whose abilities put them squarely in the elite zone. Exact predictions are hard to come by, but here is one guess. The skill set developed will be less concerned with the preparation of routine forms, for which there is strong paralegal competition. Rather it will seek, as does the recent NYU curricular revision, to give students a chance to work overseas or in high-pressure environments where their practice exposure can complement their book knowledge.63 All students need not take this line, nor should they be required to do so, for the key policy implications of the current wave of law school reforms are these. The organized bar through the American Bar Association should not be allowed to protect its client base by tightening its accreditation standards, by raising legal barriers to the unauthorized practice of law, or by tightening the rules that govern the admission of foreign students into the American bar (which have just been tightened in New York).64 Mercantilism is the common response to changes in market forces, and that should be stoutly resisted if at all possible.

VI. CONCLUSION. As this article is being written, tectonic forces are working to change the shape of both the legal and medical professions. These changes are inevitable and for the most part welcome. The cycle of innovation whereby experts start a process that then over time becomes routinized is socially beneficial at both stages, so that it would be unwise to erect various barriers to the standardization and commoditization of these key services. The innovators should be able, and will be able, to retain their advantage, only by continuing to make advances in areas that have resisted general improvement. The real danger of abuse in this area lies not in the firms in competitive industries that become leaders in their own market by adapting most rapidly to these forces. It lies instead in the protectionist responses to


64 Foreign Legal Education, N.Y., St. Bd. of L. Examiners, http://www.nybarexam.org/Foreign/ForeignLegalEducation.htm, for all the complex details, which are beyond the scope of this article.
these changes: in trying to erect entry barriers, by licensing or other forms of restrictions—all to insulate high-cost providers from low-cost sources of competition. The powerful awareness of this risk was all too apparent to Larry Ribstein, who fought mightily against these trends. It is worth keeping up that battle even after his powerful voice has been silenced.