

University of Pennsylvania Law Review

FOUNDED 1852

Formerly
American Law Register

VOL. 158

MARCH 2010

No. 4

ARTICLE

CONTRACTING OVER LIABILITY: MEDICAL MALPRACTICE AND THE COST OF CHOICE

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Contractual liability proponents claim that states can best reform malpractice liability by allowing patients to contract over and out of liability. Propo-

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nents assert that informed patients would be better off if they were allowed to contract over liability than they would be if states reformed malpractice liability directly because informed patients would contract for the rules that maximize their welfare. Proponents also claim that states reforming malpractice liability could only benefit patients by including a right to contract out of liability. This Article demonstrates that these claims are incorrect. Informed patients who value state-imposed malpractice liability can be hurt by the introduction of contractual liability, because contractual liability produces lower deterrence benefits at a higher price. Four inefficiencies make contractual liability a less beneficial and more costly form of liability than state-imposed malpractice liability: collective goods problems, time inconsistency, adverse selection, and network externality problems. Adoption of contractual liability therefore would hurt patients who value liability because it would force them to use a less valuable and more expensive form of liability and create inefficient incentives for patients to waive liability that would have been optimal if imposed by the state. This conclusion holds whether patients negotiate liability contracts directly with individual physicians or are presented with standard form contracts governing malpractice liability offered by their health insurers.

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INTRODUCTION

Each year, more than a hundred and fifty thousand people are killed and more than a million people are injured by medical error, much of which is preventable.¹ Indeed, more people are killed each year by medical negligence than are killed by either automobile accidents or workplace injuries.²

Malpractice liability is potentially one of the most effective mechanisms for reducing medical error. Well-designed malpractice liability can optimally deter error by giving medical providers direct financial incentives to make cost-effective investments in patient safety. This benefits patients and medical providers alike.³

¹ See Patricia M. Danzon, *Liability for Medical Malpractice* (discussing evidence that patients suffer more than 150,000 iatrogenic fatalities annually, more than half of which were caused by medical negligence), in 1 HANDBOOK OF HEALTH ECONOMICS 1339, 1351 (Anthony J. Culyer & Joseph P. Newhouse eds., 2000); see also *infra* Section I.A (discussing the rate of medical error and its causes).

² *Id.* at 1351-52.

³ See Jennifer Arlen & W. Bentley MacLeod, *Torts, Expertise, and Authority: Liability of Physicians and Managed Care Organizations*, 36 RAND J. ECON. 494, 507-11 (2005) (arguing that malpractice liability can be used to induce medical providers to invest optimally to reduce medical error); *infra* note 45 (discussing empirical evidence).

In its current form, however, medical malpractice liability is not as effective as it could be. It must be reformed. This raises two questions: (1) what is the best process for reforming the system, and (2) what provisions should be included in any state-adopted reforms?

At present, a heated battle rages between proponents of two opposing answers to these questions. One group seeks to reform malpractice liability from within.⁴ The other wants to replace malpractice liability with liability imposed by contracts executed between patients and medical providers, either individual medical providers⁵ or health insurers.⁶

⁴ See *infra* note 19.

⁵ See, e.g., RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE* ch. 14 (2008) (asserting that patients should be permitted to contract over liability); Richard A. Epstein, *Contractual Principle Versus Legislative Fixes: Coming to Closure on the Unending Travails of Medical Malpractice*, 54 DEPAUL L. REV. 503, 505 (2005) [hereinafter Epstein, *Contractual Principle*] (asserting that it is a fundamental error to treat malpractice reform as a tort problem because “designing a governance regime calls for a contractual response”); Richard A. Epstein, *Medical Malpractice, Imperfect Information, and the Contractual Foundation for Medical Services*, 49 LAW & CONTEMP. PROBS. 201, 202 (1986) (arguing in favor of contractual malpractice liability); Richard A. Epstein, *Medical Malpractice: The Case for Contract*, 1 AM. B. FOUND. RES. J. 87, 94-95, 149 (1976) (contending that contractual physician liability is the superior approach to medical liability); Clark C. Havighurst, *Private Reform of Tort-Law Dogma: Market Opportunities and Legal Obstacles*, 49 LAW & CONTEMP. PROBS. 143, 161-62 (1986) (claiming that a larger role for private agreements in the determination of physician liability would benefit all parties involved); Glen O. Robinson, *Rethinking the Allocation of Medical Malpractice Risks Between Patients and Providers*, 49 LAW & CONTEMP. PROBS. 173, 198 (1986) (explaining why medical malpractice liability should be governed by contract); see also Keith N. Hylton, *Agreements to Waive or to Arbitrate Legal Claims: An Economic Analysis*, 8 SUP. CT. ECON. REV. 209, 263 (2000) (insisting that parties to consensual relationships should be allowed to contract over liability).

⁶ See, e.g., CLARK C. HAVIGHURST, *HEALTH CARE CHOICES* 265-302 (1995) (advocating contractual MCO liability for physician negligence); Patricia M. Danzon, *Tort Liability: A Minefield for Managed Care?*, 26 J. LEGAL STUD. 491, 493-94 (1997) (supporting limited contractual liability for MCOs); Clark C. Havighurst, *Vicarious Liability: Relocating Responsibility for the Quality of Medical Care*, 26 AM. J.L. & MED. 7, 8 (2000) [hereinafter Havighurst, *Vicarious Liability*] (asserting that MCOs should be liable for all medical malpractice committed by healthcare providers but should be allowed to alter or eliminate this liability by contract); William M. Sage, *Enterprise Liability and the Emerging Managed Health Care System*, 60 LAW & CONTEMP. PROBS. 159, 208 (1997) (arguing that Congress should impose contractual liability for medical negligence on MCOs); see also PAUL H. RUBIN, *TORT REFORM BY CONTRACT* 75-77 (1993) (advocating patient contracting over malpractice damage awards through health insurers); THALER & SUNSTEIN, *supra* note 5, at 212-13 (suggesting that insurers should be allowed to contract with patients over physician liability for negligence); Richard A. Epstein & Alan O. Sykes, *The Assault on Managed Care: Vicarious Liability, ERISA Preemption, and Class Actions*, 30 J. LEGAL STUD. 625, 644-48 (2001) (arguing that states should allow MCOs to limit liability by contract).

Proponents of contractual liability assert that all patients would benefit if states allowed patients to contract over liability because some patients would benefit from the right to contract and none would be hurt, as long as contracting is voluntary and patients know the expected benefits and costs of liability. Proponents' claim that informed patients⁷ cannot be hurt by contracting over malpractice liability rests on the assumption that patients obtain the full benefit of state-imposed liability, and bear the same cost, when they impose liability by contract. Thus, any informed patient who would have derived a net benefit from state-imposed liability would impose the same liability rule by contract and obtain the same net benefit. Only those patients who would not have been well served by state-imposed liability would use their right to contract to alter or eliminate liability. Contracting would allow these patients to select a liability rule that they prefer.⁸

The claim that informed patients would be unambiguously better off if allowed to contract over liability has won the day with many scholars. Indeed, even most opponents of contractual liability accept the proposition that informed rational patients cannot be hurt by the right to contract over liability;⁹ they focus their objections on information or behavioral problems¹⁰ that proponents claim do not, or need not, exist.¹¹ Embracing proponents' view, a growing number of scho-

⁷ Throughout this Article, the term "informed patients" is used to refer to patients who are informed about the costs and benefits of imposing liability by contract. They are not informed about each individual medical provider's risk of medical error, however. This Article assumes that patients are informed about the costs and benefits of malpractice liability in order to evaluate proponents' claim that contractual liability enhances patients' welfare when patients make rational, informed, contract choices. This Article shows that even in this favorable situation, contractual liability is not efficient.

⁸ For a summary of the conventional economic case for contract, see PAUL C. WEILER, *MEDICAL MALPRACTICE ON TRIAL* 96 (1991). For an exposition of the claim that contracting over liability would allow patients to adopt rules that achieve the balance between cost and quality for which they are willing to pay, see Epstein, *Contractual Principle*, *supra* note 5, at 507-09.

⁹ See *infra* Section II.B.

¹⁰ See, e.g., Tom Baker & Timothy Lytton, *Allowing Patients to Waive the Right to Sue for Medical Malpractice: A Response to Thaler and Sunstein*, 104 NW. U. L. REV. (forthcoming 2010) (manuscript at 5-12) (observing that behavioral biases may undermine patients' ability to contract effectively on their own behalf).

¹¹ See, e.g., Epstein & Sykes, *supra* note 6, at 647-48 (claiming that MCO contractual liability would not be plagued by serious information problems); see also J. Mark Ramseyer, *Products Liability Through Private Ordering: Notes on a Japanese Experiment*, 144 U. PA. L. REV. 1823, 1825 (1996) (arguing that the claim that consumers are not sufficiently informed to contract over products liability is empirically "questionable"); Alan Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis*, 97 YALE L.J. 353, 378-84 (1988).

lars—including some in the current administration—promote the idea that patients should be allowed to contract over liability.¹² The most ardent proponents want states to delegate the entire task of reforming malpractice liability to contract by allowing patients and their individual medical providers to contract for the reforms they prefer.¹³ More moderate proponents want contracting to be a component of state-adopted malpractice liability reform, contending that states should reform malpractice by imposing liability for all actionable errors on Managed Care Organizations (MCOs)¹⁴ and then permit MCOs to contract with patients to alter or eliminate liability.¹⁵

Notwithstanding scholars' widespread acceptance of the core economic argument for contractual liability, proponents have never demonstrated the validity of their foundational claim that informed patients necessarily benefit from the right to contract over malpractice liability. Specifically, they have never shown that (1) informed patients will contract for optimal liability reforms or that (2) no informed patient would be worse off under contractual liability because informed patients can get as much benefit from contractual liability as they can from liability imposed by the state by fiat.

This Article employs economic analysis to assess the validity of proponents' claims that patients necessarily benefit from the right to contract over malpractice liability and its reform, provided they know the costs and benefits of imposing liability. It shows that these claims are incorrect. Informed patients¹⁶ would not necessarily use the right to contract to adopt optimal liability reforms. Moreover, a state adopting effective liability reforms would hurt citizens who benefit from state-imposed liability if it allowed them to contract out of it.

As proponents recognize, informed patients necessarily benefit from the right to contract only if patients have optimal incentives to contract over liability. This implies that patients must obtain the same benefit, at the same cost, when they impose liability by contract as they

¹² Recent scholars to embrace contractual malpractice liability include Cass Sunstein. See THALER & SUNSTEIN, *supra* note 5, at 212-13. Courts also now enforce clauses requiring mandatory arbitration of medical claims; these clauses affect expected liability. See Carol A. Crocca, Annotation, *Arbitration of Medical Malpractice Claims*, 24 A.L.R.5TH 1, 47-52 (1994).

¹³ See, e.g., Epstein, *Contractual Principle*, *supra* note 5, at 509.

¹⁴ This Article defines an MCO as any insurer that attempts to influence the quality of care selected either directly, through utilization review, or indirectly, through financial incentives provided to physicians to cut costs (e.g., capitation).

¹⁵ See sources cited *supra* note 6.

¹⁶ See *supra* note 7.

could get from liability imposed by a welfare-maximizing state by fiat.¹⁷ Contractual liability proponents have always assumed that this requirement is met. This Article shows that it is not. Informed patients get less benefit, at a higher cost, from contractual liability than from state-imposed liability as a result of a host of inefficiencies plaguing malpractice liability contracts. These inefficiencies, which include collective goods problems, time-inconsistency problems, adverse selection, and network externalities, lower the benefit and increase the cost to patients of contractual liability relative to state-imposed liability.

Contractual liability proponents assume that each patient obtains the same net benefit from a liability rule whether it is imposed by fiat or by contract because they assume that contracting simply increases the choices available to patients without altering value of liability to patients. This assumption is incorrect. Contractual liability is a materially different form of liability than state-imposed liability, with different benefits and costs. Traditional malpractice liability is imposed collectively and automatically by all patients on all providers throughout time. By contrast, contractual liability is imposed by individual patients on a specific set of providers at the moment of contracting, and only by request. These structural differences affect the benefit to patients of imposing liability because both investments in medical care and malpractice liability are collective goods; they also affect current and future patients. By contrast, contractual liability is not imposed collectively—it only reaches a subset of current providers, and only as of the moment of contract. Moreover, all else being equal, the cost to patients of liability is lower when it is imposed automatically by the state than when patients must contract into it because medical providers contracting for liability would charge an inefficiently high price for it as a result of adverse selection.¹⁸ Thus, patients can more effectively use liability to regulate quality investments that are collective goods, made across multiple time periods, by current and future providers, when the state imposes collective liability on all providers, than when they must contract for liability.

¹⁷ See Robinson, *supra* note 5, at 183-84 (positing that the case for contract depends on whether “in general, private parties are likely to achieve results that are at least as good and fair for themselves as would be achieved by paternalistic intervention”); see also HAVIGHURST, *supra* note 6, at 266 (arguing that there seems “to be a strong inducement for consumers and providers jointly to discover and to agree on rules and procedures that reduce the uncertainty, complexity, and volume of litigation”).

¹⁸ For a discussion of adverse selection, see *infra* Section III.C and Part IV.

To establish that patients do not have optimal incentives to contract over malpractice liability, this Article considers two leading proposed forms of contracting over liability. It first considers proposals to permit patients to negotiate liability contracts with individual medical providers when patients seek medical services, evaluating both the claim that patients would contract into optimal reforms and the claim that patients would benefit if allowed to contract around state-adopted reforms. This Article then considers proposals to allow a form of collective contracting over liability, under which MCOs would bear any malpractice liability imposed and would present health insurance subscribers with health insurance contracts governing their right to sue for medical malpractice.

This Article first demonstrates that states cannot rely on individual contracting over liability to achieve optimal malpractice liability reform because patients will not contract individually to adopt optimal reforms. This is because many optimal reforms are valuable only if adopted by most patients simultaneously. The value of reforms, such as hospital liability and MCO liability, depends on their collective adoption because they are designed to use the collective threat of liability to induce medical entities to make substantial investments and fundamental structural reforms that reduce the risk to all of their patients of being injured by medical error. For example, hospitals held liable for all medical errors on site would substantially improve their provider monitoring, supervision, health care technology, and administrative systems—to the benefit of all hospital patients.¹⁹ State-imposed medical-entity liability would produce these deterrence benefits, with each patient benefiting from the collective safety investments produced by the threat of liability to other patients. By contrast, patients would not reap equivalent benefits from contracting individually to impose liability on a hospital. This is because hospitals will not invest as much in error-reducing structural reforms and health care

¹⁹ There have been many proposals for medical-entity liability. See, e.g., Kenneth S. Abraham & Paul C. Weiler, *Enterprise Medical Liability and the Evolution of the American Health Care System*, 108 HARV. L. REV. 381, 398-414 (1994) (proposing hospital enterprise liability for medical error); Jennifer Arlen & W. Bentley MacLeod, *Malpractice Liability for Physicians and Managed Care Organizations*, 78 N.Y.U. L. REV. 1929, 1961-79 (2003) (favoring MCO liability for both their own negligence in making treatment decisions and physician negligence); Michelle M. Mello & Troyen A. Brennan, *Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform*, 80 TEX. L. REV. 1595, 1623-26 (2002) (arguing in favor of hospital enterprise liability created by requiring hospitals to pay for and provide malpractice liability insurance to their affiliated physicians); and Sage, *supra* note 6, at 164-69, 206-09 (discussing the benefits of MCO liability for medical malpractice).

technology in response to the threat of liability to one patient as they would if subject to potential liability to all of their patients. Moreover, individual contracting over reforms such as hospital liability would be plagued by a free-rider problem because hospitals tend to standardize systemic safety practices, such as administrative systems and protocols, across all patients. Thus, each informed patient contracting over liability would have an incentive to reduce her costs by eschewing hospital liability, safe in the knowledge that if other patients imposed it she would benefit from the resulting systemic safety improvements even if she does not contract for medical-entity liability. Accordingly, contracting is not an optimal mechanism for reforming malpractice liability because even when every patient would value hospital liability if it were collectively imposed, each patient contracting over liability nevertheless might rationally elect not to reform liability through individual contracts. Thus, states cannot rely on contracting over liability to reform malpractice liability.

This Article next considers the separate claim that states that adopt optimal malpractice liability reforms could only benefit their informed citizens by allowing patients to negotiate liability contracts with their individual providers. This Article shows that this claim also is incorrect. Patients who benefit from state-imposed liability are worse off when allowed to contract individually over liability, even when they are informed, because individual negotiable contracting reduces the value and increases the cost to patients of any liability imposed. As a result, patients get less benefit from any liability they impose. Moreover, contracting would create inefficient incentives for patients to waive liability.

Patients get less benefit from the right to impose liability through individual negotiated contracts than from liability imposed by the state. This is because a primary goal of liability is to induce medical providers to invest in their capacity to select and provide proper care, which hereinafter is referred to as expertise. These investments in expertise produce collective benefits, reducing the risk of error for most, if not all, of a provider's patients; moreover, they often are cost-justified only in light of this collective benefit. The state can induce providers to make cost-effective investments in expertise by imposing optimal liability by fiat.²⁰ This liability benefits each patient by reducing her risk of medical error. Patients do not achieve an equivalent reduction in their risk of error when they impose liability individually,

²⁰ See Arlen and MacLeod, *supra* note 19, at 1982-83.

however, because a provider will not make the same investment in expertise and other types of collective care in response to the threat of liability to one patient as when faced with liability to all patients. Indeed, an individual patient may not be able to produce a sufficient threat of liability to induce *any* material investments in collective care. Moreover, each patient can waive liability without losing the benefit of any collective safety investments induced by the threat of liability to other patients. As a result, under contractual liability, patients who would have benefited from state-imposed liability would face strong incentives to waive liability, to their detriment.²¹

Patients required to obtain liability through individual negotiable contracts would lose another benefit of state-imposed liability. State-imposed liability can be used to give medical providers incentives to make durable investments in care for the benefit of future patients. By contrast, patients required to impose liability through negotiable individual contracts would be unable to use the threat of future liability to induce providers to make precontractual investments in care. This lost benefit would increase the likelihood that contracting would lead patients to sign inefficient liability waivers.²²

Finally, individual contracting over liability could harm patients by increasing the cost to them of imposing liability. Instead of setting the price for liability at the expected cost of bearing liability to this patient or to the average patient, providers would price liability at the cost of bearing liability to the type of patients they expect to select liability contracts. The group of patients who prefer liability can be expected to include a disproportionate percentage of the patients who impose higher-than-average liability costs, however, since these patients derive

²¹ See *id.* at 2003-04.

²² *Infra* Section III.B; see also Jennifer Arlen, *Private Contractual Alternatives to Malpractice Liability*, in *MEDICAL MALPRACTICE AND THE U.S. HEALTH CARE SYSTEM* 245, 257 (William M. Sage & Rogan Kersh eds., 2006). Renegotiation also undermines patients' ability to use contractual liability to regulate the moral hazard problem. See Arlen & MacLeod, *supra* note 19, at 2002 (explaining that patients and providers cannot use renegotiable contractual liability to induce physicians to make efficient nonverifiable investments in postcontractual care because providers know that patients will waive liability after providers decide how much to invest); Abraham Wickelgren, *The Inefficiency of Contractually-Based Liability with Rational Consumers*, 22 *J.L. ECON. & ORG.* 168, 173-75 (2006) (showing that contracting over products liability is inefficient if consumers are able to waive liability after the producer has invested in quality, because consumers' incentives to waive once investments are fixed will result in producers underinvesting in product quality in anticipation of liability being waived); see also Drew Fudenberg & Jean Tirole, *Moral Hazard and Renegotiation in Agency Contracts*, 58 *ECONOMETRICA* 1279, 1280 (1990) (finding that the ability to renegotiate a contract undermines the principal's ability to use incentive contracts to induce agents to invest in effort postcontract).

a disproportionate benefit from the right to impose liability. Accordingly, providers would charge each patient more for the right to impose liability by contract than they would charge for state-imposed liability because they expect that patients who seek out the right to impose liability will be more likely to use it.²³ This surcharge is not efficient, however, because it also would fall on low-liability-risk patients who value safety, creating an inefficient incentive for them to reject contractual liability.

The conclusion that individual negotiating over contracting is inefficient raises the question of whether contractual liability can be structured to remedy these problems by making contracting more collective and nonnegotiable. This Article therefore considers the dominant alternative contractual liability proposal under which MCOs would bear all default liability for medical malpractice but could contract over liability with patients by including nonnegotiable standard form clauses governing liability in their health insurance plans.²⁴ This Article shows that MCO contractual liability would enable patients to capture more of the benefits of state-imposed liability. MCO contractual liability nevertheless is inefficient because it would materially increase the costs to patients of imposing liability by severely exacerbating the adverse selection problem.

Contracting between patients and insurers over liability would exacerbate the adverse selection problem because patients who need serious or regular medical care are most likely to value liability, as they face the greatest risk of medical error. Consequently, in order to break even on liability contracts, MCOs would have to price the liability insurance plans to reflect both the cost of liability and the higher expected health care costs of the patients likely to purchase these liability-inclusive insurance plans. This surcharge would harm healthy patients who value liability by forcing them to pay more for liability than is optimal—and more than they would have to pay if the state imposed liability by fiat. This surcharge would force many who would have benefited from state-imposed liability to waive liability altogether. As a result, many patients would obtain lower-quality care than is optimal.

Finally, this Article considers the claim that patients should be allowed to vary the standard of care, even if they cannot contract out of liability, because all patients benefit when each is allowed to contract

²³ See *infra* Section III.C (discussing adverse selection).

²⁴ This Article does not separately consider standard form contracting between patients and physicians because this type of contracting would face all the problems identified in Part IV, as well as additional problems. See *infra* note 123.

for the level of care that reflects her individual willingness to pay for safety. This Article reveals that this claim is incorrect because medical care is characterized by network externalities. Health care delivery is more cost-effective when providers are subject to a relatively common standard of care because standardization facilitates the training and monitoring of physicians, research into best medical practices, and coordination of care across providers. Thus, patients as a whole could be hurt by their individual efforts to alter the standard of care because each patient's effort to obtain the standard of care she prefers could produce more variation in standards than is good for the system, and thus for patients.

Accordingly, this Article demonstrates that contracting over liability, even under the best of circumstances, is neither an effective mechanism for reforming malpractice liability nor a necessarily beneficial component of malpractice liability reform. Instead, informed patients who benefit from liability generally are better off when the state imposes their preferred rule than when they are required to obtain it by contract. Moreover, this Article reveals that, contrary to proponents' claims, contractual liability does not enhance patients' choices. Instead, it would harm patients who value state-imposed liability by forcing them to use a form of liability that provides them lower benefits at greater cost. This suggests that states genuinely interested in their citizens' welfare would likely better serve their citizens by adopting effective malpractice liability reform within the tort system rather than by embracing contracting over liability.

Part I of this Article discusses the standard economic justification for malpractice liability and presents the traditional claim that patients always benefit when they are allowed either to reform liability by contract or to contract out of any reforms adopted by the state. Part II shows that patients negotiating over liability with individual providers would not contract into optimal malpractice liability reforms. Part III demonstrates that states adopting effective reforms would harm patients who benefit from liability if they allowed patients to negotiate over liability with their individual providers. Part IV examines the nonnegotiable collective contracting between patients and MCOs and shows that this form of contractual liability would harm patients because it is plagued by adverse selection. Part V reveals that contracting over the standard of care would produce more variation than is optimal as a result of contracting patients' failure to take adequate account of network externalities. Part VI concludes by discussing the implications of this analysis for malpractice liability reform.

I. THE CLASSIC ECONOMIC ARGUMENT FOR CONTRACTUAL MALPRACTICE LIABILITY

Patients receiving medical care face a serious risk of being severely injured or killed by medical error.²⁵ Medical error causes enormous human suffering and significantly increases health care costs. Preventable medical error is estimated to cost about \$17 to \$29 billion per year.²⁶ Injuries to hospital patients resulting from medical negligence impose average additional costs of approximately \$1246 per patient admission.²⁷

Medical error is not only devastating and expensive, but also largely avoidable. Physicians and hospitals could dramatically curtail medical error by making additional cost-effective investments in patient safety—including greater physician investment in expertise, as well as greater hospital investment in improved administrative systems and oversight of residents and interns.²⁸ Yet, hospitals and physicians will not invest adequately in patient safety of their own accord. States must intervene to induce them to make these investments.

States can use the threat of liability for medical negligence to induce medical providers to reduce the risk of medical error. Yet to do so effectively, states must reform existing malpractice liability laws. This raises the questions of what process states should use to reform malpractice liability and what provisions these reforms should include.

Proponents of contractual liability assert that contract holds the answer to both questions. They claim that states can rely on patients to adopt optimal reforms by contract. They also claim that states that

²⁵ See Danzon, *supra* note 1, at 1351.

²⁶ See INST. OF MEDICINE, *TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM* 27 (Linda T. Kohn et al. eds., 2000) [hereinafter *TO ERR IS HUMAN*].

²⁷ Michelle M. Mello et al., *Who Pays for Medical Errors? An Analysis of Adverse Event Costs, the Medical Liability System, and Incentives for Patient Safety Improvement*, 4 J. EMPIRICAL LEGAL STUD. 835, 847 (2007); see also Chunliu Zhan & Marlene R. Miller, *Excess Length of Stay, Charges, and Mortality Attributable to Medical Injuries During Hospitalization*, 290 JAMA 1868, 1872 (2003) (finding that hospital errors result in excess national health care costs of almost \$5 billion per year).

²⁸ See PAUL C. WEILER ET AL., *A MEASURE OF MEDICAL MALPRACTICE: MEDICAL INJURY, MALPRACTICE LITIGATION, AND PATIENT COMPENSATION* 42-44, 137-39 (1993) (identifying both inadequate physician expertise and institutional problems in hospitals as leading causes of medical error); Lori Andrews, *Studying Medical Error in Situ: Implications for Malpractice Law and Policy*, 54 DEPAUL L. REV. 357, 363 (2005) (finding that many medical errors are attributable to individuals, as well as to factors under the control of hospitals); Michelle M. Mello & David M. Studdert, *Deconstructing Negligence: The Role of Individual and System Factors in Causing Medical Injuries*, 96 GEO. L.J. 599, 620 (2008) (same); *infra* Section I.A.

reform malpractice directly should include a provision allowing patients to contract around or out of liability, thereby transforming malpractice liability into a set of default rules.

This Part discusses the causes of medical error and explains how malpractice liability benefits patients by inducing providers to make cost-effective investments in care. It then presents the standard economic argument for contractual liability, which is based on economic analyses of contracting over products liability. Finally, this Part identifies reasons to question the validity of this economic case for contract as applied to contractual malpractice liability.

A. *Causes of Medical Error and the Goals of Malpractice Liability*

Malpractice liability benefits both patients and providers when used to induce doctors and hospitals to invest in cost-effective measures designed to reduce the risk of error. By giving medical providers incentives to invest optimally in patient safety, well-designed malpractice liability enables providers to promise to deliver, and thus to charge for, the quality of care that patients want to receive.²⁹

Malpractice liability is needed because patients face a substantial unobservable and preventable risk of being injured by medical error. This risk is not limited to patients who seek treatment from incompetent physicians. In fact, most medical errors—including those that result in serious injury and death—are caused by otherwise competent medical providers who err accidentally.³⁰ These errors, while accidental, are not inevitable. Studies have found that patients often are injured because their physicians did not know the proper diagnosis or treatment or were not technically competent to perform the procedure safely.³¹ Physicians could substantially reduce patients' risk of be-

²⁹ See Arlen & MacLeod, *supra* note 3.

³⁰ At one point, people assumed that most medical errors were caused by a few bad doctors. Empirical analyses consistently refute this “bad apple” view of medical error. See, e.g., John E. Rolph et al., *Identifying Malpractice-Prone Physicians*, 4 J. EMPIRICAL LEGAL STUD. 125, 150 (2007). Accordingly, even if the medical community were able to police its members adequately, this regulation would not eliminate the primary causes of medical error.

³¹ See Andrews, *supra* note 28, at 390 fig.3 (showing that almost 38% of medical errors in a Chicago hospital were at least partially attributable to individual error resulting from poor technical performance, poor judgment, or the failure to obtain or act on information, and that a substantial percentage of these errors were also caused by inadequate training or supervision); Mello & Studdert, *supra* note 28, at 606 tbl.1 (finding 48% of medical errors producing a claim were attributable, at least in part, to the physician's lack of technical competence or knowledge and that 57% were attributable to a failure of vigilance or memory); see also ATUL GAWANDE, COMPLICATIONS

ing injured by medical error by investing more in their capacity to provide quality care—for example, by investing more in the expertise and health care technology needed to properly diagnose patients, select treatments, and perform procedures without error.³²

Hospitals also could better protect patients. Studies have found that between four and eighteen percent of hospital patients are the victims of medical errors, many of which cause serious injuries.³³ Nearly sixty percent of these errors are attributable to systemic problems under the hospital's control,³⁴ including inadequate supervision of medical personnel.³⁵ These systemic problems include inadequate procedures for transferring responsibility for patients, inadequate staffing, inadequate provider oversight, and inadequate health care

197-98 (2002) (describing the findings of three studies where autopsies of patients who died in the hospital revealed that 40% were misdiagnosed and that one-third of these patients would have been expected to live if properly diagnosed and treated); JEROME GROOPMAN, *HOW DOCTORS THINK* 24 (2007) (noting evidence suggesting that 10-15% of physicians' diagnoses are wrong); Elizabeth A. McGlynn et al., *The Quality of Health Care Delivered to Adults in the United States*, 348 *NEW ENG. J. MED.* 2635, 2641 (2003) (showing that patients on average receive only about 55% of recommended care); Mark A. Schuster et al., *How Good Is the Quality of Health Care in the United States?*, 76 *MILBANK Q.* 517, 521 (1998) (finding that, for chronic conditions, only "60 percent [of patients] received recommended care and 20 percent received contraindicated care").

³² See *TO ERR IS HUMAN*, *supra* note 26, at 4; WEILER ET AL., *supra* note 28, at 9-10; Andrews, *supra* note 28, at 387; Mello & Studdert, *supra* note 28, at 617.

³³ The lowest estimate of hospital error is based on the Harvard Medical Malpractice Study, which examined written hospital records for medical error and used a conservative standard for detecting error. See WEILER ET AL., *supra* note 28, at 43 (finding that 3.7% of the hospitalized patients studied were injured by the medical treatment they received); *infra* note 75 (discussing this study). A subsequent study employing on-site observation of hospital error found that almost 18% of hospital patients were the victims of at least one error sufficiently serious to prolong their hospital stay. Many of these errors were not recorded in the hospital's written records. See Andrews, *supra* note 28, at 362; see also Robert H. Brook et al., *Effectiveness of Nonemergency Care Via an Emergency Room*, 78 *ANNALS INTERNAL MED.* 333, 337 (1973) (finding that only 25% of patients seeking care in an emergency room received at least "minimally adequate medical care"); Knight Steel et al., *Iatrogenic Illness on a General Medical Service at a University Hospital*, 304 *NEW ENG. J. MED.* 638, 639 (1981) (finding that 9% of 815 patients were harmed by medical error that was either life threatening or produced disability).

³⁴ See Mello & Studdert, *supra* note 28, at 605 (showing that 56% of errors where claims were filed had systemic causes, usually in addition to individual causes); see also Andrews, *supra* note 28, at 362-63 (finding that hospital practices, including administrative systems, are important contributing causes of medical error).

³⁵ See Mello & Studdert, *supra* note 28, at 606 tbl.1 (finding that inadequate supervision was a contributing cause of 20% of the medical errors that resulted in claims).

technology.³⁶ Hospitals also affect physicians' error rates through their rules governing the work hours of their interns and residents.³⁷

Hospitals could significantly improve patients' health by reducing medical error. Evidence suggests that improving hospital safety also could reduce medical costs by decreasing expenditures on medical interventions necessitated by medical error. The potential savings is evident in findings that hospitals with the lowest error costs impose only \$42 in error-related costs per patient admission, whereas those with the highest error costs impose expected error costs of \$4769 per patient admission.³⁸ Overall, the average patient admitted bears a cost of more than \$1240 due to errors attributable to hospital medical management.³⁹ Thus, many hospitals could save lives and lower health care costs by reducing the risk of error.⁴⁰

Physicians and hospitals do not invest adequately in patient safety unless they are held liable for their medical errors. Without effective malpractice liability, providers underinvest in safety because, absent liability, providers can lower their costs by reducing safety investments without ultimately paying the full burden of the resulting increase in error.⁴¹

Market forces do not ensure that providers bear the costs of patient injuries because patients do not have accurate information about

³⁶ Hospitals also can decrease error by investing in health care technology, such as computerized physician order entry systems that reduce drug errors. See GAWANDE, *supra* note 31, at 63. In addition, U.S. hospitals could substantially reduce deadly hospital-induced infections by adopting better procedures akin to those used in Europe, where hospitals have nearly eliminated the risk of hospital-acquired, antibiotic-resistant staphylococcus. See Kevin Sack, *Swabs in Hand, Hospital Cuts Deadly Infections*, N.Y. TIMES, July 27, 2007, at A1.

³⁷ Physician exhaustion produced by long hospital shifts is a known cause of medical error. See Drew Dawson & Kathryn Reid, *Fatigue, Alcohol and Performance Impairment*, 388 NATURE 235, 235 (1997) (finding that people kept awake for 24 hours suffered a deficit in cognitive psychomotor performance "equivalent to the performance deficit observed at a blood alcohol concentration of roughly 0.10%"); Christopher P. Landrigan et al., *Effect of Reducing Interns' Work Hours on Serious Medical Errors in Intensive Care Units*, 351 NEW ENG. J. MED. 1838, 1842 (2004) (finding that interns on the traditional extended schedule made 35.9% more "serious medical errors" than did interns on a lighter schedule).

³⁸ See Mello et al., *supra* note 27, at 847.

³⁹ *Id.*

⁴⁰ See *id.* at 836 (noting the "strong business [rationale]" for investing in safety improvements); see also Danzon, *supra* note 1, at 1353-54 (describing a study finding that hospitals vary widely in their error rates, with some having a negligent-error rate of only 1% and others having a negligent-error rate of 60%—a disparity that could not be entirely explained by differences in illnesses and patient populations).

⁴¹ See Mello et al., *supra* note 27, at 837-38 (finding that hospitals do not bear the cost of the extra medical care required by medical errors attributable to them).

differences in provider quality.⁴² Thus, patients' demand and willingness to pay for physicians' services do not adjust to reflect differences in expected outcomes. In addition, patients' welfare depends on their providers' investments in quality postcontract, after the patients have selected the provider.⁴³ Accordingly, absent liability, hospitals and physicians do not face a sufficient penalty for excessive error to induce them to invest optimally in patient safety.⁴⁴

⁴² Most patients believe that physicians and hospitals do not differ significantly in the quality of care they provide because they believe that health care regulation has eliminated any significant differences in physician or hospital quality. Jacquelyn J. Jewett & Judith H. Hibbard, *Comprehension of Quality Care Indicators: Differences Among Privately Insured, Publicly Insured, and Uninsured*, 18 HEALTH CARE FINANCING REV. 75, 90 (1996); see also KAISER FAMILY FOUND. & AGENCY FOR HEALTH CARE RESEARCH & QUALITY, NATIONAL SURVEY ON AMERICANS AS HEALTH CARE CONSUMERS: AN UPDATE ON THE ROLE OF QUALITY INFORMATION, at Summary § 1 (2000) (finding that only 47% of patients believed that there were big differences in the quality of care between local hospitals); cf. Mark R. Chassin et al., *Benefits and Hazards of Reporting Medical Outcomes Publicly*, 334 NEW ENG. J. MED. 394, 394-95 (1996) (showing that public reporting of evidence identifying higher-risk physicians and hospitals did not affect patients' willingness to seek services from these providers). Patients' belief that provider quality is constant stands in contrast with empirical evidence that licensed medical providers differ significantly in the quality of care they deliver. See *supra* text accompanying notes 38-40 (discussing the variation in error rates across providers).

⁴³ Arlen & MacLeod, *supra* note 3, at 510-12 (showing that, absent liability, physicians underinvest in postcontractual care).

⁴⁴ See *id.* at 507-08 (showing that, absent liability, even compassionate physicians have an incentive to underinvest in patient safety); see also Michael Spence, *Consumer Misperceptions, Product Failure and Producer Liability*, 44 REV. ECON. STUD. 561, 563-64 (1977) (showing that liability is needed to induce producers to invest optimally in product quality if consumers underestimate product risks).

Malpractice liability is needed notwithstanding recent efforts to provide patients with better information about providers' quality because current disclosure policies tend to be quite limited. For example, most disclosure policies only inform patients whether a provider (e.g., a hospital) follows specific safety practices and do not disclose patient outcomes. See, e.g., Leslie P. Kernisan et al., *Association Between Hospital-Reported Leapfrog Safe Practices Scores and Inpatient Mortality*, 301 JAMA 1341, 1348 (2009) (finding that higher Leapfrog safe practice scores were not associated with significant risk-adjusted decreases in inpatient mortality in the 1075 hospitals that completed Leapfrog's 2006 Safe Practices Survey); see also Meredith B. Rosenthal & R. Adams Dudley, *Pay-for-Performance: Will the Latest Payment Trend Improve Care?*, 297 JAMA 740, 741 tbl. (2007) (showing that 91% of pay-for-performance "programs target clinical quality measures," while only 37% "include patient satisfaction measures"). This limited disclosure does not provide incentives for providers to invest in safety measures that are not subject to disclosure requirements. See Peter K. Lindenauer et al., *Public Reporting and Pay for Performance in Hospital Quality Improvement*, 356 NEW ENG. J. MED. 486, 486 (2007) (finding that patient outcomes are better when hospitals have direct financial incentives to avoid poor outcomes than they do when hospitals only voluntarily report information about quality).

When properly designed, medical malpractice liability can be used to redress this market failure.⁴⁵ Effective malpractice liability enhances the welfare of patients and providers alike by giving providers a direct financial incentive to make cost-effective investments in patient safety, even when patients cannot observe quality differences among providers.⁴⁶ These investments include investments in expertise, administrative systems, and health care technology designed to reduce providers' risk of accidentally harming patients. Many of these investments benefit both current and future patients. A well-designed malpractice liability system that induces these investments could save both lives and billions of dollars. These benefits compare favorably with the costs of liability, which run about one to two percent of total

⁴⁵ See Arlen & MacLeod, *supra* note 3, at 503-04 (showing that physicians will invest optimally in patient safety and MCOs will make optimal decisions regarding utilization review if each is subject to optimal medical malpractice liability); see also Abraham & Weiler, *supra* note 19, at 410-11 (arguing that hospital enterprise liability could provide effective incentives for hospitals and physicians to reduce medical error); Havighurst, *supra* note 6, at 27 (claiming that MCO tort liability will improve incentives to take care by shifting focus from cost control to overall efficiency).

Empirical evidence suggests that liability and other financial sanctions for bad outcomes can improve the quality of medical care patients receive. See, e.g., Janet Currie & W. Bentley MacLeod, *First Do No Harm? Tort Reform and Birth Outcomes*, 123 Q.J. ECON. 795, 797 (2008) (finding that caps on noneconomic damages increase complications in labor and delivery, as would be expected if liability deters procedures that increase risk); Lindenaue et al., *supra* note 44, at 486 (finding that hospitals provide superior quality care when given direct financial incentives to avoid bad outcomes); see also TOM BAKER, *THE MEDICAL MALPRACTICE MYTH* 108-10 (2005) (explaining how the high malpractice liability costs of the 1980s induced the American Society of Anesthesiologists to adopt reforms that reduced death rates from anesthesia to four per one million patients—lowering malpractice liability insurance rates substantially); Danzon, *supra* note 1, at 1341 (“The limited empirical evidence of provider response to liability and the deterrent effect of claims suggests—but cannot prove—that the net benefits of the malpractice system may plausibly be positive.”); cf. Mello & Brennan, *supra* note 19, at 1604-05 (presenting evidence that malpractice liability may improve hospitals' safety records, but noting that the evidence on liability's deterrent effect is mixed).

⁴⁶ Evidence suggests that malpractice liability is sufficiently accurate to achieve its deterrence goals if properly designed. See, e.g., David M. Studdert et al., *Claims, Errors, and Compensation Payments in Medical Malpractice Litigation*, 354 NEW ENG. J. MED. 2024, 2028 fig.1 (2006) (providing evidence that 82% (653/798) of the malpractice claims in which patients received a payment involved injuries attributable to medical error). See generally BAKER, *supra* note 45, at 83-87 (discussing empirical evidence on litigation accuracy); Arlen & MacLeod, *supra* note 19, at 1933 (examining the optimal scope of physician and MCO negligence liability for medical malpractice); Philip G. Peters, Jr., *What We Know About Malpractice Settlements*, 92 IOWA L. REV. 1783, 1803-05 (2007) (presenting empirical evidence suggesting that settlement outcomes are driven by the strength of a plaintiff's case); *infra* note 75 (discounting claims that malpractice liability is random).

health care costs⁴⁷—amounting to a surcharge of about \$10 to \$20 on the annual health care costs of a patient spending \$1000 per year on health care.

Unfortunately, malpractice liability cannot achieve its full deterrence potential unless it is reformed.⁴⁸ This observation raises two questions. First, what is the best way to achieve malpractice liability reform: Should state courts and legislatures implement needed reforms, or should states delegate authority over malpractice reform to patients by allowing them to contract over liability with medical providers? Second, what provisions should these reforms contain; specifically, should states reforming malpractice liability permit patients to contract out of it?

B. *The Traditional Economic Argument for Contracting over Malpractice Liability*

Contractual liability proponents argue that contracting holds the answers to both questions, claiming that states should allow patients and medical providers to adjust the malpractice liability rules that govern their relationship by contract.

The strongest proponents claim that states should use contracting over liability as the primary mechanism for reforming malpractice liability. Specifically, they argue that states can best reform malpractice liability by allowing patients to contract over liability.⁴⁹ These proponents believe that contracting is an effective reform mechanism because they assume that patients internalize all the costs and benefits of malpractice liability, and its reform, when they impose it by contract. They thus conclude that informed patients have optimal incentives to impose contractual liability whenever—and in the same form that—a

⁴⁷ See Danzon, *supra* note 1, at 1343 (“Malpractice [liability insurance] premiums account for roughly 1% of total health care spending, hence are not a significant contributor to the level or growth of health care costs.”); BAKER, *supra* note 45, at 40 (same); Paul C. Weiler, *The Case for No-Fault Medical Liability*, 52 MD. L. REV. 908, 909 (1993) (“[T]he idea that containing medical liability costs will make any appreciable dent in health care costs is absurd.”). The amount spent on medical malpractice liability premiums is far less (one-fifth to one-tenth the size) than the amount spent on either workers’ compensation or automobile insurance, even though substantially more people are killed by medical malpractice each year than by workplace and automobile accidents combined. See BAKER, *supra* note 45, at 63.

⁴⁸ See *infra* Section II.A (discussing the problems plaguing the current system).

⁴⁹ See, e.g., Epstein, *Contractual Principle*, *supra* note 5, at 505-06; see also Hylton, *supra* note 5, at 209-10.

benevolent state, acting in patients' collective best interests, would do so. Accordingly, state action is not needed.⁵⁰

Other proponents want states to play a role in malpractice liability reform, but claim that malpractice liability reform should include a provision allowing patients to contract over liability, on the grounds that informed patients can only benefit from the right to contract.⁵¹ According to proponents, contractual liability cannot harm informed patients because all informed patients who would have benefited from reformed malpractice liability imposed by the state would contract to retain this liability, for the same benefit and cost as when it was state imposed. The only patients who would contract out of liability are those who would not have fared well under state-imposed liability.⁵²

Proponents' faith in the optimality of contracting has led them to conclude that contractual liability is not just equal to malpractice liability, it is superior to it. According to proponents, contracting has two advantages over mandatory liability. First, contractual liability is superior because it places control over liability with the people (patients and providers) who directly experience—and thus are in a better position to evaluate—the benefits and costs of malpractice liability. Second, contractual liability is superior because it allows liability rules—and thus investments in safety—to vary across patients. Variation is important because patients differ significantly in their willingness (and ability) to pay for safety. Contractual liability allows each patient to contract for the level of care that she is willing and able to pay for. Thus, even states that reform malpractice liability could only benefit patients by allowing them to contract over liability, because contracting would allow those patients who would prefer a different standard of care to obtain it by contract. Contracting could achieve this benefit without imposing costs on informed patients who value

⁵⁰ See Epstein, *Contractual Principle*, *supra* note 5, at 505 (arguing that malpractice liability reform could be best achieved by allowing patients to contract with providers over liability); see also Danzon, *supra* note 6, at 517-18 (criticizing state legislative proposals that would extend liability to all MCOs rather than deferring to contract terms); Epstein & Sykes, *supra* note 6, at 625-27 (arguing against reforms seeking to impose mandatory liability on MCOs on the grounds that any such liability should be contractual); Robinson, *supra* note 5, at 198-99 (claiming that state-imposed liability may not be necessary if private parties are free to determine liability by contract).

⁵¹ See Epstein, *Contractual Principle*, *supra* note 5, at 505-06.

⁵² Proposals for states to adopt entity-level liability while permitting patients and providers to contract around it fall into this category. See *supra* note 6.

state-imposed liability, proponents claim, because these patients can, and will, replicate state-imposed liability and its benefits by contract.⁵³

C. Requirements for Optimal Contracting over Liability

Proponents' claim that states cannot hurt informed patients by giving them the right to contract over liability depends critically on their assumption that each informed patient has optimal incentives to contract into liability. This assumption is satisfied only if two conditions are met. First, patients must obtain the same benefit when they impose liability by contract as they would have gotten had the state imposed their preferred liability regime by fiat. Thus, each patient who imposes liability by contract must produce the same increase in her providers' investments in patient safety as she would obtain if the state imposed the same liability rule by fiat.⁵⁴ Second, providers must

⁵³ For a summary of the conventional economic case for contract, see, for example, PAUL WEILER, *MEDICAL MALPRACTICE ON TRIAL* 96 (1991); Epstein, *Contractual Principle*, *supra* note 5, at 507-08; and Robinson, *supra* note 5, at 183-84.

⁵⁴ Cass Sunstein and Richard Thaler focus their defense of contractual liability on the compensatory role of tort liability and largely ignore deterrence concerns. THALER & SUNSTEIN, *supra* note 5. Yet one cannot assert, as they do, that patients would be better off if allowed to contract over liability without considering the effect of contractual liability on patients' ability to use liability to induce providers to invest in patient safety. Deterrence is particularly important since leading reforms would make malpractice more effective. See sources cited *supra* note 45; *infra* Section II.A; see also Abraham & Weiler, *supra* note 19, at 410-11 (explaining how hospital liability would create better incentives to reduce medical error); Arlen & MacLeod, *supra* note 19, at 1993-95 (showing how MCO liability would reduce medical error). Thus, we should not embrace contractual liability unless proponents can show that it would not hurt patients who would benefit from the deterrence that state-imposed malpractice liability could be designed to provide.

Beyond this, contractual liability is hard to justify solely on compensation grounds. First, for many patients the expected cost of using liability solely to obtain compensation exceeds the expected benefit. Providers subject to liability must charge an additional fee equal to the expected cost to the provider of bearing liability. Were compensation the only effect of liability, the amount that providers would charge for liability would exceed the benefit of liability for the vast majority of patients. The provider's premium would reflect the expected damage award plus her litigation costs, whereas the patient would receive the damage award net of her litigation costs, producing a total load of more than 50%. Moreover, risk averse patients could insure more cheaply through first-party insurance. Thus, states interested only in compensating injured patients could achieve this goal more effectively by adopting no-fault or social insurance for medical error, because liability takes too long and is too expensive to provide patients with effective insurance. See, e.g., Danzon, *supra* note 1, at 1369 (observing that 60 cents of each dollar spent on medical malpractice liability insurance is lost to either litigation costs or administrative expenses, and only 40 cents reaches the patient as compensation; by contrast, 90 cents of each dollar spent on first-party insurance is available for compensation); Mark Geistfeld, *Should Enterprise Liability Re-*

face incentives to charge patients imposing liability an amount equal to the direct cost to the provider of assuming liability—this being the cost to the provider of the increased investment in care induced by liability plus the expected cost of compensation.

Proponents have never shown that contractual malpractice liability satisfies these requirements. They have relied instead on economic analyses of products liability which find that consumers can use contractual liability to obtain the same increase in producers' investment in care, both postcontract and precontract, as would result from identical state-imposed liability.⁵⁵ Proponents of contractual malpractice liability have implicitly assumed that these analyses apply to contracting over medical malpractice liability as well. The validity of this claim depends on whether these classic models capture the essential economic structure of contracting over malpractice liability.

1. Costs of Contractual Versus State-Imposed Liability

Existing analyses of contractual products liability find that patients pay the same price for liability whether it is imposed by contract or by the state. Both types of liability increase producer costs by inducing investments in safety and requiring them to pay compensation to injured victims. Accordingly, whether subject to state-imposed liability or contractual liability, a producer operating in a competitive market passes these costs on to consumers.⁵⁶ Producers do not overcharge for liability, it is assumed, because competitive market forces keep prices equal to marginal cost. Thus, the price for liability, whether imposed

place the Rule of Strict Liability for Abnormally Dangerous Activities?, 45 UCLA L. REV. 611, 627-32 (1998) (arguing that third-party insurance provided through the tort system is more expensive than first-party insurance); cf. Studdert et al., *supra* note 46, at 2026-27 tbl.1 (finding that median defense-side costs in paid claims were \$27,954, which is about 13.5% of the median payment of \$206,400).

⁵⁵ See, e.g., Sanford Grossman, *The Informational Role of Warranties and Private Disclosure About Product Quality*, 24 J.L. & ECON. 461, 463 (1981) (showing that nonnegotiable contracting over warranties can induce producers to invest optimally in product quality, assuming that consumers independently value liability for insurance reasons); George L. Priest, *A Theory of Consumer Product Warranty*, 90 YALE L.J. 1297, 1347 (1981) (showing that market forces will pressure producers to offer full warranties, thereby providing incentives for them to invest optimally in postcontractual quality); Spence, *supra* note 44, at 569-70 (showing that contracting over liability will lead to efficient product markets when producers can use voluntary liability to signal quality); see also Hylton, *supra* note 5, at 222 (presenting a model of contracting over waivers that implicitly assumes that accidents depend only on an injurer's postcontractual decision to take care to benefit one person).

⁵⁶ Patients pay these costs either directly, in the form of higher medical bills, or indirectly, through higher health insurance premiums.

by the state or by contract, equals the cost to the producer of the safety investments induced by liability plus the expected compensation. If this analysis applies to medical markets as well, patients contracting over liability would bear the full cost of liability—and no more than the full cost—whether liability is imposed by contract or by the state.⁵⁷

2. Deterrence Benefits of Contractual Versus State-Imposed Liability

Economic analyses of products liability also find that patients obtain the same benefit from liability whether it is imposed by the state or by contract. They find that liability enables consumers to obtain the same reduction in the risk of injury whether it is imposed by contract or by the state. This conclusion holds even when the risk of injury depends on investments in quality taken precontract, as well as on those taken postcontract.⁵⁸ The economic argument for contractual malpractice liability assumes that these findings can be extrapolated to contracting over malpractice liability, as follows.

a. *Postcontractual Care*

Patients seeking services from a provider benefit when the latter makes cost-effective investments designed to reduce the risk of medical error after agreeing to treat the patient.⁵⁹ State-imposed malpractice liability uses the threat of liability imposed for medical error to give providers a direct financial incentive to make these investments. Contractual liability proponents assume that patients can replicate these incentives to invest in postcontractual care by imposing liability by contract. They reason that medical providers should have the same incentive to invest in safety whether faced with a threat of medical negligence liability imposed by the state or as a result of a contract.⁶⁰

⁵⁷ See Priest, *supra* note 55; Spence, *supra* note 44; see also Hylton, *supra* note 5.

⁵⁸ See sources cited *infra* note 63.

⁵⁹ Postcontractual expertise is important because best medical practices change so quickly that physicians cannot reliably select the right treatment without continually investing in expertise. Cf. Annetine C. Gelijns et al., *Uncertainty and Technological Change in Medicine*, 26 J. HEALTH POL. POL'Y & L. 913, 914 (2001) (noting that "approximately 35% of the 200 largest selling prescription drugs are new each year," and in one year alone the Food and Drug Administration approved approximately 5000 new and modified medical devices).

⁶⁰ See, e.g., Priest, *supra* note 55 (describing the investment theory of contractual liability, in which producers contract to bear liability when they are better able than consumers to reduce product risks); see also Hylton, *supra* note 5 (modeling contractual liability as a solution to producer moral hazard).

b. *Precontractual Care*

Proponents also assume that patients can use contractual liability to induce providers to invest in care precontract. Precontractual care matters because physicians and hospitals dramatically affect expected patient outcomes by investing in their ability to provide error-free care in advance of delivering care. These investments, which include durable investments in expertise, administrative systems, health care technology, and supervision, benefit future patients as well as current ones.⁶¹

Medical caregivers subject to well-designed malpractice liability imposed by the state have every reason to make cost-effective investments in durable care because these investments reduce their future expected liability.⁶² Thus, they will invest in safety measures that are cost-effective in light of their effect on the risk of injury to both current and future patients. Accordingly, state-imposed malpractice liability benefits patients by inducing providers to invest in care precontract, prior to any contractual relationship with the patient.

Proponents assume that contractual liability can replicate this benefit—inducing providers to invest in precontractual care—even though patients do not impose contractual liability until after precontractual investments are fixed. This assumption is based on classic economic analyses of contracting over products liability. Economic analyses of products liability have shown that the right to contract over liability can induce producers to make precontractual investments in care, even when care is unobservable, because producers who do so can use contractual liability to signal that they are of higher quality and thereby obtain a higher price. High-quality providers can signal their quality by offering to bear liability at a price equal to their expected cost of liability whenever low-quality providers cannot mimic this offer without bearing a liability burden that exceeds the benefit of pretending to be high quality.⁶³ The ability to signal quality through contractual liability gives producers incentives to invest in precontractual care in order to

⁶¹ See *supra* Section I.A.

⁶² Providers will not make durable investments that are cost-effective in light of their benefit to all patients if the providers do not benefit from the effect of durable investments on future patients; they will only make investments that are cost-effective given their benefit to current patients.

⁶³ See Spence, *supra* note 44, at 569-70 (showing that producers can use voluntary nonnegotiable liability to signal product quality, thereby enabling consumers to purchase the quality of product they prefer); see also Grossman, *supra* note 55, at 474-77 (showing that a monopolist will offer a full warranty, even when consumers cannot observe product quality, in order to avoid the negative price effect of signaling poor quality by offering an incomplete warranty).

be able to attract consumers by offering liability contracts. When high-quality providers can use liability to signal quality, each patient obtains the same safety benefit from contracting into liability as from state-imposed liability, because liability contracts are offered by providers who made greater investments in precontractual care.

3. Perceived Strength of the Claim for Contract

The proposition that patients get the same deterrence benefits from liability, at the same price, whether it is imposed by tort or by contract, has led both proponents and opponents of contractual liability to conclude that contractual liability cannot hurt informed patients. Opponents nevertheless object to contracting because they believe that patients are not sufficiently informed to contract on their own behalf.⁶⁴ This imperfect information objection has not weakened proponents' enthusiasm for contract, however. Proponents believe that patients are sufficiently informed to contract effectively over liability.⁶⁵ Moreover, they assert that, even if information problems do exist, states should respond by structuring contractual liability to ensure that patients are informed, instead of rejecting contracting altogether. This position is garnering increasing support.⁶⁶

D. *Inapplicability of Classic Analyses to Malpractice Liability*

Notwithstanding the widespread acceptance of this analysis, closer examination of contracting in medical care markets reveals reasons to suspect that contractual malpractice liability cannot replicate the incentive effects of tort liability at an equivalent price.⁶⁷ Although proponents assume contractual liability does nothing more than expand the choices available to patients, this is not the case. In fact, the introduc-

⁶⁴ A related objection to contractual liability is that contracting would be undermined by behavioral biases that may cause patients to act contrary to their own interests. See Baker & Lytton, *supra* note 10, at 5-12.

⁶⁵ See, e.g., Epstein & Sykes, *supra* note 6 (positing that information problems associated with MCO contractual liability are not significant); see also Ramseyer, *supra* note 11, at 1825 (asserting that claims that consumers are not sufficiently informed to contract over products liability are empirically "questionable"); Schwartz, *supra* note 11, at 380 (concluding that the evidence on consumers' approach to product risks "more strongly supports the view that consumers are informed than the view that they are ignorant"); cf. Mark Geistfeld, Note, *Imperfect Information, the Pricing Mechanism, and Products Liability*, 88 COLUM. L. REV. 1057, 1058 (1988) (discussing how pricing mechanisms for warranties can be modified to reduce information problems).

⁶⁶ See sources cited *supra* note 12.

⁶⁷ See *supra* note 17.

tion of contracting fundamentally alters the scope of liability that patients can impose in ways that harm many patients. Whereas malpractice liability is a collective, pooled, multiprovider form of liability posed by all patients on all providers now and in the future, contractual liability is a far narrower form of liability, imposed by only one patient (or set of patients), on one provider (or a limited group), for a limited period of time. The economic case for contract thus is correct only if this fundamental change in the structure and scope of liability neither reduces the deterrence benefit of liability nor increases its cost.

Table 1: Tort Liability Versus Contractual Liability

	Tort Liability	Contractual Liability
Patients Covered	Liable to All Patients	Liable Only to Parties to Contract
Timing of Liability	Liable to All Future Patients	Liability to Future Patients Not Guaranteed
Physicians Bound	Affects All Physicians	Only Affects Parties to Contract
Liability Signals	No Signal: Liability	Patients Selecting Liability Signal
Patient Costliness	Automatic	Information About Themselves

Proponents implicitly assume that these structural changes do not matter because the economic models on which they rely—classic economic models of products liability—find that contractual liability is equivalent to state-imposed malpractice liability. Yet these classic analyses depend on a series of assumptions about the structure of customer-producer relationships that differ fundamentally from the relationships among physicians, patients, and insurers.

First, the classic models of contractual products liability assume that consumers’ liability choices are independent. In these models, each consumer who imposes liability only affects the expected safety of the product she purchases, and in turn is only affected by her own liability choices. By contrast, in medical markets, patients’ liability choices are not independent because patients’ welfare is affected by safety investments, such as expertise and administrative systems, which benefit many patients collectively.

Second, the classic models generally assume that producers make take-it-or-leave-it offers to consumers. Yet contracting between individual patients and physicians at the moment of treatment would oc-

cur face-to-face. Patients in theory would be able to negotiate over liability with providers.

Third, in the classic models, the cost to a producer of selling a product with liability depends only on the quality of the product, and is not affected by the noncontractable characteristics of the purchaser. Thus, each producer charges a price surcharge for liability equal to the per-consumer cost of liability to the producer (this being the quality investments induced by liability plus the expected cost of compensation). By contrast, in the medical context, it is more costly for medical providers to assume liability for and deliver care to some patients than others.

Finally, the classic models assume that the marginal cost to each producer of delivering a particular level of care is unaffected by other producers' decisions about how much to invest in safety. By contrast, medical care is characterized by network externalities in that the cost of providing care is lower when providers standardize treatment protocols, since this lowers the cost of training medical providers and delivering care.

Accordingly, relationships in medical markets are more interdependent, and less stable, than those captured by the classic economic models of products liability. Therefore, before we can accept the claims of contractual malpractice liability proponents, we must directly examine whether patients contracting into malpractice liability do in fact derive the same benefit, at the same price, as they would derive from malpractice liability imposed by fiat.⁶⁸ This Article thoroughly examines patients' incentives to contract over malpractice liability with both individual physicians and insurers, taking explicit account of the institutional structure of medical care markets. It analyzes both the claim that contracting would produce efficient reforms and the claim that contracting is an efficient component of malpractice reform. It shows that both claims are incorrect.

⁶⁸ The proposition that we must directly consider whether contractual malpractice liability is efficient, rather than relying on analyses of products liability, is strengthened by economic analyses of health care that have identified numerous inefficiencies plaguing other types of health care contracts. See generally Joseph P. Newhouse, *The Economics of Health Insurance* (finding that contracting in health care markets is distorted by moral hazard, adverse selection, and other problems), in 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS 872-75 (Steven N. Durlauf & Lawrence E. Blume eds., 2d ed. 2008). As a result of these inefficiencies, certain health care contracts, specifically health insurance policies, are regulated. Accordingly, before embracing contractual liability it is important to determine whether the inefficiencies that plague other health care contracts also would afflict malpractice liability contracts.

Since the costs and benefits of contracting depend on the type of contracting employed, this Article considers two different forms of contractual liability, focusing on the two that have garnered the most support, and have the most plausible claim to being optimal. The first is individual contracting between patients and medical providers at the moment that patients seek medical care (point of service contracting). When considering this form of contracting, this Article assumes that liability contracts are fully negotiable at the point of service. The second is contracting between patients and health insurers to govern liability for both insurers and individual providers. This analysis assumes that contracting occurs through standard form contracts offered to patients on a take-it-or-leave-it basis when they sign up for health insurance.⁶⁹ In order to focus the analysis on the core economic argument that *informed* patients benefit from the right to contract, this Article assumes that patients are rational and can accurately assess the costs and benefits of imposing liability.⁷⁰

II. MALPRACTICE REFORM THROUGH NEGOTIABLE INDIVIDUAL CONTRACTING

This Part examines contractual liability proponents' most ambitious claim: that individual contracting over liability is an optimal mechanism to implement malpractice liability reform because patients would contract with individual providers for the reforms that maximize their welfare.⁷¹ To examine the issue, this Part focuses on the form of individual point of service contracting that best facilitates voluntary contracting: contracts negotiated between patients and providers at

⁶⁹ See *supra* note 24 and accompanying text.

⁷⁰ This Article assumes for argument's sake that consumers are informed about the costs and benefits of imposing liability in order to evaluate contractual liability in the most favorable light. Nevertheless, patients may not be sufficiently informed to contract effectively. See, e.g., Arlen, *supra* note 22, at 253-54, 263-64 (discussing information problems afflicting contractual malpractice liability); see also Mark Geistfeld, *The Political Economy of Neocontractual Proposals for Products Liability Reform*, 72 TEX. L. REV. 803 (1994) (same); Neil D. Weinstein, *Unrealistic Optimism About Susceptibility to Health Problems: Conclusions from a Community-Wide Sample*, 10 J. BEHAV. MED. 481, 494-96 (1987) (finding that people underestimate the probability that they will fall ill, and thus underestimate the probability that they will need medical care).

⁷¹ See, e.g., Epstein, *Contractual Principle*, *supra* note 5, at 509 (asserting that legislative solutions to the liability problem are inferior to solutions that allow patients to contract over liability). The separate claim that patients would benefit from the ability to contract over the standard of care is considered in Part V.

the point of service.⁷² To test whether patients and providers would indeed contract individually for all optimal reforms, this Part examines whether patients would contract individually to impose liability on medical entities (hospitals or MCOs) for all medical negligence whenever patients would benefit if the state imposed this reform by fiat.⁷³

This Part demonstrates that informed patients would not contract to impose liability on medical entities whenever they would benefit if the state imposed this reform by fiat because patients get less benefit from imposing this reform individually by contract than when it is imposed collectively. This is because medical-entity liability is a collective good. Thus, patients may not contract into this reform even when they would all benefit if the state adopted it. In addition, individual contracting is an excessively expensive way to obtain reforms that should be widely adopted.

A. *The Need for and Benefits of Medical-Entity Liability Reform*

Contractual liability proponents' faith that contracting is an effective mechanism for reforming tort liability often appears to be predicated on the assumption that the central problem with malpractice liability is that there is too much of it. This view leads naturally to a favorable assessment of contractual liability because contracting would reduce the scope of malpractice liability.⁷⁴

Yet the empirical literature on malpractice liability does not support the conclusion that the best way to improve malpractice liability is to reduce or eliminate it. Instead, empirical analysis suggests that the core problems plaguing malpractice liability are that: (1) medical providers with higher-than-average error rates face *too little* liability for their errors, and (2) the medical entities whose actions directly affect

⁷² This Article focuses on negotiable individual contracting because it is the most choice-enhancing form of contracting. Also, standard form contracting with individual providers would be rendered inefficient by information costs, search costs, and medical duress if not publicly disclosed in advance of the patient seeking care. Should providers disclose their standard form contracts on the web, then individual contracting would be plagued by adverse selection, in addition to the problems discussed above. See discussion *infra* note 123.

⁷³ This Article focuses on medical-entity liability because this reform has garnered broad support from medical malpractice liability experts. See sources cited *supra* notes 6, 19.

⁷⁴ This Article shows that contracting over liability would dramatically reduce the amount of malpractice liability, but only by hurting patients who would have benefited from state-imposed liability.

medical quality also do not face sufficient tort liability to induce them to adequately invest in patient safety.⁷⁵

Physicians with higher-than-average error rates do not bear the full expected cost of their errors because the vast majority of patients injured by medical error do not sue.⁷⁶ In addition, patients who do

⁷⁵ See Abraham & Weiler, *supra* note 19, at 408; Mello & Brennan, *supra* note 19, at 1616-17. Another problem plaguing malpractice liability is that neither the standard of care nor damages are set optimally. See Jennifer Arlen, *Tort Damages* (showing that under current legal rules governing damages for serious personal injury and death, injurers' expected damages are too low to induce them to take due care and engage in optimal activity levels), in 2 *ENCYCLOPEDIA OF LAW AND ECONOMICS* 682, 718 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000); Danzon, *supra* note 1, at 1347-48 (arguing that the current practice of predicting negligence determinations based on medical custom biases the standard of care in favor of excessive care when the custom was established by physicians treating patients with fee-for-service health insurance); Paul C. Weiler, *Reforming Medical Malpractice in a Radically Moderate—and Ethical—Fashion*, 54 *DEPAUL L. REV.* 205, 217-218 (2005) (advocating for damage reforms that include a schedule for noneconomic damages).

By contrast, the evidence does not support the oft-repeated claim that malpractice liability is random, falling on physicians regardless of whether they erred. Instead, studies find that the vast majority of malpractice claimants who receive payments were injured by medical error. See *supra* note 46. Scholars who argue that malpractice liability is random generally cite the Harvard Medical Practice Study (HMPS) to support this claim. Yet the HMPS cannot be used to assess litigation accuracy because it included too few malpractice lawsuits to produce any statistically significant results about the quality of litigation outcomes. Patricia M. Danzon, *Medical Malpractice*, in 2 *THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW* 624, 626 (Peter Newman ed., 1998). In addition, the HMPS should not be used to analyze litigation accuracy because it was designed to provide a conservative estimate of medical error and not to assess litigation accuracy. It thus employed a protocol for identifying medical negligence that underestimates the amount of negligence. First, the study relied solely on *written* hospital records and research, which often fail to document medical errors. See Andrews, *supra* note 28, at 370 (finding that more than 60% of the patients seriously injured by medical error were “not brought to the hospital’s attention” through either written occurrence reports or potential claims files). Second, the HMPS coded the injury as *not* attributable to error if either one of the two physician reviewers concluded that no error occurred, even if the other reviewer concluded that the patient’s injury was caused by medical error. See BAKER, *supra* note 45, at 28-29 (discussing the HMPS); cf. Michelle M. Mello & Kathryn Zeiler, *Empirical Health Law Scholarship: The State of the Field*, 96 *GEO. L.J.* 649, 682-84 (2008) (concluding that the debate over malpractice liability reform has not been adequately informed by controlled empirical studies, but has instead been overly influenced by preconceptions supported by uncontrolled descriptive studies).

⁷⁶ Indeed, on average a provider who errs is sued only 10% to 12% of the time. PATRICIA M. DANZON, *MEDICAL MALPRACTICE: THEORY, EVIDENCE, AND PUBLIC POLICY* 23-24 (1985) (describing a study showing that only 10% of patients injured by a negligent adverse event filed a medical malpractice case); see also Andrews, *supra* note 28, at 370 (finding that although 185 patients in a Chicago hospital (17.7%) were the victims of a medical error producing a serious injury, only thirteen patients (1.2%) brought a claim); Danzon, *supra* note 1, at 1354 (noting that in the HMPS, less than 15% of negligent injuries produced a malpractice claim); David M. Studdert et al., *Negligent Care*

file suit often do not recover even when they have legitimate claims.⁷⁷ Finally, high-error physicians are insulated from the cost of their errors by medical malpractice liability insurance. Physicians rarely pay directly out of pocket for malpractice claims imposed on them.⁷⁸ Nor do physicians bear the full cost of their errors indirectly through their medical malpractice liability insurance premiums for two reasons. First, physicians often set their policy limits below their patients' expected losses.⁷⁹ Second, malpractice liability insurance premiums are not experience-rated, so high-error providers do not pay higher premiums than lower-error providers in the same medical specialty.⁸⁰

Another weakness of the current system is that it does not provide adequate incentives for hospitals and MCOs to invest in patient safety. Although many errors are attributable to hospitals' administrative systems, patients generally cannot recover for injuries resulting from systems problems unless they can identify an individual act of negligence. As a result, hospitals do not have adequate incentives to make

and Malpractice Claiming Behavior in Utah and Colorado, 38 MED. CARE 250, 255 (2000) (finding that 97% of the patients who suffered negligent injury did not sue).

⁷⁷ Studdert et al., *supra* note 46, at 2028 (finding that 27% of the victims of medical error who filed claims did not recover); see also Lee D. Cranberg et al., *Do the Claims Hold Up? A Study of Medical Negligence Claims Against Neurologists*, 4 J. EMPIRICAL LEGAL STUD. 155, 161 (2007) (finding that a majority of the patients who filed valid claims against neurologists did not recover); David M. Studdert & Michelle M. Mello, *When Tort Resolutions Are "Wrong": Predictors of Discordant Outcomes in Medical Malpractice Litigation*, 36 J. LEGAL STUD. 547, 565 (2007) (finding that patients with valid claims are particularly likely to be denied recovery if they proceed to trial).

⁷⁸ Most doctors have malpractice liability insurance that covers the cost of any malpractice claims. Indeed, insured doctors rarely pay out of pocket even when the damages awarded at trial exceed the limits of their policy because patients tend to settle at the policy limits after trial. David A. Hyman et al., *Do Defendants Pay What Juries Award? Post-V verdict Haircuts in Texas Medical Malpractice Cases, 1988–2003*, 4 J. EMPIRICAL LEGAL STUD. 3, 7 (2007); Kathryn Zeiler et al., *Physicians' Insurance Limits and Malpractice Payments: Evidence from Texas Closed Claims, 1990–2003*, 36 J. LEGAL STUD. S9, S10-11 (2007).

⁷⁹ See Mark Geistfeld, *Malpractice Insurance and the (Il)legitimate Interests of the Medical Profession in Tort Reform*, 54 DEPAUL L. REV. 439, 444 (2005) (concluding that malpractice liability premiums are lower than they would be if physicians paid the total cost of all medical negligence); *supra* note 78.

⁸⁰ Individual physician malpractice liability insurance premiums reflect a physician's specialty and time in practice and location, but do not adjust to reflect a provider's individual claims experience. See Danzon, *supra* note 1, at 1360-62; Mello & Brennan, *supra* note 19, at 1616. By contrast, hospital malpractice liability insurance is experience-rated. See generally Geistfeld, *supra* note 79, at 444 (noting that individual physician malpractice insurance premiums are not experience-rated); William M. Sage, *Medical Malpractice Insurance and the Emperor's Clothes*, 54 DEPAUL L. REV. 463, 473 (2005) (noting that physicians are charged premiums based on average loss experience in their specialty, not individual experience).

systemic investments to reduce the risk of error.⁸¹ MCOs, in turn, are insulated by federal law from liability for injuries resulting from negligent decisions denying coverage for medically necessary treatments.⁸² Finally, hospitals and MCOs both avoid liability for negligence of most (and in the case of most MCOs, all) of their affiliated physicians by employing them as independent contractors. As a result, they do not have adequate incentives to screen and monitor the physicians practicing for them or within their facilities.⁸³

Contractual liability would be an effective mechanism for reforming tort liability only if patients contracting over liability would be likely to adopt the reforms best able to ameliorate these problems plaguing malpractice liability. Many malpractice liability experts agree that medical-entity liability could be used to provide both individual physicians and medical entities with more effective incentives to invest in patient safety.⁸⁴ Leading contractual liability proponents assert that the state need not intervene to adopt this reform but instead could rely on patients to adopt this reform by contract if it benefits them.⁸⁵ This claim is not correct.

B. *Will Patients Contract for Medical-Entity Liability Reform?*

Even where all patients would benefit from state-imposed medical-entity liability, patients contracting over liability would not impose this reform because each patient would get less benefit from contracting individually to impose medical-entity liability than she would get from medical-entity liability imposed by the state. Thus, even if the benefit of medical-entity liability exceeds its cost when liability is state-

⁸¹ See Mello & Brennan, *supra* note 19, at 1620-21.

⁸² See *Aetna Health Inc. v. Davila*, 542 U.S. 200, 221 (2004) (holding that ERISA preempts patients' state tort actions against their health insurers for alleged failures to exercise reasonable care in handling insurance coverage decisions). For a justification of MCO liability, see Arlen & MacLeod, *supra* note 19, at 1942-44.

⁸³ Hospitals often escape liability for negligence by hiring surgeons, anesthesiologists, and radiologists as independent contractors. MCOs also generally hire physicians as independent contractors. See Arlen & MacLeod, *supra* note 19, at 1990 (arguing that optimal tort liability includes MCO liability for physician negligence). See generally Jennifer H. Arlen & W. Bentley MacLeod, *Beyond Master-Servant: A Critique of Vicarious Liability* (analyzing how the independent contractor rule distorts principle-agent relationships in ways that create excessive risk), in *EXPLORING TORT LAW* 111, 117-40 (M. Stuart Madden ed., 2005).

⁸⁴ See sources cited *supra* note 19; cf. Stephen M. Shortell & Sara J. Singer, *Improving Patient Safety by Taking Systems Seriously*, 299 *JAMA* 446-47 (2008) (arguing that health care organizations should be given financial incentives to protect patient safety).

⁸⁵ See sources cited *supra* note 6.

imposed, it would not be cost-effective for patients to contract for this reform individually.

State-imposed medical-entity liability benefits patients by using the threat of liability for injuries to all patients to induce hospitals and MCOs to change their internal operations to reduce the risk of error.⁸⁶ Hospitals can reduce error by improving their administrative systems, providing better supervision of residents and interns, improving their health care technology, monitoring providers' outcomes, and altering rules governing physicians' work hours. MCOs can reduce error by using their data on patient outcomes both to screen and monitor providers based on their error rates. MCOs also could redraft their contracts to provide physicians and hospitals with incentives to improve quality.⁸⁷

Most of these measures confer a collective benefit on all (or most) of the patients served by the medical entity. Thus, each medical entity's incentive to invest in these measures depends on its liability to all of its patients. Given this, medical entities would not invest as much in systems, monitoring, and health care technology when threatened with liability to one patient as when threatened with liability for injuries to all their patients. Consequently, a patient imposing medical-entity liability through an individual contract would not produce as great a reduction

⁸⁶ MCOs and hospitals would be particularly responsive to malpractice liability because, unlike physicians, these entities either self-insure or purchase liability insurance that is experience-rated. See *supra* note 80 and accompanying text (discussing experience-rating); see also Abraham & Weiler, *supra* note 19, at 410 (observing that one advantage of hospital liability is that insurers can charge medical entities liability insurance premiums that "reliably reflect the prior claims experience of the particular institution"); Arlen & MacLeod, *supra* note 19, at 1990 n.205 (observing that one advantage of MCO liability is that MCOs would either self-insure or purchase experience-rated malpractice liability insurance).

⁸⁷ Entities could use their monitoring information to induce physicians to reduce their error rates more effectively than is possible through the use of individual liability alone because entities possess direct evidence about providers' per-patient outcomes (and direct evidence on error) even when no claim is filed. Thus, entities could sanction providers who deliver inadequate care even if the patient did not file a claim. Moreover, entities can sanction physicians in ways not insulated by physician liability insurance. Furthermore, entities could facilitate experience-rating of individual liability insurance by sharing their information about physicians' patient-health-adjusted outcomes. Finally, entity-level liability would reduce the underclaiming problem because patients injured by medical care in a hospital would no longer be deterred from claiming by the difficulty of having to identify the individual responsible for their injuries. See Arlen & MacLeod, *supra* note 19, at 1990-95 (discussing the benefits of MCO liability); see also Abraham & Weiler, *supra* note 19, at 398-400, 407-14 (explaining why hospital enterprise liability is a more effective mechanism for medical error than individual physician liability); Mello & Brennan, *supra* note 19, at 1626 (asserting that one advantage of channeling liability costs through hospitals is that it facilitates experience-rating of liability insurance).

in her risk of error as she could get if the state imposed liability by fiat because her individual threat to impose liability would not be sufficient to induce substantial investments by the entity in collective care.

Indeed, a patient might get little benefit at all from imposing medical-entity liability individually even when she would benefit substantially from state-imposed liability. Many of the cost-effective investments that entities can make to improve patient safety—such as administrative system overhaul, new health care technology, new monitoring systems, and additional staff—are so expensive that they are cost-justified only when measured against their effect on all the patients who benefit from them. They are not cost-effective when considered against their benefit to a single patient.⁸⁸ Given this, medical entities would not adopt these reforms in response to the threat of liability to a single patient. As a result, each individual patient contemplating whether to impose entity liability by individual contract could rationally conclude that she would obtain no material safety benefit from doing so, even when she would benefit enormously if the state imposed medical-entity liability by fiat.

Moreover, the possibility that other patients might impose entity liability does not solve this problem. Patients are better off not contracting to impose medical-entity liability, even when they expect others will do so, because the investments in care induced by other patients' imposition of entity liability would confer collective benefits on all of the entities' patients, including those who do not impose liability.⁸⁹ Pa-

⁸⁸ The expected liability imposed by any individual patient is not sufficiently high to justify a hospital making substantial expenditures based on liability to one patient. This is true even though the median award for valid claims is about \$200,000. Studdert et al., *supra* note 46, at 2027. A profit-maximizing entity weighs the cost of a safety investment against its *expected* benefit, which depends on its *expected* potential liability to the patient. This amount is the per-patient expected damage award if the patient is injured, sued, and recovers, adjusted to reflect the probability that (i) the patient imposing liability will be the victim of medical error, (ii) the injury will be serious, (iii) the victim will sue, and (iv) the plaintiff will be successful. If we make these adjustments, a median award of about \$200,000 translates into an expected liability cost of only \$328, assuming that 9% of patients are the victims of medical error, *see* discussion *supra* note 33, 25% produce serious injuries, and that only 10% of these serious injuries result in malpractice claims, *see* discussion *supra* note 76, of which only 73% lead to a victory for the patient, *see* Studdert et al., *supra* note 46, at 2028. Similarly, the average damage award of \$485,000 translates into a per-patient expected cost of liability of only \$796. These costs are too low to induce a medical entity to make the substantial expenditures in administrative practices, personnel, and equipment purchases needed to reduce medical error based on the threat of liability to a single patient.

⁸⁹ Hospitals benefit all of their patients when they reform administrative practices to improve hand-off procedures, the supervision of residents and interns, and the

tients thus can obtain these benefits by free-riding on others' liability choices, avoiding the added cost of imposing liability themselves.⁹⁰

Therefore, states cannot rely on contracting over liability to produce optimal liability reform because patients would not optimally contract into reforms, such as entity liability, that produce collective benefits, even when they all would benefit from similar reforms imposed collectively through state action.⁹¹ Moreover, contracting is a costly way to produce reforms that should be widely adopted. Thus, patients who would benefit from these reforms would be better off if the state imposed them by fiat.

III. INDIVIDUAL NEGOTIABLE CONTRACTING OUT OF REFORMED LIABILITY

Proponents of contractual liability also claim that any state that does reform malpractice liability can only benefit its citizens by allowing them to contract out of these reforms with their individual providers.⁹² This Part evaluates this claim as applied to negotiable contracting between patients and individual providers at the point of service.

monitoring of physicians. Cf. *infra* note 96 and accompanying text (discussing empirical evidence that providers standardize care across patients).

⁹⁰ To the extent that hospitals standardize administrative systems and other safety measures, see *infra* note 96, then all hospital patients are governed by the same administrative systems and safety measures, whether they impose liability or not. Given this, individual patients are better off not imposing liability because patients who impose liability must pay more for the same quality of care than patients who do not impose liability. Patients would pay more if they imposed liability because hospitals would charge them for the expected cost to the hospital of the patients' right to receive compensation for injuries resulting from medical negligence. But most patients do not want to pay for the right to obtain compensation through the tort system. First, the amount they must pay for this right—which is based on the damages that providers must pay plus their litigation costs—exceeds its expected benefit, which is the damage award minus plaintiff-side litigation costs (and exclusive of those of the defendant). In addition, patients can often obtain insurance against many losses resulting from medical negligence at lower cost by purchasing first-party insurance. See *supra* note 54 and accompanying text.

⁹¹ The finding that the deterrence benefit of contractual liability is less than the deterrence benefit of state-imposed liability establishes that contractual liability is not an efficient reform mechanism even if patients also value the right to compensation. Patients only have efficient incentives to contract into liability if they can replicate the benefit of optimal state-imposed liability by contract. This necessarily includes the deterrence benefits of liability. Moreover, patients would be unlikely to value contractual liability solely as a mechanism for obtaining insurance against the risk of medical negligence because malpractice liability is not an effective mechanism for compensating patients. See *supra* note 54 and accompanying text.

⁹² See *supra* Section I.A.

It first evaluates whether patients who would have benefited from the effect of state-imposed liability on their individual physicians' investments in safety would necessarily benefit from negotiating to impose liability through an individual contract. It then assesses whether providers would price contractual liability optimally.

This Part shows that individual contractual liability would violate each of these conditions. Patients who value liability would get less benefit, at greater cost, from liability imposed by contract than from state-imposed liability. Thus, states would hurt the patients who would benefit from state-imposed malpractice liability by permitting them to contract out of it and would create excessive incentives for patients to waive liability.⁹³

A. *Collective Goods and the Free-Rider Problem*

Patients obtain less deterrence benefit when they impose liability individually by contract than they do from liability imposed by the state because individual physician malpractice liability is a collective good, best regulated by collective liability. As previously explained, a central purpose of malpractice liability is to induce providers to make cost-effective investments in patient safety.⁹⁴ Many of these investments are not patient-specific, but instead affect the provider's capacity to provide proper care to any and all of her patients. These investments in collective care include investments in obtaining the expertise needed to correctly diagnose patients and select the right treatment, as well as pre- and postcontractual investments in health care technology, staffing, and supervision.⁹⁵ These investments benefit all of a pro-

⁹³ See *supra* note 54 and accompanying text; see also *supra* note 91 and accompanying text. This Article focuses on inefficiencies that arise from the structural differences between contractual and state-imposed malpractice liability. In addition, patients will not have optimal incentives to contract into liability with individual providers if they are insured against some of the losses arising from medical error, since insurance reduces the ex post (post-insurance) cost to them of error. See Geistfeld, *supra* note 70, at 830-31 (arguing that consumers will not contract efficiently over liability for product defects if they are insured against their losses, assuming that insurance premiums do not adjust to reflect the risk of the products that each consumer purchases); see also Jon D. Hanson & Kyle D. Logue, *The First-Party Insurance Externality: An Economic Justification for Enterprise Liability*, 76 CORNELL L. REV. 129, 132, 148-53 (1990) (observing that first-party insurance can blunt potential victims' incentives to invest in deterrence since insurers do not classify insureds according to the riskiness of their product purchases); see also discussion *infra* note 123.

⁹⁴ See *supra* Section I.A.

⁹⁵ Studies of medical error reveal that patients particularly benefit from liability when it induces medical providers to invest more in expertise, administrative systems,

vider's patients because providers usually use their expertise, improved administrative systems, and good health information technology when treating all of their patients, not just a select few.⁹⁶

Recognition that core medical safety investments are collective goods reveals that malpractice liability is also a collective good. Liability is a collective good because each patient's risk of being injured by her medical caregiver depends on that provider's investments in collective care, which in turn depend on the scope of that provider's expected liability to all of her patients collectively, not just to one patient. Thus, each patient's expected safety depends not only on her own liability decisions, but also on the liability choices of others.⁹⁷

and health information technology pre- and postcontract, since deficient expertise and poor systems are leading causes of medical error. See *supra* text accompanying notes 30-40 (discussing the causes of medical error).

⁹⁶ For example, once a physician develops expertise in a particular illness or treatment choice, she usually uses this expertise to benefit all affected patients. She will not knowingly deny some patients the right to that expertise because they have not paid for premium care. Similarly, physicians who develop administrative systems or surgical procedures to reduce error generally apply them to all relevant patients and do not limit them to a select few. See Richard G. Frank & Richard Zeckhauser, *Custom-Made Versus Ready-to-Wear Treatments: Behavioral Propensities in Physicians' Choices*, 26 J. HEALTH ECON. 1101, 1102 (2007) (finding that physicians tend to follow norms rather than customizing care for individual patients).

The claim that providers tend to standardize collective aspects of care—such as expertise, treatment assessments, and systems—even when patients have paid for care of differing quality—also is supported by evidence that the quality of care a patient receives from her physician depends not only on whether that patient herself has decided to insure through an MCO (which will place pressure on the physician to reduce costs) but also on whether a high proportion of the physician's other patients are insured through an MCO. Sherry Glied & Joshua G. Zivin, *How Do Doctors Behave When Some (But Not All) of Their Patients Are in Managed Care?*, 21 J. HEALTH ECON. 337, 352-53 (2002) (concluding that the quality of care a patient receives from her physician depends not only on whether the patient is enrolled in an MCO but also on whether the physician's other patients are predominately managed care patients); see also Paul A. Heidenreich et al., *The Relation Between Managed Care Market Share and the Treatment of Elderly Fee-for-Service Patients with Myocardial Infarction*, 112 AM. J. MED. 176, 179-80 (2002) (providing evidence that a patient's expected outcome from treatment by a particular physician depends on the portion of the patients enrolled in managed care in the local market and not just on that patient's choice of insurer).

⁹⁷ See Arlen & MacLeod, *supra* note 19, at 2003 (finding that contracting over liability to govern physician expertise is not efficient because expertise is a collective good). The interdependence of patients' liability choices is heightened by the fact that many important medical care investments are "lumpy"—the provider faces a discrete choice between making a substantial investment in a particular type of care or no investment at all. For example, a hospital seeking to protect patients by purchasing and implementing a physician-order-entry system (to computerize prescriptions) must incur the full cost of purchasing the system, installing it, and implementing it. It cannot purchase a marginal (one dollar) increment of the system. Similarly, it is difficult for a hospital to change policies regarding supervision or patient hand-off procedures in marginal (one dollar) in-

Because malpractice liability is a collective good, patients are better off when they can impose liability collectively, as when the state imposes liability by fiat, because patients do not achieve the same deterrence benefits when they threaten to impose liability individually. Under state-imposed liability, each provider invests in all measures that are cost-effective in light of their effect on the provider's expected liability to all of her patients. By contrast, a patient imposing liability individually only induces those investments that are cost-justified in light of their effect on the provider's expected liability to her alone.

Moreover, a patient contracting into liability only benefits from the marginal effect of her own liability on the provider's care, even if other patients also impose liability. Physicians tend to apply improvements in expertise, safety protocols, staff, and administrative systems to all their patients. Thus, whether or not a particular patient imposes liability, her treating physician would give her the benefit of all collective care investments induced by other patients' decisions to impose liability. As a result, each patient may get little or no benefit from imposing liability individually by contract even when collectively all patients are much better off when liability is imposed.

To see this, consider a provider serving many patients, each of whom would benefit from state-imposed malpractice liability because it would induce the provider to make a substantial investment in collective care. These individual patients could not replicate this benefit by contracting to impose liability individually. Any patient who expects all other patients to waive liability would rationally waive it as well, because the provider will not make the needed substantial investment in collective care in response to the threat of liability to one patient. In turn, any patient who expects others to impose liability still benefits from waiver if the threat of liability to others is sufficient to induce the provider to make all (or almost all) of the desired investments in collective care. The patient could reap the benefit of these

crements. Hospitals generally need to change procedures in a uniform way across an entire ward (and often the entire hospital), which entails a substantial expenditure. *See supra* note 96 and accompanying text (discussing the standardization of health care practices).

The magnitude of the costs involved in the hospital reforms needed to protect patient welfare are sufficiently great that no one patient would impose enough expected liability to induce these expenditures because a provider's expected liability to one patient is not particularly high. *See supra* note 88 and accompanying text. Liability only induces such investments if the physician faces liability to a sufficiently large number of patients to justify a substantial investment in error reduction.

investments at less cost⁹⁸ by not imposing liability, whenever her physician applies the same expertise, administrative systems, protocols, and other collective care measures to all patients.⁹⁹

⁹⁸ Patients waiving liability would lower their expected costs because providers would charge higher prices to patients imposing liability than to those who do not, even if the quality of care is the same, because providers serving liability-imposing patients must recapture the expected cost of the liability-imposing patients' right to compensation. Given this, patients would benefit from waiving contractual liability, because the premium providers must charge in order to accept liability exceeds the compensation patients generally expect to receive. Providers will charge a premium for liability that reflects their expected gross damage payments *plus* their expected defense costs, whereas patients will receive compensation net of both their own litigation costs and defense-side costs. See *supra* note 54 and accompanying text (explaining this point and noting that patients can more cheaply insure through first-party insurance than through liability); see also Weiler, *supra* note 47, at 926 (observing that "malpractice litigation uses up approximately 55% to 60% of the claims dollar—not even counting the business costs incurred by all forms of private insurance").

⁹⁹ We can demonstrate this claim through the following example. Assume that the state imposed optimal liability reform. Assume there are 100 patients. Assume that if liability is imposed for all patients, each physician would spend \$3000 to adopt optimal care, which would reduce each patient's risk of suffering a \$1000 injury due to medical negligence from 1/10 to 1/100. Assume litigation costs are \$300 per claim. The total net social benefit of using liability to reduce the risk of error across all patients is $[(1/10)(1000) - (1/100)(1000)]100 - 3000 - (1/100)(300)(100) = 5700$, which yields a benefit of \$57 per patient.

Table 2: Expected Costs if Doctor Invests \$3000

Liability Waiver	Cost of Care Per Patient	Patient's Expected Harm	Net Expected Compensation	Patient's Expected Costs
Yes	30	10	0	40
No	30	10	$10 - 3 = 7$	$40 + (1/100)(1000 - 1000 + 300) = 43$

Notwithstanding the fact that each patient is better off when liability is imposed, each patient offered the right to contract out of liability will do so because she gains nothing from her individual decision to impose liability. To see this, assume the patient believes that the other 99 patients will impose liability. In this case, the threat of liability to these other patients is sufficient to induce the provider to invest \$3000 in care. This will lower the risk of injury to the remaining contracting patient to 1/100, whether or not she imposes liability. Given this, the patient will waive liability because doing so enables her to obtain care at a lower cost. If the patient imposes liability, the provider will charge her an extra \$10 to reflect the providers' expected payments to the patient. Yet the patient only expects to receive \$7 in expected compensation, because she must pay expected attorney's fees of \$3 ($300(1/100) = 3$). By contrast, if a patient assumes that none of the others will impose liability, then she also will not because imposing expected liability on the physician of \$100[(1/10)(1,000)] will not induce the provider to invest \$3000 in care. Of course, if each patient reasons the same

Contracting over liability thus would encourage each patient acting individually to waive liability in order to reduce her health care expenses because she can do so without substantially reducing expected outcomes. Of course, if each patient makes the same rational decision, none of them will impose liability even when all of them would have been better off if they imposed liability collectively.¹⁰⁰ Thus, patients who would have benefited from the effect of state-imposed liability on providers' investments in collective care would be worse off under individual negotiable contractual liability because they would be unable to use contract to induce providers to make optimal investments in collective care.

Moreover, this collective action problem exists even if we recognize that patients are risk averse and want to insure against losses from medical error. Patient risk aversion would not induce patients to opt into liability solely in order to get the right to compensation because even risk averse patients rarely derive a net benefit from the right to receive compensation for medical error through the tort system. First, providers must charge patients much more for this right to compensation than patients can expect to receive. Providers would price contractual liability to reflect their own litigation costs as well as the gross value of damages paid, much of which would go to plaintiffs' lawyers. Most patients facing liability with a load factor of about sixty percent would find that the cost of obtaining compensation through the tort system exceeds its benefit. In addition, patients would not contract solely for the right to obtain compensation given that they can obtain broader and cheaper coverage for many of the monetary costs of all medical errors—and not just those resulting from provable medical negligence—by purchasing first-party disability insurance or medical insurance that includes long-term care.¹⁰¹ Thus, the quest for insur-

way, then they will all waive liability and the physician will not invest \$3000 in care—to the detriment of every patient.

¹⁰⁰ See Arlen & MacLeod, *supra* note 19, at 2003-04. The free-rider problem is particularly great when liability is needed to induce providers to make substantial, discrete, collective investments that cannot be undertaken incrementally, such as health care technology, improvements in administrative systems or support staff, and substantial investments in expertise. In this situation, each patient knows that her medical provider will make the investment only if she faces liability for a substantial number of her patients. If she does face liability, she will make the investment regardless of what any particular patient does. If she does not, she will not make it, regardless of what any one patient does. Given this, each patient will rationally waive liability because she knows that her decision will have no effect on the provider's expected investment in discrete care.

¹⁰¹ See *supra* note 54 and accompanying text.

ance would not generate a sufficiently broad independent demand for medical malpractice liability to ensure that all patients who would have benefited from the effect of state-imposed liability on medical safety impose liability by contract.

B. *The Inability to Induce Optimal Precontractual Care*

Patients who value liability also would be worse off under negotiated contractual liability because it cannot be used to induce providers to make optimal precontractual investments in care, unlike state-imposed liability.¹⁰² State-imposed malpractice liability can be used to induce providers to make durable investments in care precontract because providers anticipating liability to future patients benefit from making durable investments in care that are economically justified in light of their benefit to future as well as current patients. Thus, state-imposed malpractice liability benefits patients by inducing providers to invest in their safety precontract, prior to any patient-provider relationship.

Proponents assert that patients obtain a similar benefit when they contract into liability, because contracting into liability enables them to select the providers who invested more in precontractual care. As previously explained, this claim rests on the premise that high-quality providers can use negotiable contractual liability to signal their higher quality.¹⁰³ This claim is incorrect as applied to negotiable contracting over liability because this form of liability is not a credible signal of precontractual quality.

High-quality providers cannot use liability to signal quality because low-quality providers can mimic their liability contract offers without losing money. First, low-quality providers can offer to bear liability for the same price as high-quality providers because physician malpractice liability is not experience-rated. Thus, high-quality physicians cannot use a liability offer to signal quality because low-quality physicians can mimic their liability contracts, at the same cost, by purchasing liability

¹⁰² Individual providers could not eliminate these inefficiencies by using standard form contracts because standard form contracting with individual providers would be plagued by a host of additional problems. See *infra* Section IV.A & note 123 (discussing the numerous problems associated with standard form contracting between individual providers and patients at the point of service).

¹⁰³ See *supra* subsection I.C.2. When signaling through voluntary liability enables consumers to distinguish high-quality providers from low-quality ones, then voluntary liability also provides medical caregivers with an incentive to become high quality by investing in precontractual quality. See *supra* text accompanying note 62.

insurance at the same price as high-quality physicians.¹⁰⁴ Informed patients, knowing this, would attach no signaling value to an offer to bear liability.

Second, high-quality providers cannot use an offer to bear liability to signal quality when patients can negotiate with them at the moment of contracting. Informed patients who receive this offer, and believe it is an accurate signal, would seek a liability waiver in return for a mutually beneficial reduction in the contract price. Patients would seek to waive liability—even when they value the quality ostensibly associated with the signal—because the provider's precontractual care is already fixed by the time the patient contracts with her.¹⁰⁵ Thus, each patient can reduce her costs by waiving liability without affecting her provider's expected precontractual care. Accordingly, once the provider has offered to bear liability, a patient has no reason to accept it unless she wants to use liability to insure against the risk of error.¹⁰⁶ As previously explained, however, an informed rational patient should not be willing to pay to insure through the tort system because the price providers must charge for liability (and defense costs) substantially exceeds a patient's expected net recovery after litigation costs. Also, patients can more cheaply insure against the risk of accidental harm through first-party insurance.¹⁰⁷ Thus, an informed patient of

¹⁰⁴ In the classic signaling model, high-quality physicians are able to use liability to signal quality because their lower risk of error translates into lower expected liability costs. Thus, they can offer to bear liability at a lower price than can low-quality physicians. This result does not hold if physicians obtain malpractice liability insurance which is not experience-rated, however, because now low- and high-quality physicians bear the same expected liability costs in the form of standardized premiums.

¹⁰⁵ Moreover, the patient's expectation about the provider's quality is also fixed—the patient having obtained all available information about the provider's quality from her *offer* to bear liability.

¹⁰⁶ The conventional result that contracting over liability will result in a “separating equilibrium” in which only high quality producers offer to bear liability—thereby signaling their superior quality—is based on a model in which producers make take-it-or-leave-it liability offers. In addition, in these models, consumers are risk averse and bear no costs if they enforce their right to compensation. Given this, in these models, consumers value warranties both for the signal they provide about the producer and for the insurance against the risk of product defects, and thus they accept liability. See Grossman, *supra* note 55, at 474-77 (showing that a monopolist will offer a full warranty using a model in which consumers are risk averse and warranty offers are not renegotiable); Spence, *supra* note 44, at 569-70 (showing that producers can use voluntary contracting over liability to signal quality when consumers are risk averse, injuries involve purely monetary losses, and other conditions are met).

¹⁰⁷ See, e.g., Danzon, *supra* note 1, at 1369 (observing that the load burden on first-party insurance is only 10 cents of every premium dollar whereas the load burden on malpractice liability insurance is 60 cents of every premium dollar); see also Richard A.

ferred the right to impose liability that she believes signals the provider is high quality generally would seek the services of that provider but then immediately ask the provider to waive liability, for a mutually acceptable price reduction.¹⁰⁸ A provider operating in a competitive market would accept this offer.

Unfortunately, this results in a situation in which high-quality providers cannot use contractual liability to signal quality. Low-quality providers can mimic the malpractice liability contracts of high-quality producers without bearing excessive liability costs, because they can be confident that most patients will seek a waiver.¹⁰⁹ As a result, even

Epstein, *Products Liability as an Insurance Market*, 14 J. LEGAL STUD. 645, 668-69 (1985) (arguing that products liability does not confer a net benefit when viewed purely as an insurance system).

¹⁰⁸ Consider two physicians negotiating over liability with a risk neutral patient: a low-quality physician who has an error risk of 0.1 and a high-quality physician with an error risk of 0.01 as a result of unobservable precontractual investments that increased her marginal treatment costs by \$30 per patient. The patient suffers a \$1000 loss if her physician errs. Litigation costs are \$300. Assume low-quality care is costless.

The patient would prefer to be treated by the high-quality physician. In return for \$30 in additional cost, she obtains \$90 in expected benefit, resulting from a reduction in her expected losses from (0.1)1000 to (0.01)1000. This produces an expected net benefit of \$60—which translates into a net benefit of \$57 if liability is used to signal quality.

Patient’s Expected Costs if She Believes Liability Signals Quality

No Liability	$30 + (0.01)(1000) = 40$
Liability	$40 + (0.01)(1000 - 1000 + 300) = 43$

The high-quality provider cannot use liability to signal quality if the patient can negotiate for a waiver after selecting the physician because patients who believe the signal will negotiate to eliminate liability. Once a patient has selected the physician, expected quality is fixed. At this point, liability only operates as a mechanism for compensating the patient. Given this, each patient should ask the doctor to waive liability in return for a price reduction, because the amount the physician must charge her for the right to compensation (\$10) exceeds her expected recovery, which is only \$7 after litigation costs. The patient could leave both parties better off by, for example, offering to waive liability in return for a price reduction of \$9. Ex post, the high-quality physician will accept this offer. The expectation of renegotiation precludes the high-quality physician from using liability to signal quality, however, because low-quality providers also will offer to bear liability, confident in the expectation that patients who select them believing the signal will ask to waive liability.

¹⁰⁹ Arlen, *supra* note 75. Negotiation also undermines the use of contractual liability to regulate the moral-hazard problem. See Arlen & MacLeod, *supra* note 19, at 2002-03 (explaining how renegotiation undermines the ability of patients and physicians to use contractual liability to address moral hazard because providers know that patients have an incentive to waive after providers invest in care); Abraham L. Wickelgren, *The Inefficiency of Contractually-Based Liability with Rational Consumers*, 22 J.L. ECON. & ORG. 168, 170 (2006) (showing that contracting over products liability by homogenous consumers is not efficient if consumers can waive liability after producers select product

where each patient would benefit if the state imposed liability by fiat in order to induce producers to invest optimally in precontractual care, patients contracting individually over liability nevertheless would waive it because they could not use negotiable contractual liability to replicate the effect of state-imposed liability on precontractual care. Accordingly, a patient who benefits from the incentives that state-imposed liability gives providers to invest in precontractual care would not obtain the same benefit if required to negotiate liability with individual providers.

C. *Adverse Selection*

Contracting over liability also could hurt patients because providers would charge more for contractual liability than for equivalent liability imposed by the state, as a result of adverse selection. This premium surcharge would create an inefficient incentive for patients to waive liability even when the expected benefit of liability exceeds the direct costs of imposing it.

In a perfect world, patients would obtain liability whenever the expected benefit to them of liability equals or exceeds the expected cost to providers of bearing liability. Patients would not get liability when the expected cost exceeds the expected benefit. Contractual liability proponents claim that contracting by informed patients would lead to this desired outcome. This claim rests on the premise that providers operating in competitive markets would price liability at its per-patient cost—this being the per-patient cost of the additional safety induced by liability plus the expected cost of each patient's right to compensation. Thus, patients would pay the same price for liability whether it is imposed by the state or by contract.¹¹⁰ This is not correct.

quality); see also Drew Fudenberg & Jean Tirole, *Moral Hazard and Renegotiation in Agency Contracts*, 58 *ECONOMETRICA* 1279, 1280-81 (1990) (showing that principals cannot use incentive contracts to solve the moral hazard problem if they can renegotiate the contract after a risk-averse agent has invested in postcontractual effort because, once effort is fixed, both the principal and the risk-averse agent benefit from renegotiating the contract to eliminate the agent's risk of being penalized for bad outcomes in return for the principal paying a lower salary).

¹¹⁰ Some proponents of contractual liability recognize that state-imposed liability pools customers into a single insurance pool, a pooling that would be undone by contractual liability. Proponents assume, however, that using contractual liability to undo this pooling would necessarily increase consumers' welfare. See, e.g., RUBIN, *supra* note 6, at 40-44; Epstein, *supra* note 107, at 652. Yet economists have shown that both low- and high-cost patients may be better off with pooling because pooling reduces the cost of obtaining the benefits of liability even to low-cost patients. See generally Charles Wilson, *A Model of Insurance Markets with Incomplete Information*, 16 *J. ECON. THEORY* 167,

Providers would charge more for contractual liability than for state-imposed liability and also more for liability than it would cost them to provide liability to the average liability-valuing patient.

Providers would not set the price for liability equal to the expected cost of providing liability to each individual patient because the cost of offering liability to a patient depends on a variety of patient-specific factors that are unobservable (and noncontractable) at the moment of contract. Patient-specific factors that can inflate the cost to a provider of bearing liability include preexisting conditions that increase the probability of a serious medical error¹¹¹ and patient litigiousness. Thus, providers do not know enough about the patient at the moment of contracting to set the price for liability equal to the actual expected cost of bearing liability to that patient. Providers also face other obstacles to price discriminating in this way. As a result, patients' choices would not be optimal because imperfectly informed providers would undercharge some patients for liability and overcharge others relative to the costs they actually impose on the provider.

Of course, providers also undercharge some patients and overcharge others under state-imposed liability. Accordingly, the issue arises whether contractual liability increases or reduces the cost of this problem for patients. Evaluating this issue from the perspective of patients who value liability, these patients fare better when liability is imposed by the state. Thus, it cannot be claimed that contracting over liability does not harm any patient.

When liability is imposed by the state, each provider imposes a surcharge for liability based on the expected cost of the safety investments induced by liability plus her expected liability payment on average across all patients. Providers would charge more to accept the same liability by contract, however, because the patients likely to purchase a liability contract are more costly to them than are patients as a whole. The problem is that patients do not simply differ in ways that affect providers' costs. These differences also affect the value to patients of imposing liability. Patients get more benefit from liability (and the resulting increase in safety) if they expect to need a substan-

200-02 (1977) (showing that, when adverse selection is present, total social welfare may be higher when insurance is mandatory and pooled); *infra* Section IV.B (arguing that MCO contractual liability would be harmful to consumers because it would increase the adverse selection problem).

¹¹¹ Moreover, patients with complex conditions may impose additional costs on providers to the extent that treating them requires additional effort and resources for which the provider is not fully compensated by insurance.

tial amount of medical care or would face a significant risk of error if they do need care. Thus, patients with multiple preexisting conditions are more likely to value liability than are healthier patients because the former are more likely to be the victim of medical error and thus place a higher value on both the increased safety induced by liability as well as on the right to compensation. Litigious patients are also more likely to elect to impose liability than are nonlitigious ones, all else equal, because they are more likely to use the right to sue for damages. As a result, providers would charge more for contractual liability than for liability imposed by fiat because the expected cost of caring for (and bearing liability for injuries to) the average patient who values liability is higher than the expected cost of treating the average patient under state-imposed liability.¹¹²

It might seem that this surcharge is optimal in that it would simply require expensive patients to bear their full costs. This is not the case for two reasons. First, although the average liability-valuing patient imposes higher costs on providers, others do not. They simply place a high value on safety. Some may not impose high litigation costs at all; they just value safety. Yet these lower-cost patients also would have to pay a surcharge to obtain liability because providers cannot determine which patients are more costly.¹¹³ Contracting would thus force these patients either to (a) pay more to obtain liability than they would pay under state-imposed liability (and more than it would cost the provider to deliver it to them) or (b) waive liability and receive lower-quality care than they want and are willing to pay for.¹¹⁴ Either choice would

¹¹² In other words, contracting over malpractice liability would be distorted by a problem economists call "adverse selection," which can occur when the cost or benefit to one party to a market transaction depends on an unobservable characteristic of the other party. George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488, 490-91 (1970). In this situation, contracts will deviate from optimality as a result of some people's efforts to signal that they are a good type by bearing costs that other (less desirable) people would find too costly to bear. See Michael Rothschild & Joseph Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information*, 90 Q.J. ECON. 629, 648 (1976). For a useful survey of the literature on adverse selection, see Charles Wilson, *Adverse Selection*, in 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS, *supra* note 63, at 25, 25-31, and Joseph P. Newhouse, *The Economics of Health Insurance*, in 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS, *supra* note 63, at 872, 872-75. This Section only briefly discusses adverse selection. Section IV.B discusses it more thoroughly.

¹¹³ This is true so long as the expected cost of offering liability to the patients likely to contract into it exceeds the average per-patient cost of offering liability to the population at large.

¹¹⁴ Moreover, to the extent that lower-cost patients elect to waive liability, this would only increase the price charged for liability, leading more patients to waive lia-

leave them less well off than they would be under state-imposed liability, where the price for liability would be lower.¹¹⁵ Waivers would also be inefficient, resulting in patients eschewing liability even when the benefit to the patient of liability (and higher safety) exceeds its cost.

D. Summary

The preceding analysis reveals that, contrary to proponents' claims, allowing patients to contract over liability with individual physicians could hurt patients who value liability, even if they contract in their own best interest. The reason is that contracting over liability alters the type of liability they can impose, forcing patients to substitute a narrow form of liability—individual liability imposed on specific providers at the moment of contract—for broad, collectively imposed, multitemporal, multiprovider liability imposed by the state. This is not a substitution that patients who value liability would make if given the choice, because contractual liability gives them lower deterrence benefits at greater cost. Thus, rather than being choice- and welfare-enhancing, contractual liability precludes patients from using the form of liability likely to be most cost-effective, replacing it with the right to impose a far less valuable and more costly form of liability that cannot be used to effectively regulate precontractual and collective care. As a result, the move to contractual liability would harm patients who could benefit from state-imposed liability and create inefficient incentives for patients to waive liability. This mandated change in the structure of liability is one that many informed patients would reject if offered the choice.

IV. CONTRACTING WITH COMMITMENT THROUGH MCOS

The conclusion that individual negotiable contractual liability is inefficient raises the question whether patients could obtain the benefits of state-imposed malpractice liability at the same price through an alternative form of contractual liability. In particular, the question arises whether it is possible to eliminate the inefficiencies plaguing individual negotiable contractual liability by channeling contracting

bility even though the benefit to them of liability exceeds the cost to the provider of bearing it.

¹¹⁵ See also *infra* text accompanying note 127 (discussing how pooling can redress an incompleteness in insurance markets that precludes healthy patients from purchasing insurance today to protect against the risk of becoming ill in the future).

through collective contracts with liability terms fixed prior to the moment when the patient selects her provider.

Leading contractual liability proponents favor just such a form of contractual liability. They argue that states should shift all liability for medical error to MCOs and then permit MCOs to contract over (and out of) liability by offering their subscribers health insurance plans containing clauses governing the extent to which patients can sue MCOs for injuries resulting from medical negligence by either MCOs or medical providers.¹¹⁶ This contracting would take place when patients select their health insurance plans and thus would involve patients selecting between various nonnegotiable contracts affecting liability. Proponents of MCO contracting tend to assume that informed patients would necessarily benefit from the option to contract over liability with their MCOs.¹¹⁷

This Part evaluates the claim that informed patients would not be hurt by the adoption of contracting over liability with medical insurers. In order to evaluate MCO contracting in the most favorable light, this Part focuses on a form of MCO contractual liability designed to ameliorate the collective action and renegotiation problems plaguing negotiable contracting with individual providers. Thus, it is assumed that health insurers would present subscribers with standard form nonnegotiable contracts. To ensure that liability is imposed collectively and that any decision to waive is truly voluntary, it also is assumed that each patient selecting health insurance has a choice between at least two

¹¹⁶ See *infra* note 123 and accompanying text (explaining why proponents favor MCO standard form contracting over standard form contracting with individual physicians).

¹¹⁷ In considering contracting through medical entities, this Article focuses on contracting with MCOs because MCO contracting is superior to contracting with either hospitals or large physician groups because patients are better to coordinate care, financing, and incentives across their various medical providers when they contract with MCOs than when contracting individually with hospitals or provider groups. See, e.g., HAVIGHURST, *supra* note 6, at 171-73 (arguing that enterprise contractual liability imposed on MCOs is superior to hospital liability for medical error); Arlen & MacLeod, *supra* note 19, at 1995-96 n.221 (asserting that MCOs are the superior entities to bear entity-level liability); Danzon, *supra* note 1, at 1382 (concluding that contracting through managed care plans is superior to patient contracting with individual physicians); Sherry Glied, *Managed Care* (hypothesizing that managed care plans may be able to effectively improve performance and information provisions), in 1 HANDBOOK OF HEALTH ECONOMICS *supra* note 1, at 707, 725 (Anthony J. Culyer & Joseph P. Newhouse eds., 2000); Havighurst, *supra* note 6, at 8-9 (arguing in favor of MCO contractual liability); Sage, *supra* note 6, at 163-64 (concluding that MCO liability is superior to hospital liability for medical error). But see Abraham & Weiler, *supra* note 19, at 393-94 (arguing for enterprise liability for hospitals).

health insurance plans:¹¹⁸ one in which *all* medical providers in the network are subject to reformed malpractice liability to *all* of their patients, and the other in which no provider is subject to liability for medical negligence to any patient.¹¹⁹ As before, it is assumed that patients know the costs and benefits of imposing liability by contract.¹²⁰

This Part shows that MCO contractual liability would reduce the collective goods and renegotiation problem that would plague individual negotiable contractual liability. Nevertheless, it is inferior to reformed state-imposed malpractice liability from the perspective of patients who value liability. Patients who benefit from state-imposed liability are harmed by the right to contract with MCOs over liability because MCO contractual liability would be very costly, as a result of the adverse selection problem. Indeed, channeling contracting

¹¹⁸ *But cf.* Joseph P. Newhouse, *Reimbursing Health Plans and Health Providers: Efficiency in Production Versus Selection*, 34 J. ECON. LITERATURE 1236, 1240 tbl.1 (1996) (observing that 48% of employees provided with insurance by their employers are only offered one health plan).

¹¹⁹ This form of MCO liability differs from that preferred by proponents of MCO contracting who advocate unfettered contracting between MCOs and patients over liability. This Section examines collective contracting with commitment because unfettered MCO contracting would be subject to the collective action and time-inconsistency problems identified in Part III. To evaluate MCO liability in the most favorable light, this Article focuses on the form of MCO contracting that avoids these problems.

¹²⁰ Some have argued that MCO contracting ameliorates information problems because health insurance contracts are the product of negotiations between informed employers and insurers. *See, e.g.,* Epstein & Sykes, *supra* note 6, at 647-48. There are two problems with this argument. First, many employers, especially small employers, may not be fully informed about the benefits of an effective malpractice liability regime. Second, even if informed, employers will not use their superior information to select the liability provisions that maximize their employees' welfare unless their employees also know the costs and benefits of liability. When employees are uninformed, employers will select the clauses that their uninformed employees *think* benefit them, because these clauses will be valued on labor markets. If employees care about price but underestimate the effect of liability on quality, employers will negotiate to reduce both quality and cost, even if the cost savings are less than the cost to the employees of the resulting reduction in the quality of care. *See* Sherry A. Glied, *The Employer-Based Health Insurance System: Mistake or Cornerstone?* (explaining that employers generally mimic the behavior of most workers when they select health plans, and thus place a lot of weight on price considerations and pay less attention to quality), in *POLICY CHALLENGES IN MODERN HEALTH CARE* 37, 46-47 (David Mechanic et al. eds., 2005); *see also* David Dranove & Mark A. Satterthwaite, *Monopolistic Competition When Price and Quality Are Imperfectly Observable*, 23 RAND J. ECON. 518, 519-26 (1992) (showing that competition in markets may lower consumer welfare in situations where consumers can easily compare producers' prices but cannot easily assess quality differences; this will lead producers to focus on lowering price even if it means lowering quality below optimal levels).

through MCOs would create a more serious adverse selection problem than would negotiable individual contractual liability.¹²¹

MCO contractual liability is plagued by adverse selection because, all else being equal, the patients likely to contract into liability disproportionately include those patients who expect to need serious medical care during the period of the insurance contract, in addition to those who are litigious.¹²² These patients do not just have higher expected liability costs. Ill patients also are very costly for MCOs because MCOs are selling medical insurance, and thus would bear most of the financial burden of their higher medical costs.

Accordingly, MCOs would not price liability plans efficiently, at the expected cost of offering liability to this particular patient (or even to the average patient). Instead, they would charge an additional premium to reflect the higher-than-average expected health care costs of the patients who impose liability. This premium surcharge harms all relatively healthy patients who value liability by requiring them to pay a higher price for liability than is optimal. They also would have to pay more than would be charged under state-imposed liability. As a result, patients contracting over liability with their insurers would face excessive incentives to waive liability. Indeed, if the adverse selection problem is great enough, contracting could result in all patients deciding to waive liability, even when all would have benefited from state-imposed liability.

A. *The Superiority of MCO Contractual Liability over Individual Contracting*

MCO contracting over liability through standard form contracts is superior to contracting over liability through individual negotiable contracts executed at the point of service for many reasons.¹²³ Among

¹²¹ Should individual providers publicly disclose their liability clauses (e.g., on the internet), the search-cost problem would be reduced, but only by introducing adverse selection. Disclosure of providers' liability clauses would exacerbate adverse selection because MCOs contracting with providers would design their insurance plans and contracts based on an expectation that liability providers who offer their patients liability contracts will attract higher-cost patients. MCOs would put liability-assuming providers into one insurance plan and no-liability providers into another, and price these plans accordingly.

¹²² Indeed, to the extent that reformed malpractice liability operates effectively to induce hospitals to make systemic investments in care, the patients most likely to benefit are those who expect to be hospitalized during the contract.

¹²³ MCO contracting over liability is superior to individual provider contracting liability for other reasons. First, individual providers cannot easily give insured patients adequate financial incentives to waive liability because insured patients do not pay providers directly for the cost of the care they receive, and thus may not obtain the full

other benefits, MCO contractual liability can be designed to mute collective goods problems and promote the use of liability to signal quality (by eliminating renegotiation). It also is better able to facilitate coordination of care choices across medical providers.

MCO contractual liability is less vulnerable to collective goods problems so long as MCOs allocate all liability-accepting providers to one plan and all no-liability providers to another. Moreover, MCOs must require each provider to offer the same liability terms to all pa-

benefit of any price breaks offered by physicians. MCOs, by contrast, can ensure that patients benefit when they waive liability by lowering the price for no-liability insurance. HAVIGHURST, *supra* note 6, at 171.

Standard form contracting over liability also is better accomplished through MCOs because individual-provider standard form contracting generally is rendered inefficient by imperfect information, search costs, and bounded rationality. Individual physicians do not face adequate incentives to offer optimal liability terms when contracting with patients seeking immediate medical care. Even when patients would prefer and be willing to pay to retain liability, physicians can reduce costs by offering standard form contracts that include liability waivers. Physicians offering such terms will not lose many patients because patients seeking medical care are unlikely to know the waiver clause exists, as almost no one reads standard form contracts. *See generally* Yannis Bakos, Florencia Marotta-Wurgler & David R. Trossen, *Does Anyone Read the Fine Print? Testing a Law and Economics Approach to Standard Form Contracts* 3 (N.Y. Univ. Law & Econ. Research Paper Series, Paper No. 09-40, 2009), available at http://lsr.nellco.org/cgi/viewcontent.cgi?article=1199&context=nyu_lewp (providing evidence that only a small percentage of consumers read standard form contract terms); *see also* Danzon, *supra* note 1, at 1382 (noting that patients actively seeking medical care often are in no condition to consider properly the issue of contractual liability).

Moreover, those who do read their contracts often will continue to seek treatment—even if the liability clause is welfare reducing—because it would be too costly for them to delay care in the hope of finding a provider with a contract they prefer. Patients seeking immediate necessary medical treatment are especially unlikely to search for a new provider because the cost of delaying care in the hope of finding a provider with better terms is likely to exceed the expected benefits. Search costs are particularly high when patients cannot easily learn alternative providers' liability clauses in advance or would face a delay in obtaining care from another provider. The expected benefits of searching also may be low for patients whose choice of alternative providers is limited by their insurance or by the dearth of qualified providers in their geographic area. *See generally* Alan Schwartz & Louis L. Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 VA. L. REV. 1387, 1409-15 (1983).

MCO contractual liability is less afflicted by information problems and medical duress because MCOs would incorporate liability clauses into the health insurance contracts they present to their subscribers each year. Patients normally enter into such contracts when they are not under medical duress. Patients also usually have more time to deliberate over health insurance plans than over contracts presented to them by medical providers when they seek treatment. Moreover, employers and unions often bring important clauses to their employees' attention during the open-enrollment process. *See* Danzon, *supra* note 1, at 1382; *see also* HAVIGHURST, *supra* note 6 at 171; Havighurst, *supra* note 6, at 16.

tients, including patients insured by others insurers.¹²⁴ If MCOs were required to satisfy these conditions, then MCO contractual liability would reduce collective goods problems because each patient who imposes liability would automatically receive the benefit of liability imposed by others. Moreover, patients could no longer free-ride on the liability choices of others because no patient could obtain the benefit of the incentives created by others' decisions to impose liability without electing to impose and pay for liability herself.

In addition, MCO contracting with patients through standard form nonnegotiable contracts would enable high-quality providers to use liability to signal quality because patients contracting for the services of a provider who offers to bear liability could not negotiate to waive it. Thus, low-quality providers would be unable to mimic the liability contracts of high-quality providers in the hope that patients will waive liability because once a provider has joined a liability network she is not permitted to accept waivers.

Finally, MCO contracting has the advantage of facilitating networks of providers offering similar liability terms. Networks are important because a provider's personal liability choice has external effects on other providers delivering care to the same patients for similar or related conditions. MCO contracting would facilitate the formation of all-liability and no-liability networks.

Although MCO contracting reduces the collective goods problem, it would not remedy it entirely. First, MCO contractual liability would only reduce the collective goods problem if contracting were constrained. Specifically, each physician contracting over liability must be required to accept the same liability terms to govern all relationships with all patients and with all MCOs. Absent this condition, MCOs (and thus patients) would not consider the effect of their decisions on the patients of other insurers. Moreover, they would have incentives to free-ride by signing no-liability contracts with providers who are subject to liability to other MCOs' patients. Yet imposing this condition substantially reduces the heterogeneity benefits of contracting.

Second, MCO contractual liability would not reach the millions of patients who are uninsured.¹²⁵ These patients would create a free-

¹²⁴ In other words, MCOs would need to insist that any provider who contracts to assume liability for its subscribers is also subject to liability to the subscribers of other insurers.

¹²⁵ Most privately insured patients are insured through an entity that operates as an MCO. Nevertheless, in considering the costs and benefits of MCO contractual liability, it is important to recognize that more than 17% of the nonelderly population

rider problem if permitted to seek services from providers who contract for liability with MCOs without also imposing liability. Yet, requiring uninsured patients to impose liability on any provider who has entered into liability contracts with an MCO would result in a situation where insured patients make choices that in effect bind the least well-off patients, who do not have insurance. This would result in uninsured patients bearing the full adverse selection price penalty of contractual liability without getting the benefit of the right to contract out of liability.

Finally, there exists a concern that because MCO contracting must be constrained, MCOs may converge on liability clauses that do not benefit most of their patients. When providers must offer the same liability terms in all their contracts, they may base their liability clauses on the preferences of the largest MCO or largest employer. This could result in a situation where liability choices are dictated by the preferences of a few large employers with sufficient market power to induce MCOs to offer health care plans tailored to their needs. While some employees would obtain more choice than under state-imposed liability, others effectively would have their liability clauses dictated by entities that, unlike the state, do not even have an ostensible desire to look out for their interests.¹²⁶

B. MCO Contractual Liability Increases Adverse Selection

Beyond this, MCO contractual liability would harm many patients by substantially exacerbating the adverse selection problem plaguing health insurance markets. The adverse selection problem presented by MCO contracting would be worse than that presented by negotiable contracting over liability with individual providers.

(under age sixty-five), and 15% of the entire U.S. population (including the elderly) are uninsured. Paul Fronstin, *Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2009 Current Population Survey*, 344 EBRI ISSUE BRIEF 1, 4 (2009), available at www.ebri.org/pdf/briefspdf/ebri_13_9_2009_No334_HI_Cvg1.pdf (providing insurance figures for 2008). In states such as Florida, Texas and New Mexico, more than 20% of the population is uninsured. *The Federalist Prescription*, ECONOMIST, Jan. 13, 2007, at 28. Beyond this, more than 19% of the nonelderly population and 29% of the total U.S. population (including the elderly) are covered by public insurance. Fronstin, *supra*, at 4.

¹²⁶ See Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")*, 83 VA. L. REV 713, 729-35 (1997) (discussing how learning and network externalities can lead contracting parties to adopt contracts with inefficient terms). See generally Lewis Kornhauser, Comment, *Unconscionability in Standard Forms*, 64 CAL. L. REV 1151, 1183 (1976) (discussing inefficiencies plaguing standard form contracting).

Contracting over liability is not optimal unless patients can obtain liability by paying no more than the amount it costs the provider to offer liability, this being the cost of the investments in quality induced by liability plus expected liability costs. MCO contractual liability violates this condition because competitive market pressures would induce MCOs to charge more for liability than it costs to provide it. MCOs would charge an excessive premium for liability plans to reflect the higher-than-average expected health care expenditures of the type of patients who are disproportionately likely to select plans that offer liability. This excessive surcharge would hurt patients who value liability, inducing many to waive liability even if they would have benefited from liability imposed through the tort system.¹²⁷

MCOs would have to impose a surcharge on liability plans to reflect the higher demand for health care under liability plans as a result of selection effects. A central goal (and effect) of malpractice liability is to induce medical providers to invest more in expertise and care. These safety investments disproportionately benefit patients

¹²⁷ Proponents of contractual liability recognize that insurance markets are affected by adverse selection but incorrectly assume that selection effects unambiguously favor contractual liability. They assume contractual liability is better because mandatory liability in effect requires all patients to purchase the same liability at the same price, thereby requiring low-risk patients to subsidize high-risk ones. See, e.g., RUBIN, *supra* note 6, at 40-44 (describing the adverse selection problem and concluding that “elimination of the forced transfer from the tort system would conform with general notions of fairness [and would be] efficient”); Epstein, *supra* note 107, at 660 (“If the skillful and the incompetent, the watchful and the careless must be treated as falling within a single risk classification, then the former must subsidize the latter.”).

Yet economic analysis has shown that patients do not necessarily benefit from efforts to reduce pooling. Indeed, low-risk patients who value liability may well be better off when the state imposes liability (thereby pooling them with higher-cost patients whom they must cross-subsidize). This is because if liability is not mandatory then these patients could not obtain liability without actively seeking it and would thereby join a pool that is disproportionately composed of high-cost patients. The cost to low-risk patients of obtaining liability voluntarily thus would be much higher than the cost to them of obtaining liability imposed by the state. Thus, low-risk patients who want to impose liability benefit from pooling because they can purchase the insurance they desire more cheaply under pooled liability than they can under contractual liability. See generally Wilson, *supra* note 110, at 173-76 (showing that purchasers of health insurance may be better off when required to purchase pooled insurance because low-risk insurers may be better off subsidizing high-risk ones, as they would have to with mandatory insurance, than they would be under voluntary insurance, because adverse selection is likely to lead them to be underinsured).

Moreover, even low-risk patients who do not benefit from liability in the short run may be better off when liability is mandatory if they benefit over the long run from the right to obtain lower-cost liability protection later when they are ill and need it. See *infra* note 129 and accompanying text.

who expect to need medical care during the course of the contract. Informed patients who need serious or extended hospital care would particularly value liability, since hospitals appear to be a particularly significant source of medical error. Accordingly, a disproportionate percentage of patients attracted to liability plans would be expensive for the MCO to insure. Recognizing this, MCOs would price liability plans accordingly, based on both the cost of liability and the higher average health care costs of the type of patients who value liability. As a result, an average patient seeking to obtain liability could only do so by paying a surcharge for health care she does not expect to need. This surcharge would require patients contracting into liability to pay more than they would have to pay for state-imposed liability. Thus, average- and low-cost patients who contract into liability would have to bear a greater portion of the high-cost patients' extra health care expenses than they would have to bear under state-imposed liability. This premium surcharge is inefficient and would push many patients who value liability into no-liability plans, leaving them less well-off than they would be under state-imposed liability.

To see why MCOs would distort pricing in this way, it is useful to examine in more detail the structure of health insurance pricing and the strong pressures that MCOs face to design plans to separate ill patients from healthy ones.

1. Structure of Health Insurance Pricing and Benefits of Pooling

MCOs selling a given health plan to subscribers generally cannot legally charge individual patients different premiums based on their health differences, even when insurers have this information and know that these differences affect expected health care costs.¹²⁸

¹²⁸ Insurers are allowed to charge a different amount to insure an individual or a family but often are precluded from adjusting premiums to reflect differences in subscribers' health status. Of particular importance, federal law precludes group health insurers from charging individuals different premiums based on their health status. Group insurers also cannot exclude subscribers based on health status. See Mary Crossley, *Discrimination Against the Unhealthy in Health Insurance*, 54 U. KAN. L. REV. 73, 113-16 (2005) (discussing the Health Insurance Portability and Accountability Act's nondiscrimination provisions). Some states have gone even further, requiring insurers to charge the same premium for a given benefit package to all subscribers within a given geographic location, even if the different subscriber pools have different risk characteristics. See *id.* at 112 (describing the "community rating" systems some states have employed). Issuers are allowed to charge different premiums for different plans, however and can take the expected average health status of expected subscribers into account when setting these premiums.

State and federal regulations limit MCOs' ability to price discriminate within a plan largely because legislatures recognize that insurance cannot reliably guarantee coverage for ill patients unless ill patients are pooled in a plan with large numbers of healthy patients. The reason for this is simple: absent pooling, insurance companies would price health insurance to reflect each patient's expected annual health care costs, but many, if not most, seriously ill patients cannot afford to pay their expected health care costs for the year. Accordingly, in order to enable the seriously ill to get health insurance, government regulation encourages insurance that pools ill and healthy patients together into a single plan with a uniform price. Our current system of tax-subsidized, employer-based health insurance helps to induce pooling.

This pooling of healthy and ill patients might appear to harm healthy patients. Yet, in fact they often benefit from it. First, relatively healthy patients often benefit from pooling in the short run because it enables them to obtain high-quality insurance at a lower price than they could get otherwise, as will be explained. In addition, people can benefit from pooling over the long run because pooling effectively enables them to insure against the risk of being sick in the future. Many, if not most, patients who are healthy today are likely to become seriously ill in the future and need more medical care than most patients can afford. Absent pooling, each healthy patient would face a risk that she will eventually become a seriously ill patient unable to afford medical insurance or medical care. Patients would like to insure against this risk of becoming ill in the future but cannot do so directly because health insurance markets involve annual contracting. Pooled employer-based insurance offers a partial solution to this problem by combining high- and low-cost employees into a single insurance pool to which an employee is entitled to belong so long as she remains with that employer. Thus, while low-cost healthy patients do cross-subsidize ill patients in the short run, they benefit from this system in the long run because it enables them to obtain cross-subsidized insurance should they become sick in the future. Thus, pooling benefits healthy patients by operating as a substitute for the ability to purchase insurance for future illnesses.¹²⁹

¹²⁹ See Glied, *supra* note 120, at 41 (arguing that job-based insurance coverage through large firms offers a form of long-term private health coverage against future risk).

2. Price-Distorting Effects of Adverse Selection

Although pooling potentially benefits ill and healthy patients alike, MCOs operating in competitive markets face strong market pressures to break out of the pooling equilibrium by finding ways to separate low-risk from high-risk subscribers. MCOs stand to gain from segmenting the market because patients vary enormously in their demand for health care. Ninety percent of the population spends relatively little on health care, while ten percent of the population accounts for nearly three-quarters of all medical spending.¹³⁰ Indeed, the top one percent of health care users account for thirty percent of all medical spending.¹³¹

Because MCOs are not allowed to directly discriminate against ill patients, they regularly seek other mechanisms to separate healthy from ill subscribers. For example, many MCOs seek to attract healthy patients by designing plans that limit coverage in ways that deter unhealthy patients from selecting the plan. The MCOs' goal is to design a plan that would be acceptable to healthy people (albeit one offering lower quality than healthy people would otherwise want) but unacceptable to those with serious health care needs. It is true that insurers also offer high-quality plans. But they charge very high premiums for them to the extent their selection efforts are effective, on the assumption that these plans will disproportionately attract high-cost subscribers.¹³² These premiums are sufficiently large that they tend to drive relatively healthy patients to lower-quality plans than they would prefer. These inflated premiums would be particularly likely to induce low- and middle-class patients to select plans offering lower-quality care than they would prefer.

MCOs' efforts to segment the market can hurt both high- and low-risk patients. Most obviously, high-risk patients are hurt by efforts to segment the market because many can only afford adequate insurance if they are part of a pool dominated by healthy subscribers. Thus, they may be forced to select the low-quality plan designed for healthy subscribers. Low-risk patients also can be hurt because MCOs' efforts to segment the market are likely to cause them to purchase lower quality insurance and care than they would prefer (and be willing to pay for).

¹³⁰ David M. Cutler & Richard J. Zeckhauser, *The Anatomy of Health Insurance*, in 1 HANDBOOK OF HEALTH ECONOMICS, *supra* note 1, at 563, 572.

¹³¹ *Id.* at 571-72.

¹³² See Newhouse, *supra* note 118, at 1253-56 (discussing evidence that MCOs use plan design to select for healthier patients).

MCOs can only create a low-cost plan that does not appeal to high-risk patients by designing the low-cost plan to provide substantially lower-quality care than the high-cost patients want. These plans also are lower quality than most low-cost patients want, however. MCOs nevertheless attract lower-cost patients to these plans because MCOs charge a substantial premium for high-quality plans (since these plans attract high-cost subscribers). This adverse selection surcharge discourages low- and middle-class healthier patients from obtaining the quality of care they prefer.¹³³ Thus, insurers' efforts to segment the market present all patients with the unhappy choice between low-cost insurance that gives them much lower-quality insurance than many would prefer, and higher-quality insurance at a price that far exceeds the amount they would have to pay for the same insurance in a pooled market. Moreover, as previously explained, market segmentation also harms lower-risk patients over the long run by precluding them from using pooled insurance to, in effect, obtain lower-cost insurance against the risk of becoming ill in the future.¹³⁴

These costs of separation in markets plagued by adverse selection are sufficiently severe that governments not only regulate insurance prices, but also have long regulated the terms of insurance contracts in an effort to preclude insurers from offering excessively low-quality plans in order to segment the market.¹³⁵ These interventions mute se-

¹³³ For example, one study of family health policies found that a patient seeking to switch from a low-quality plan (charging a premium at the bottom tenth percentile of the premium distribution) to a plan offering no more than a 40% increase in health benefits (as measured by spending) would have to incur a three-fold increase in premium costs for this relatively small increase in coverage. This three-fold increase in costs to obtain a mere 40% increase in coverage reflects the fact that the better plan attracts a disproportionate percentage of patients who need medical care. Thus, the patients attracted to this plan have higher expected average costs than the patients insured by the low-quality plan. *Id.* at 1253-55.

The Federal Employees Health Benefits Plan also appears to exhibit a pricing structure distorted by selection effect. *Id.* at 1255. This plan offered two nonintegrated plans with a free choice of physicians, known as the high- and low-option plans. *Id.* The plans differed only in the amount of cost sharing, not in the coverage provided. *Id.* Although the actuarial difference in the two plans was only 10%, the price charged for the high-option plan was almost double that charged for the low-option plan, as a result of the expectation that this plan would attract people with greater health care needs. *Id.*

¹³⁴ See *supra* text accompanying note 129.

¹³⁵ For example, largely to combat adverse selection, states impose certain minimum-quality constraints on the coverage that plans can offer, such as requiring coverage of certain medical procedures. See Russell Korobkin, *The Efficiency of Managed Care "Patient Protection" Laws: Incomplete Contracts, Bounded Rationality, and Market Failure*, 85 CORNELL L. REV. 1, 60-62 (1999) (contending that market forces will not induce MCOs

lection but also leave MCOs with an unfulfilled demand for mechanisms that promote selection. This unfulfilled demand has implications for MCO contracting over liability.

3. Adverse Selection Under MCO Contractual Liability

States' efforts to reduce adverse selection would be seriously compromised by the introduction of MCO contractual liability. MCO contracting over liability raises selection problems because the primary effect of a well-designed liability system is to induce investments in expertise and systemic care, especially by medical entities such as hospitals. These investments disproportionately benefit patients who need medical care over the term of the contract, especially those who expect to need serious hospital care. Thus, liability plans would attract a disproportionate number of patients who expect to need serious (i.e., expensive) hospital care.

Contracting over liability would exacerbate adverse selection by providing insurers with an additional unregulated distinction in plan quality that they could use, in combination with other differences, to segment patients based on cost. Contracting over liability would help insurers segment the market because informed patients obtain more benefit from liability—and thus are more likely to demand it—if they have a higher-than-average demand for medical care. Patients who are ill also may value liability more because they have a higher-than-average risk of being injured by medical error if they obtain care, since patients who suffer from multiple conditions are more likely to be injured seriously if an error occurs. These patients, if informed, would disproportionately seek policies offering liability.¹³⁶

Contracting over liability thus would present MCOs with a new opportunity to use plan design to segment the market. Recognizing high-risk patients' greater demand for liability, MCOs would use plan design to push high-risk patients into liability plans and low-risk patients into no-liability plans.¹³⁷ To ensure that only low-risk patients

to offer optimal coverage because MCOs know they can profitably restrict coverage for certain diseases because healthy consumers are unlikely to notice the restriction since they rarely read health plan coverage provisions carefully, and MCOs can profit from discouraging subscription by unhealthy, sophisticated consumers who do read plan terms and also are expensive to serve).

¹³⁶ See *supra* Section III.C.

¹³⁷ Patients who anticipate being healthy might want liability but could live without it in return for a sufficiently large discount. By contrast, patients who need serious care would find the no liability plans unattractive. Consequently, MCOs would use their right to contract over liability to help them segment the market.

purchase no-liability plans, MCOs would likely incorporate no-liability clauses into plans that restrict coverage and quality in ways that are acceptable (albeit not preferred by) low-risk patients but are completely unacceptable to high-cost patients. In turn, liability clauses would likely only be included in expensive, high-quality, high-quantity health plans that disproportionately attract unhealthy patients.¹³⁸

As a consequence, patients would not have optimal incentives to contract into MCO liability because they could only obtain liability by paying an additional premium surcharge to reflect the higher expected health care costs of the high-cost patients disproportionately drawn to the higher-quality liability plan.¹³⁹ This obviously could hurt high-cost patients. But it could also hurt low-cost patients who benefited from state-imposed liability. These patients either would have to pay much more for liability than they would have under state-imposed liability or would have to accept a health plan that offers them substantially lower-quality care than they would prefer.¹⁴⁰ Moreover, MCO contractual liability would undermine their ability to use pooled insurance against the risk of becoming seriously ill in the future. Thus, many healthier patients would be worse off than under state-imposed liability.

¹³⁸ See Cutler & Zeckhauser, *supra* note 130, at 607 (“Generally, the sick are drawn to more generous plans than the healthy.”).

¹³⁹ It might appear that the adverse selection problem is muted by risk averse patients, who are likely both to disproportionately prefer liability and to be healthier on average. Yet, contrary to this expectation, empirical analysis reveals that risk averse people impose lower costs on *life* insurers but do not impose sufficiently lower costs on acute health insurers to counteract the exponentially higher cost of insuring the unhealthy people who value this insurance. Thus, adverse selection seriously plagues the market for acute health insurance. See David M. Cutler et al., *Preference Heterogeneity and Insurance Markets: Explaining a Puzzle of Insurance*, 98 AM. ECON. REV. 157, 161 (2008) (“For acute health insurance, the lack of any systematic offsetting effect of risk tolerance may explain why . . . this market is, on net, adversely selected.”).

Similarly, it might seem that insurers would be less inclined to penalize liability subscribers since liability deters errors that increase medical expenses. But this effect will not seriously mute the adverse selection problem if the increased medical costs associated with the patients who prefer liability exceeds the cost savings to the MCO associated with any resulting reduction in medical error. This is likely since MCOs pay all the added health care costs of the very ill patients who value liability and these costs are exponentially higher for the very ill. By contrast, MCOs only bear higher medical costs as a result of error for the smaller portion of patients injured by error, and then only when the error harms the patient without killing her immediately. Thus, the per-patient adverse selection effect on plans that attract the ill can be expected to dwarf the per-patient deterrence benefits from liability.

¹⁴⁰ See generally Cutler & Zeckhauser, *supra* note 130, at 606-24 (discussing the effect of adverse selection on the health insurance choices of higher- and lower-risk patients).

In the extreme case, MCO efforts to select patients through plan design could lead to a premium death spiral under which all MCOs offer only lower-quality (no liability) plans, even when most patients prefer higher-quality plans (with liability). Selection can lead to a premium “death spiral” if (1) a large percentage of healthy patients select the low-cost plan, and (2) the expected health costs of the patients who want the high-quality plan exceed the ability to pay of many of them, especially those with lower costs. In this case, some of the sick patients with lower medical needs (and lower costs) may decide to select a no-liability plan. But the decision of these patients to exit the liability plan would only increase the selection pressure on the higher-quality liability plan, producing an additional price increase. This price increase would induce even more patients to select the low-quality plan. This can lead to a situation where all patients pool in the lower-quality plan, even though most of them prefer the higher-quality plan. Should this happen, the lower-quality plan would increase in price until it no longer offers a significant price savings. Selection effects can lead even relatively ill patients to select no-liability plans if selection pressures drive too many healthy patients from the higher-cost plans.¹⁴¹

Thus, patients who value liability can be hurt by the right to contract with MCOs over liability, because patients who would be willing to pay the social cost of the liability they impose would not necessarily be able to obtain liability by contract. They either would have to pay an enormous premium surcharge for liability or select a low-cost no-liability plan that offers them lower-quality care than they would prefer. Those patients who do contract into liability likely would pay far more for it than they would if the state imposed liability by fiat.

V. CONTRACTING INTO EXCESSIVE VARIATION IN STANDARDS OF CARE

The preceding arguments against permitting contractual liability waivers raise the following question: could states avoid the worst problems associated with contracting, while retaining its ostensible benefits, by allowing limited contracting that allows patients to contract over the standard of care but does not allow them to waive liability? This form of contracting would, it has been suggested, allow patients to contract for the standard of care that reflects their willingness to

¹⁴¹ See *id.* at 616 (“The disappearance of generous plans as a result of dynamic processes of adverse selection is termed a ‘death spiral.’”); Newhouse, *supra* note 118, at 1255 (explaining that limits on insurance pooling can lead to a “premium death spiral”).

pay for safety.¹⁴² According to proponents, each patient would contract for the level of care that maximizes her welfare, thereby producing the socially optimal degree of variation in the standard of care.¹⁴³

This Part considers the claim that patients should be permitted to contract over the standard of care because this would produce optimal variation in the standard of care.¹⁴⁴ It shows that this claim is incorrect. Individual contracting would create more variation in the standard of care than is socially optimal—and than is optimal for patients collectively—because parties engaged in atomistic contracting will not adequately take into account the cost savings to other patients and providers resulting from standardizing care standards and treatment protocols. The decision of what degree of variation to permit is likely best left to an entity capable of balancing the benefit of individualizing against its social costs (e.g., the state).

A. *Learning and Network Externalities of Varying the Standard of Care*

Proponents of contractual liability assume that contracting will yield the optimal variation in the standard of care because they assume that each patient fully internalizes the costs and benefits of her decision concerning the standard of care.¹⁴⁵ In other words, they im-

¹⁴² Contracting over the standard of care would permit patients to agree that doctors should treat them less intensively than other patients. One way patients could do this is to agree that a physician would provide only cost-effective treatments (and not provide some effective but excessively expensive treatments). Moreover, patients could agree that in determining whether a treatment is appropriate—in the sense of cost-effective—the evaluation could be made using a value of life that is lower than the valuation used for other patients.

¹⁴³ See Epstein, *Contractual Principle*, *supra* note 5, at 509 (describing the bargaining that would take place if patients could negotiate their standard of care).

¹⁴⁴ This Part focuses on the claim that contracting would produce optimal variation in the standard of care because Part III reveals that patients would not use their right to contract to select the level of care that maximizes their welfare. Patients would not have optimal incentives to contract over the level of care provided because collective goods and renegotiation problems would preclude them from obtaining the full deterrence benefit of any standard of care imposed by contract. In addition, they would be overcharged for contracting into higher quality of care as a result of adverse selection. Thus, for the reasons given in the preceding Part, contracting would not provide patients with optimal incentives to contract into the care levels that benefit them.

¹⁴⁵ See, e.g., Robinson, *supra* note 5, at 182-83 (suggesting that, because patients bear the costs of medical care and obtain its benefits, from an efficiency perspective contractual arrangements would allow the parties to establish the rules that they prefer).

PLICITLY assume that each patient's decision about her standard of care does not affect other patients.¹⁴⁶

Yet if we consider how physicians are trained and how they practice, it becomes clear that this is not the case. Physicians' capacity to provide care is affected by a complex interdependent network of relationships involved in the training of doctors, the provision of care, and the assessment of treatment protocols. As a result, providers obtain external learning, coordination, and network benefits when they aspire to a commonly agreed upon standard of care. Thus, the cost to providers of delivering health care is lower when they aim to provide the same standard of care than when the standard of care varies significantly across providers.

Most obviously, providers are able to gain expertise at lower cost when they can rely on the training they receive in medical school and at teaching hospitals to inform them how to respond to particular patient conditions. This expertise is the same when treatment protocols are the same for all similarly situated patients and do not depend on patients' contract terms. Moreover, when providers are at least aiming for similar goals, nonteaching hospitals can rely on teaching hospitals to train young physicians, confident that successful training will produce a doctor who is aiming to deliver the quality of care the hospital is obligated to provide. By contrast, when the standard of care is determined by contract, physicians trained in hospitals whose patients contracted to receive minimal care would be taught significantly different treatment protocols from those trained in hospitals whose patients contracted for the highest possible care. This lack of standardization would require nonteaching hospitals to either retrain physicians or specify the hospitals in which they should do their internships.

Physician expertise also is less expensive when providers aim at a common standard of care because providers are better able to rely on research on best medical practices when they share common goals. At present, medical researchers can conduct research on best practices to the benefit of doctors nationwide because there is considerable agreement about the *desired* goal of medical treatment. The medical profession could not as easily develop best medical practices if physicians in different hospitals were governed by dramatically different standards of care—resulting, for example, from differences in the willingness-to-pay valuation used to determine whether a treatment is

¹⁴⁶ See *id.* at 194 (arguing that informed patients would employ contract to demand the level of care that is optimal for them).

cost-effective. Thus, variation in the standard of care would increase the cost of physician expertise.

Medical care would also be more expensive to provide—and potentially more prone to error—if standards of care were to vary substantially across providers, because medical care requires considerable coordination across different providers, often operating out of different practices.¹⁴⁷ Providers can better coordinate their medical decisions when they are governed by a common standard of care. Nowhere is this more evident than in the hospital context. To control error, hospitals need to train nurses, aides, interns, and residents to follow standard protocols so that they can make quick, accurate, and automatic decisions in time-sensitive situations. Individualized standards of care would increase hospitals' costs of ensuring that their staff can promptly and effectively coordinate their actions to serve patients if these differences in standards result in protocols that differ across patients. Similarly, individual contracting would increase the care costs of surgeons and other physicians who are associated with more than one hospital. Without contracting, these providers can deliver care more effectively under the assumption that each of them, in the hospitals they serve, is aiming at a common standard. Allowing each physician in the hospital to contract for her privately preferred standard of care would undermine this system.¹⁴⁸

B. *Will Patients Contract for Optimal Variation?*

Patients contracting over the standard of care will seek more individualization of the standard of care than is optimal. This is because each individual patient obtains the full benefit of her decision to seek the standard of care that matches her willingness to pay for safety but does not bear the full cost of the resulting increased heterogeneity in care standards. These costs are externalized onto providers—mostly those serving other patients—who would find it more costly to obtain effective training, to coordinate care across providers, and

¹⁴⁷ See Hoangmai H. Pham et al., *Care Patterns in Medicare and Their Implications for Pay for Performance*, 356 NEW ENG. J. MED. 1130, 1132-33 (2007) (noting that most Medicare beneficiaries are under the care of at least two primary care physicians and five specialists working in four different practices).

¹⁴⁸ It also is helpful for all providers to be ostensibly governed by a common standard of care because patients often are cared for by many providers, practicing out of many different institutions. Standardizing the duty of care helps facilitate the coordination of care across these providers. In turn, coordination would be more difficult if each different provider treating a patient were governed by a dramatically different standard of care.

to ascertain best medical practices. Given these externalities, private contracting may well lead to more variation in the standard of care than patients would prefer. Equivalently, private contracting could also lead to more variation than patients would select if they could act collectively (e.g., by imposing liability through the state) to determine how much variation to permit.¹⁴⁹

Alternatively, if the network externalities and learning effects are strong enough, contracting could lead private parties to converge on standards that may be suboptimal. As a result of network effects, large insurers and teaching hospitals will have disproportionate power to determine the level of care, because it is less costly for smaller providers to adhere to the level of care set by large insurers and teaching hospitals than to contract for their own standard of care, even if the other standard would be preferable. The preferences of patients contracting with these market makers thus would impose external costs on other patients.¹⁵⁰ Moreover, the resulting uniformity would largely eliminate one of the principal asserted benefits of contractual liability: its ability to allow for diversity in actual or effective standards of care.¹⁵¹

Accordingly, analysis of the structure of the health care industry reveals that the most cherished benefit of contracting—the ability to individualize the standard of care—may not be a benefit at all if patients can only obtain it through a mechanism, such as individual con-

¹⁴⁹ See Kahan & Klausner, *supra* note 126, at 733 (“As long as the value of customized terms exceeds the value of the potential standard term to the initial user, [parties] may customize even if standardization would be socially optimal.”).

¹⁵⁰ See, e.g., *id.* at 729-36 (describing the effects of learning and network externalities on the efficiency of standard terms in contracts); Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 805-08 (1995) (arguing that standard terms adopted by heterogeneous firms may be inefficient because of network externalities); Kornhauser, *supra* note 126, at 1174-75, 1177-79 (stating that inefficient standard terms can occur even when there are no bargaining defects because of search costs, consumer irrationality, and bounded memory).

¹⁵¹ Convergence on a uniform term would present a challenge for contractual liability because it would raise the question of why we need to achieve this uniformity through costly individual contracts instead of through the state. After all, if patients are as informed about the costs and benefits of liability—and as attentive to this issue—as contractual liability proponents assume them to be, it would seem that they should be sufficiently informed and attentive to induce legislatures to adopt optimal reforms. Many of the pathologies of interest-group politics (e.g., rent-seeking) arise because citizens do not already know the costs and benefits of a legal rule and do not attend to the issue. These problems with state action would be muted if citizens—and thus, presumably, the state—are perfectly informed about the effects of a legal rule, attend to the issue, and develop a uniform solution which in theory could even provide for the socially optimal level of variation across consumers. See generally DENNIS C. MUELLER, PUBLIC CHOICE III 343-48 (2003) (discussing rent-seeking behavior and the political process).

tracting, that does not enable patients effectively to balance the benefits of individualization against its costs. This is a decision that, at least in theory, could be better made collectively.

CONCLUSION

Proponents of contractual liability have long argued that states can best reform medical malpractice by allowing patients and medical providers to determine liability by contract. They also insist that any reforms adopted should grant patients and medical providers the right to contract over liability. Proponents' faith in contract rests on the premise that informed patients cannot be hurt by the right to contract because they have optimal incentives to contract into liability and thus can, and will, use contract to replicate the effects of even the best state-imposed liability. This is not the case. Informed patients who value liability cannot do as well for themselves through contract as they can when the state imposes effective liability by fiat because contractual liability—whether obtained individually or through MCOs—is a more restricted form of liability, conferring lower benefits at greater cost.

Patients obtain less benefit from contractual liability because they cannot use it to obtain two primary benefits of state-imposed liability: the ability to induce medical providers to make additional cost-effective investments in both collective and durable care, benefiting many patients, both now and in the future. Malpractice liability is a potentially effective mechanism for regulating such investments because it is a collective, multiperiod, and multiprovider form of liability. Patients benefit from the ability to impose liability collectively because this effectively induces collective investments in care. Patients benefit from the fact that tort liability spans multiple time periods because multiperiod liability can be used to induce providers to make durable investments to benefit future patients (precontractual care). Patients could not use individual negotiable liability to induce equivalent investments in collective and precontractual care because such liability is too narrow in scope. Beyond this, contractual liability would hurt patients who value liability because providers, recognizing the selection effects of liability, would charge patients more to impose liability by contract than they would charge were liability mandatory. Thus, rather than unambiguously benefiting patients, contractual liability would hurt those patients who value liability by reducing the benefit of imposing liability and increasing its cost. As a result, contracting would pressure patients who benefited from state-imposed liability to waive liability by contract.

Accordingly, granting patients the right to contract with providers for liability cannot be assumed to make patients better off, because contractual liability does not unambiguously increase the choices available to patients. Instead, adoption of contractual liability would preclude patients from imposing the form of liability that many value most—automatic, collectively imposed, multiperiod malpractice liability—and require them instead to consider a narrower, and less valuable, form of liability. This mandated change in the form of liability available to patients would hurt patients who value liability. Accordingly, states capable of reforming malpractice liability to benefit their citizens could best serve them by imposing reformed liability through the tort system and rejecting the call to permit contracting.