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## **The Case Against Collective Liability**

J. Shahar Dillbary

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## The Case Against Collective Liability

J. Shahar Dillbary\*

*Collective liability—defined as the imposition of liability on a group that may include innocent actors—is commonplace. From ancient to modern times, legislators, regulators, and courts have imposed such liability when they believe that the culprit is a member of the group. Examples of collective liability abound: from surgical teams held jointly liable for a misplaced sponge to entire families evicted from their homes for drug-related activity of a single person under the “one strike” rule. Courts recognize, of course, that collective liability punishes the innocent, but they view it as a necessary evil, to smoke out and punish an unknown wrongdoer in a known group.*

*Despite the ubiquity of collective liability regimes, they remain under-theorized and under-studied. Proponents of collective liability justify its imposition on two grounds. First, claims of deterrence suggest that the threat of collective liability incentivizes innocent actors to monitor each other and take preventative measures. The second claim is that once a harm occurs, potential liability will encourage innocent actors to share information that would identify the wrongdoer.*

*Drawing on economic theory and empirical evidence, this Article sheds light on the dark side of collective liability. It concludes that, disconcertingly, collective liability regimes may lead to contrary results and perverse outcomes. Through clear examples, this Article reveals that collective liability can (1) erode actors’ incentives to monitor and take preventative measures, (2) incentivize those knowledgeable about the culprit’s identity to keep quiet, lie, or even plot with others to lie, and (3) help service providers (e.g., physicians) engage in new unnoticed forms of harmful practices. Fortunately, many of the faults of collective liability are remediable. This Article provides a straightforward and practical proposal that would minimize strategic behaviors, reduce the detrimental effects of collective liability, and bypass the identification problem altogether. This will offer a*

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\* J. Shahar Dillbary is the James M. Kidd, Sr. Professor of Law at The University of Alabama School of Law. I would like to thank Yonathan Arbel, Ronen Avraham, Oren Bar-Gill, the honorable Judge Joseph Colquitt, David Hyman, Ben McMichael, Paul Pecorino, Caryn Roseman and the participants of the European Law and Economics Conference, the University of Hamburg Economics Department Workshop, and the Southern Economic Association Conference for their comments; the honorable Judge Filipe Luis Peruca for his generous time interviewing for this Article, to Christopher Collins, Marilia Rosa de Oliveira Lara, Felipe Fulgencio, Bernardo Werneck and Fabio Yanitchikis Cuoto for the help with translating from Portuguese the Twin decision, and to Tyler Adams, Elizabeth Aune, Lauren Gaskin, Connor Lunny and Jennifer Sandlin for excellent research assistance.

*new path in medical malpractice, housing evictions, assault, larceny, and a variety of other cases that are subject to group liability.*

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## I. INTRODUCTION

In 2019, a judge faced a reverse Solomonic<sup>1</sup> dilemma. A young girl brought a suit against two men, identical twins, arguing one of them is her

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<sup>1</sup> 1 *Kings* 3:16-28. The Biblical story (known as the Judgment of King Solomon) involves two women each claiming to be the true mother of a newly born baby boy. It was clear that one of them was lying, but it was impossible to determine who. The two women lived alone in the same house when they had their babies, so there were no witnesses and their testimonies were equally credible. In addition, the babies were of the same age (they were born within a three-day period). The identities of the women’s partners were also unknown (the women are described as “harlots”), thus ruling out the ability to rely on resemblance to the fathers. To force the truth out of the contestants, King Solomon ordered the division of the child between them. One

father.<sup>2</sup> DNA tests corroborated her claim but could not point definitely to either one of them. Other evidence was equally unhelpful. The twins denied any relationship with the mother and blamed each other. The mother could not identify the true father either because the twins had previously impersonated one another and used each other's names in order to hide their identity.<sup>3</sup> By the end of the trial, it was clear that one of the defendants was lying and the other telling the truth, but it was impossible to determine who was who. The twins thought that, with each one of them having an equal probability of being the true father, the case would be dismissed. They were wrong. In a decision that sent shock waves through the legal community worldwide, the judge ordered that the names of *both* twins appear on the birth certificate and that each fully pay child support.<sup>4</sup>

The twin case is not an exception in our legal landscape. Collective liability regimes—regimes that impose liability on a group that clearly includes innocent actors—are everywhere.<sup>5</sup> They are used by legislators,

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woman was content. The other agreed to waive her claim to the baby, thereby credibly identifying herself as the mother.

<sup>2</sup> T.J.G.O., Ap. Civ. No. XXXXXXXXXXXX (redacted), Cachoeira Alta, Relator: Des. Filipe Luis Peruca, 21.03.2019, <https://www.tjgo.jus.br/images/docs/CCS/duplapaternidade.pdf> in Lili an Cury, *Dupla paternidade biológica: juiz determina que gêmeos idênticos paguem pensão à criança*, TRIBUNAL DE JUSTIÇA DO ESTADO DE GOIÁS, (Apr. 1, 2019), <https://www.tjgo.jus.br/index.php/institucional/centro-de-comunicacao-social/17-tribunal/6716-dupla-paternidade-biologica-juiz-determina-que-gemeos-identicos-paguem-pensao-a-crianca> [Twin case]; Telephone Interview with the honorable Judge Filipe Luis Peruca (Sep.13, 2019) (on file with authors).

<sup>3</sup> See also Charlie Parker, *Identical Twins Both Ordered to Pay Child Support After Inconclusive Paternity Test*, N.Y. POST (Apr. 4, 2019), <https://nypost.com/2019/04/04/identical-twins-both-ordered-to-pay-child-support-after-inconclusive-paternity-test/> (reporting that the twins did so “either to attract as many women as possible or to hide betrayal in their relationship.”).

<sup>4</sup> To date, U.S. courts facing a similar dilemma were able to determine the identity of the father using non-genetic evidence. State ex rel. Dep’t of Soc. Servs., Div. of Child Support Enf’t v. Miller, 218 S.W.3d 2 (Mo. Ct. App. 2007) is illustrative. *Miller* involved two identical twins who unknowingly had sex with the same woman within hours. *Id.* at 6. The court explained that genetic testing of identical twins gives rise to two conflicting presumptions of fatherhood that cancel each other. In such cases “neither brother [can be] adjudicated [the child’s] father, even though those same tests indicate that one of the two is the father.” The court was able to break the scientific tie with “soft” evidence—the mother’s testimony—from which it was concluded that one of the brothers, Raymon Miller, was the father. See also Ill. Dep’t of Pub. Aid ex rel. Masinelli v. Whitworth, 652 N.E.2d 458 (Ill. App. Ct. 1995) (holding that in the absence of a conclusive result from DNA testing, the court must resort to nongenetic evidence to determine the identity of the father).

<sup>5</sup> Hal R. Varian, *Monitoring Agents With Other Agents*, 146 J. INSTITUTIONAL & THEORETICAL ECON. 153 (1990) (“[I]t is common to find incentive mechanisms that

commonly employed by regulators, and permeate our judicial system. An example of a group liability regime that impacts millions—many of whom are people of color and poor—is President Clinton’s “One-Strike-and-You’re-Out” rule.<sup>6</sup> As Ms. Rucker learned, the rule allows housing authorities to evict an entire family if *one* of the household members or their guests engaged in any drug activity on or near the premises.<sup>7</sup> In Ms. Rucker’s case, the eviction proceedings started after her daughter was caught with cocaine three blocks from her apartment.<sup>8</sup> The fact that the daughter was mentally disabled or that the other occupants—Ms. Rucker, her grandchildren, and great granddaughter—were innocent was of no consequence.<sup>9</sup> Ms. Rucker challenged the decision. She argued that the rule does not allow the eviction of innocent tenants and, if it does, the rule is unfair and unconstitutional.<sup>10</sup> The United States Supreme Court disagreed. In a unanimous decision, it held that a public housing authority can evict an entire group of tenants even if they “did not know, could not foresee, or could not control” the culprit’s behavior.<sup>11</sup>

Collective liability regimes have been subject to much debate. While in the past moral and racial considerations dominated the discussion, in recent years, two economic justifications have been raised in support of applying collective liability. The first, exemplified by the motivation behind

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involve agents monitoring each other.”); Thomas J. Miceli & Kathleen Segerson, *Punishing the Innocent along with the Guilty: The Economics of Individual versus Group Punishment*, 36 J. LEGAL STUD. 81 (2007) (“[T]here are many enforcement contexts in which the identity of the offender is uncertain but he or she is known to be a member of a well-defined group.”).

<sup>6</sup> Codified as part of the Anti-Drug Abuse Act, 42 U.S.C. § 1437(d)(1)(6) (requiring local public housing authorities to include in their leases a provision that allows for the eviction of tenants under such conditions). See HUD Announces “One Strike” Rules for Public Housing Tenants, NAT’L DRUG STRATEGY NETWORK (May 1996), <https://www.ndsn.org/may96/onestrik.html>; Office of Pub. & Indian Hous., “One Strike and You’re Out” Screening and Eviction Guidelines for Public Housing Authorities (HAs), HOUS. & URBAN DEV. (Apr. 12, 1996), <https://www.hud.gov/sites/documents/96-16pihn.doc>.

<sup>7</sup> *Id.*

<sup>8</sup> Dep’t of Hous. & Urban Dev. v. Rucker, 535 U.S. 125, 128 (2002). The other three plaintiffs included two elders whose grandchildren were caught smoking marijuana in the complex parking lot and a tenant whose caregiver was caught smoking cocaine. *id.* On its face, *Rucker* may seem like an individual liability case as Ms. Rucker was the only named tenant on the lease. In effect, however, the rule imposed collective liability by subjecting each household member to the same sanction.

<sup>9</sup> *Id.* at 129.

<sup>10</sup> *Id.* at 125.

<sup>11</sup> *Id.*

the One Strike Rule, is deterrence.<sup>12</sup> The claim is that the threat of collective liability incentivizes innocent actors to monitor each other and take preventative measures.<sup>13</sup> The second justification, exemplified by the twin case, is that once a harm occurs, liability will encourage innocent actors to share information that would identify the wrongdoer.<sup>14</sup>

The prior literature on collective liability often uses *Ybarra v. Spangard* to epitomize the two rationales.<sup>15</sup> In *Ybarra*, the victim underwent an appendectomy and woke up with an unrelated arm and shoulder injury. The accident itself bespoke of negligence, but the victim who was under full anesthesia could not identify the injurer. Members of the team refused to volunteer any information either. To avoid injustice to the plaintiff, the court fashioned a new theory now known as “collective res ipsa loquitur.”<sup>16</sup> Under this theory, each member of the medical team is presumed to be “negligent” unless she provides exculpatory evidence. Law and economics giants laud *Ybarra*.<sup>17</sup> They explain that the theory (a) incentivizes actors to deter wrongdoing by encouraging them to monitor each other and, (b) if an accident occurs, the doctrine encourages the faultless to provide information that would point to the injurer.<sup>18</sup>

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<sup>12</sup> Mark F. Grady, *Res Ipsa Loquitur and Compliance Error*, 142 U. PA. L. REV. 887, 913 (1994) (referring to the deterrence rationale as the “most obvious economic interpretation” for the doctrine); Daryl J. Levinson, *Collective Sanctions*, 56 STAN. L. REV. 345, 347 (2003); ARIEL PORAT & ALEX STEIN, TORT LIABILITY UNDER UNCERTAINTY, 151 (2001) (discussing both rationales); Miceli & Segerson, *supra* note 5, at 87 (“The threat of group punishment in such a setting may be an effective way to encourage monitoring of precaution before the fact (thus promoting deterrence) and revelation of information after the fact (thus saving on detection costs.”); *see also infra* Part III.A.

<sup>13</sup> This was the Supreme Court’s rationale in *Rucker*, 535 U.S. at 134 (explaining that the “no fault” eviction “maximizes deterrence and eases enforcement difficulties.”).

<sup>14</sup> Saul Levmore, *Gomorrhah to Ybarra and More: Overextraction and the Puzzle of Immoderate Group Liability*, 81 VA. L. REV. 1561, 1564 (1995); Levinson, *supra* note 12, at 351; *see also infra* Part III.C.

<sup>15</sup> *Ybarra v. Spangard*, 154 P.2d 687 (Cal. 1944).

<sup>16</sup> DAN B. DOBBS, THE LAW OF TORTS § 158, at 381 (2000); *Myrlak v. Port Auth. of N.Y. & N.J.*, 723 A.2d 45, 53 (N.J. 1999). The elements of res ipsa are discussed in Part II below.

<sup>17</sup> *See e.g.*, Levmore, *supra* note 14, at 1563–64 (arguing that collective liability “is surprisingly similar to the famous case of *Ybarra v. Spangard*,” which he dubs as a “shrewd, judge-made law”); PORAT & STEIN, *supra* note 12, at 151–58 (referring to *Ybarra* as the “Injured Shoulder Case” and lauding its deterrence and information-harnessing features); Miceli & Segerson, *supra* note 5, at 87 (arguing that the rule in *Ybarra* is “an effective way to encourage monitoring of precaution [and thereby] promoting deterrence”); *infra* notes 56–65 and accompanying text.

<sup>18</sup> *See infra* Part III.A. and III.C (discussing the prior literature).

Drawing on economic theory and empirical evidence, this Article sheds light on the dark side of collective liability. It concludes that, disconcertingly, collective liability regimes may lead to contrary results and perverse outcomes. Upending common belief, the Article reveals that collective liability can incentivize actors to suppress information that would identify the responsible parties. Communal liability can also reduce actors' incentives to monitor each other and erode their incentive to take care. Moreover, the Article reveals that collective liability allows service providers to engage in new forms of defensive and offensive practices that have gone unnoticed.

The remainder of the Article is organized as follows. Part II begins with examining the cost of holding innocent actors liable (i.e., false positives).<sup>19</sup> It does so by tracking the evolution of *res ipsa* from an individual liability regime to a collective liability scheme. A close scrutiny shows that in each step of the doctrine's development the concern of holding innocent actors liable has been considerably understated. The Article also reveals that *res ipsa* is a form of stacked (or pyramidal) inferences—inferences drawn from other inferences. Such inferences are so speculative that many jurisdictions prohibit them while others use them with caution. Yet, although *res ipsa* is a clear form of stacked inferences, it has been accepted by virtually all jurisdictions despite the concern that liability may be imposed on an innocent party. As Part II explains, when *res ipsa* is used as a collective liability mechanism, the risk of false positives nears certainty.

Part III examines the lauded benefits from collective liability doctrines like *res ipsa*. Part III.A. focuses on the cross-monitoring rationale. It shows that group responsibility can dilute the parties' incentives to monitor and take care and can lead to more accidents. In other cases, collective liability may result in over-investment in monitoring. It can even incentivize actors to use monitoring as a means to escape liability. Finally, this Part shows that in some cases, like *Ybarra*, the law makes it impossible for the parties to contract around collective liability regimes even when doing so would be socially desirable.

Part III.B. shows that collective liability allows service providers (e.g., physicians) to engage in new forms of defensive and offensive practices.<sup>20</sup> It reveals, for example, that current law incentivizes surgical

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<sup>19</sup> See e.g., Miceli & Segerson, *supra* note 5, at 82 (“The chief drawback [in collective liability regimes] is the cost associated with wrongful punishment of the innocent.”).

<sup>20</sup> Defensive practices are defined as unnecessary measures service providers take to shield themselves from liability. An example is when a doctor takes excessive care. Service providers engage in offensive practices when they persuade a customer to engage in an activity that is detrimental to the customer but is more profitable to the provider. An example is when a doctor, to increase her compensation, persuades a patient to undergo an unnecessary procedure that is not in the patient's interest. See *infra* notes 90–92 and accompanying text.



teams to unnecessarily inflate their size and even aggravate the victim's injuries. Physicians may do so to reduce their expected liability or increase their profits at a high cost to their patients. The findings are in line with recent empirical studies.<sup>21</sup> This Article adds to this growing body of scholarship by identifying the mechanisms that allow such perverse behaviors to take place unnoticed and offers means for curbing them.

Part III.C addresses the information-extraction rationale that is often mentioned as the most important justification for holding innocent actors liable. It reveals that this rationale, which has been adopted by courts and scholars alike, may have also been exaggerated. In many cases, the defendants are not and cannot be *ex ante* in a position to provide information that would identify the true injurer or indicate that the harm was not caused due to their carelessness. Even more disturbing, this Part shows that tort law can incentivize defendants to lie or collude with others to suppress information that would identify the responsible parties.

Part IV discusses the informational role of negligence judgments. Such judgments have a public good feature: they provide vital information to third parties. For example, a judgment against a service provider informs consumers that the defendant's practices fall behind the acceptable standard of care. The judgment also alerts other providers that they must follow the newly announced standard or expect a higher cost of operation (in the form of liability). The signals provided by the negligence judgment also allow better providers to distinguish themselves and avoid a "lemon" market. Part IV shows that collective liability not only mutes the voice of a negligence verdict, collective liability may also help disseminate false information.

Part V reconsiders the application of collective liability regimes. It reveals two insights that may explain why some collective liability regimes were successful whereas others failed. After providing a new theoretical basis, Part V offers two solutions that could minimize strategic behaviors, reduce the detrimental effects of collective liability, and would bypass the identification problem altogether. Part VI provides concluding remarks.

## II. FROM INDIVIDUAL TO COLLECTIVE LIABILITY

One collective liability regime that has been consistently cited with much approval by law and economics enthusiasts is *res ipsa loquitur*.<sup>22</sup> The doctrine applies when the accident is a mystery but the circumstances

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<sup>21</sup> See *infra* notes 90–92 and accompanying text.

<sup>22</sup> See *infra* notes 55–65, 136–139 and accompanying text.

bespeak of negligence.<sup>23</sup> Examples include an injury from a falling object,<sup>24</sup> a tire flying off a moving car's wayward wheel,<sup>25</sup> or an exploding bottle.<sup>26</sup> In these cases, the plaintiff cannot show who caused the accident and whether it was caused by carelessness, and courts do not require the impossible. Instead, *res ipsa* relieves the plaintiff of the need to show her case with specificity.<sup>27</sup> The doctrine only requires the plaintiff to prove two general elements: (a) that the type of accident does not usually occur unless someone was careless and (b) the defendant had exclusive control over the injuring instrumentality.<sup>28</sup> The first element—the type of accident—gives rise to an inference that the accident was caused by someone's carelessness. The second element—the defendant's exclusive control—gives rise to the inference that the defendant caused the harm. From these inferences, a jury may draw a third and final inference: the defendant was the "someone" who carelessly caused the harm.<sup>29</sup> Figure 1 below illustrates the inferential chain.

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<sup>23</sup> *Stodder v. Coca-Cola Bottling Plants*, 48 A.2d 622, 624 (Me. 1946) (*Res ipsa* applies when "there has been an unexplained accident, and the instrument that caused the injury was under the management or control of the defendant, and in the ordinary course of events the accident would not have happened if the defendant had used due care"); DOBBS, *supra* note 16, at 370 § 154.

<sup>24</sup> *Byrne v. Boadle*, 159 Eng. Rep. 299 (Exch. 1863).

<sup>25</sup> *McDougald v. Perry*, 716 So. 2d 783, 784 (Fla. 1998).

<sup>26</sup> *Wilson v. Spencer*, 127 A.2d 840, 841 (D.C.1956).

<sup>27</sup> DOBBS, *supra* note 16, at 370 § 154.

<sup>28</sup> *Newell v. Westinghouse Elec. Corp.*, 36 F.3d 576, 579 (7th Cir. 1994).

<sup>29</sup> The effect of applying *res ipsa loquitur* varies from state to state. In its weakest form, *res ipsa loquitur* simply gives rise to a permissible inference: allowing the fact-finder to infer that the defendant behaved carelessly. This form of *res ipsa* merely allows the plaintiff to survive a motion to dismiss or summary judgment. In some states, the doctrine gives rise to a presumption affecting the burden of producing evidence. In these jurisdictions, when *res ipsa loquitur* applies, the fact-finder must presume that the defendant behaved carelessly unless the defendant offers evidence to the contrary. If the defendant meets the burden, the presumptive effect vanishes, and the burden shifts back to the plaintiff to show that the defendant behaved carelessly. In some jurisdictions, *res ipsa loquitur* can also act as a presumption affecting the burden of proof. In that case, the defendant must prove that it is more likely than not that she was not negligent, and if she cannot do so, she must lose. *See* CAL. EVID. CODE § 646; *Howe v. Seven Forty Two Co., Inc.*, 189 Cal. App. 4th 1155, 1163–64 (2010). Another form of *res ipsa* shifts the burdens of production *and* persuasion to the defendants. Finally, in at least one state, New Jersey, when the doctrine (dubbed the "*Anderson* holding") applies, the jury must hold at least one defendant liable. *See supra* notes 49–54 and accompanying text.

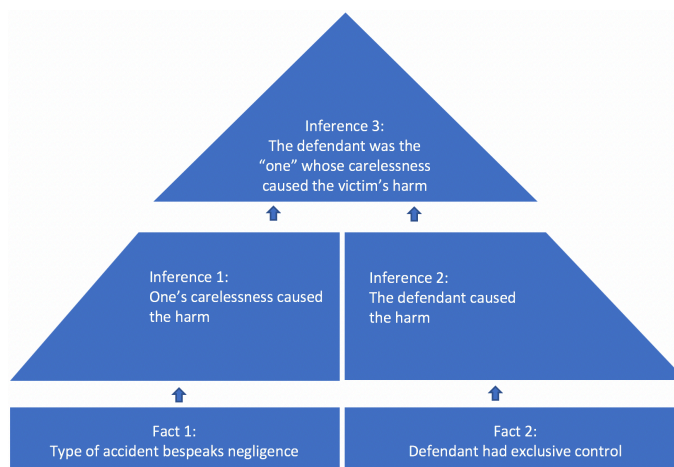


Figure 1: The Res Ipsa Pyramid of Stacked Inferences

Examples include cases like *Byrne v. Boadle*, where the plaintiff was hit by a barrel that fell from the defendant’s shop,<sup>30</sup> and *Pillars v. R.J. Reynolds Tobacco Co.*,<sup>31</sup> where the plaintiff was poisoned after chewing tobacco containing a decaying human toe. In these cases, it was first inferred that (1) the type of accident does not usually occur unless someone was careless (barrels do not fly in the air, and human toes are not present in tobacco cans); and (2) the defendant (the warehouse in *Byrne* and tobacco manufacturer in *Pillar*) caused the victim’s harm (they exclusively controlled the instrumentalities that injured the victim).<sup>32</sup> From these two inferences a third was drawn: the defendant was the “one” who carelessly caused the harm.

As *Byrne*, *Pillars*, and Figure 1 above illustrate, res ipsa is a clear form of stacked inferences—that is, inferences drawn from other inferences. Jurisdictions vary in their attitude towards deriving inferences from inferences. Many prohibit the practice while others allow it in certain

<sup>30</sup> *Byrne v. Boadle*, 159 Eng. Rep. 299 (Exch. 1863).

<sup>31</sup> *Pillars v. R.J. Reynolds Tobacco Co.*, 78 So. 365 (Miss. 1918). *Pillars* did not rely explicitly on the doctrine of res ipsa loquitur, but subsequent courts construed it as a res ipsa case. See, e.g., *Newell v. Westinghouse Elec. Corp.*, 36 F.3d 576, 578 (7th Cir. 1994) (citing *Pillars* for the proposition that res ipsa loquitur “relieves the plaintiff” from proving her case with specificity because some “accidents are so unusual that the party shown to be in exclusive control of the injuring object ought to be held responsible unless that party can offer a reasonable explanation”).

<sup>32</sup> The doctrine permits both inferences to be drawn from the same set of circumstances. See *Ripley v. Lanzer*, 152 Wn. App. 296, 314–15 (Wash. 2009) (explaining that the inference of carelessness and causation against a surgeon can “be established by the same circumstantial evidence.... leaving a scalpel blade in [the patient]’s knee”).

circumstances.<sup>33</sup> All agree, however, that inference-stacking comes with a serious risk that the final conclusion—the last link in the inferential chain—would be tenuous, unfounded, and devoid of any probative value.<sup>34</sup> The concern is that “the chain of inferences [will] spin out into the region of barest conjecture.”<sup>35</sup>

Courts and scholars often miss or ignore the pyramidal nature of *res ipsa*.<sup>36</sup> The result is a puzzle. Why are pyramiding inferences prohibited in most jurisdictions and applied with much caution by others, while *res ipsa*—which is itself a form of stacked inferences—has been adopted by virtually all jurisdictions?<sup>37</sup>

The answer may be found in the development of the doctrine. *Res ipsa* did not start as a collective liability theory.<sup>38</sup> In its early days, *res ipsa* was applied in cases where the cause of the harm was a *single* agent. In these cases, the risk that an innocent person will be held liable was low. *Byrne* and *Pillar* are good examples. With only one suspected party—the workshop owner in *Byrne* and the factory in *Pillars*,<sup>39</sup> it was possible to infer, with a high degree of probability, that the defendant’s carelessness caused the harm.

Over time, however, courts extended *res ipsa* to cases involving multiple causes and multiple agents thereby turning it into a collective

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<sup>33</sup> Modern status of the rules against basing an inference upon an inference or a presumption upon a presumption. 5 A.L.R.3d 100 (originally published in 1966) (summarizing the approach of different jurisdictions to the rule against stacked inferences).

<sup>34</sup> *Id.*

<sup>35</sup> *Hall v. Ferro-Concrete Const. Co.*, 50 N.E.2d 556, 557 (1943).

<sup>36</sup> A notable exception is *Ybarra v. Spangard*, 93 Cal. App. 2d 43 (1949). After the California Supreme Court remanded the case, a second trial took place resulting in a verdict against all defendants. On appeal, the defendants argued that the trial “court based [an] inference upon [an] inference.” *Id.* at 47. In rejecting the argument, the appellate court explained that in California an inference can be based on another inference so long as the first one is “reasonably probable.” *Id.*

<sup>37</sup> The only exception is South Carolina. *See Watson v. Ford Motor Co.*, 699 S.E.2d 169, 179 (S.C. 2010) (“South Carolina does not follow the doctrine of *res ipsa loquitur*.”).

<sup>38</sup> Other areas of the law experienced the opposite trend: a move from collective to individual liability. *See Avner Greif, Institutions and Impersonal Exchange: From Communal to Individual Responsibility*, 158 J. INSTITUTIONAL & THEORETICAL ECON. 168 (2002) (using game theory to explain the transition from the community responsibility system in late medieval times to individual liability); Francesco Parisi & Giuseppe Dari-Mattiacci, *The Rise and Fall of Communal Liability in Ancient Law*, 24 INT’L R. LAW & ECON. 489, 504 (2004) (explaining that “the rise and fall of communal liability was potentially driven by changes in the structure of society,” such as the growth in group size and wealth).

<sup>39</sup> *Pillars*, 78 So. at 365 (“The evidence disclosed that R. J. Reynolds Tobacco Company was the *sole* manufacturer of the tobacco.”) (emphasis added).

liability theory. Courts did so by holding that the second element of *res ipsa* (exclusive control) was satisfied, even when it was clear that it was not. The result was a speculative inferential chain that likely imposed liability on faultless parties. In the name of fairness to the victim, the courts were willing to impose collective liability even at the cost of sacrificing innocent defendants. *Domany v. Otis* is such a case.<sup>40</sup> In *Domany*, the plaintiff was injured when an escalator at a department store stopped abruptly.<sup>41</sup> The suit was brought against the store whose employees operated the escalator and the service company that maintained and inspected it.<sup>42</sup> Like the twin case (discussed above), each defendant tried to shift liability to the other by arguing that the other had exclusive control over the escalator.<sup>43</sup> And, as in the twin case, the court rejected that attempt and held both defendants liable.<sup>44</sup> The *Domany* court explained that the second inference (exclusive control) is satisfied either because both defendants had “joint” control over the instrumentality or because the service company controlled the escalator and the store had a nondelegable duty.<sup>45</sup>

While some courts, like *Domany*, used fictions such as “joint control” where none existed, others explicitly use *res ipsa* to impose collective liability on innocent actors. *Ybarra v. Spangard*<sup>46</sup> and *Anderson v. Somberg*<sup>47</sup> are illustrative. Both involved a surgery with a team of doctors and nurses where a patient suffered an injury that was unrelated to the medical procedure. In both cases, the plaintiff, being under full anesthesia, could not prove her case against any of the defendants. Relying on notions of justice and motivated by a desire to elicit information from the medical team, the *Ybarra* court relaxed the control requirement. It held that the plaintiff does not need to identify the instrumentality that caused the harm or even prove that it was in the exclusive control of the defendants. Rather, it held that “all those defendants who had any control over his body or the instrumentalities”—both the innocents and the culprit—are presumed to be negligent unless they provide exculpatory evidence.<sup>48</sup>

The *Anderson* holding is even more extreme. In *Anderson*, the tip of a forcep-like instrument broke off and was lodged in the plaintiff’s spinal canal.<sup>49</sup> The evidence identified a number of possible causes, including (1)

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<sup>40</sup> *Domany v. Otis Elevator Co.*, 369 F.2d 604 (6th Cir. 1966).

<sup>41</sup> *Id.* at 607.

<sup>42</sup> *Id.* at 613.

<sup>43</sup> *Id.* at 614.

<sup>44</sup> *Id.* at 614.

<sup>45</sup> *Domany*, 369 F.2d at 614.

<sup>46</sup> *Ybarra, v. Spangard*, 154 P.2d 687 (Cal. 1944).

<sup>47</sup> *Anderson v. Somberg*, 338 A.2d 1 (N.J. 1975).

<sup>48</sup> *Ybarra*, 154 P.2d at 691 (emphasis added).

<sup>49</sup> *Anderson*, 338 A.2d at 3. The *Anderson* doctrine, although not identified as such, is a form of *res ipsa loquitur*. See DOBBS, *supra* note 16, § 249 at 652; Myrlak v. Port

the mishandling of the instrument by the surgeon, (2) other surgeons who used the instrument in previous procedures, (3) the hospital, or (4) a defect caused by the manufacturer or the distributor.<sup>50</sup> In a plurality opinion, the Supreme Court of New Jersey held that the jury must return a verdict against at least one or more of the defendants.<sup>51</sup> Collective *res ipsa*, the court explained, would help identify the injurer and avoid “a miscarriage of justice.”<sup>52</sup>

*Ybarra* and *Anderson* use *res ipsa loquitur* to create a pool of potentially liable defendants.<sup>53</sup> In both, it was very likely that some members of the medical team did not commit any wrongdoing and may not have been privy to any information that would help them identify the tortfeasor. But as the remainder of this Article shows, even if actors could point to the culprit and had exculpatory evidence, it is not clear that they would provide it. In some cases, suppressing or even colluding with others to suppress information may be a winning strategy.<sup>54</sup> Moreover, collective liability may erode the incentive to take care and monitor, detrimentally impact activity levels, and result in more accidents.

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Auth. of N.Y. & N.J., 723 A.2d 45, 53 (N.J. 1999) (“The *Anderson*-type cases utilize collective *res ipsa loquitur* in that both the burden of going forward with evidence and the burden of persuasion are shifted to the defendants.”).

<sup>50</sup> *Anderson*, 338 A.2d at 4. The instrument was previously used twenty times by different surgeons, each of whom could have caused the defect. *Id.* at 3.

<sup>51</sup> *Id.* at 4.

<sup>52</sup> *Id.*

<sup>53</sup> *Anderson*, however, takes things further for at least three reasons. First, *Anderson* makes it almost impossible for innocent defendants to exculpate themselves. While *Ybarra* merely shifted the burden of production to the defendants, *Anderson* shifted the burden of production and of proof. As a result, a defendant can no longer simply offer an explanatory account but must instead *prove* that she was not negligent. *Id.* at 5 (“[Defendants] must prove their nonculpability, or else risk liability for the injuries suffered.”). Second, the *Anderson* holding was based on the assumption that the injurer was among the defendants and accordingly group liability would result in an identification process that would single out the culprit. However, this assumption was based on fiction rather than facts. The instrument that broke off was used approximately twenty times, by different surgeons, none of whom were named as a defendant. As a result, there was a significant risk that innocent people would be held liable for a wrong that they did not commit. *Id.* at 9–10 (Mountain, J., dissenting). Finally, to make things worse, *Anderson* requires the factfinder to hold at least one defendant liable—regardless of the actual evidence against them.

<sup>54</sup> It is thus not surprising that in *Ybarra* the Supreme Court’s prediction (or hope) that the threat of liability would incentivize the parties to divulge information proved to be wrong. On a second trial, all were held liable after each defendant testified but denied seeing anything that could have caused the harm. *Ybarra v. Spangard*, 208 P.2d 445, 446 (Cal. Dist. Ct. App. 1949). See also *infra* note 150.

### III. THE CASE AGAINST (CERTAIN) COLLECTIVE LIABILITY REGIMES

This Part presents the case against the widely accepted view that collective liability is justified. It shows that even on theoretical grounds collective liability schemes should give policymakers a pause. As explained below, even avid proponents of collective liability admit that collective liability schemes impose liability on innocent parties. What they fail to recognize is that the alleged benefits—monitoring, deterrence and information extraction—may be much smaller than they assume.

Even worse, as this Part reveals, collective liability can (1) erode the parties' incentives to monitor each other and take care; (2) incentivize those with private information to suppress it, lie, and collude with others to lie; and (3) even encourage wrongdoing. The Article does so using stylized examples. To be clear, the goal is not to show that all collective liability regimes are flawed. Under certain conditions, some collective liability regimes can prove effective. Rather, the goal of the stylized examples is to reveal cases where collective liability raises concerns. Moreover, the examples are realistic. Each is modeled after real cases, parties are assumed to have heterogeneous abilities, juries and judges are not omniscient, and asymmetric information is an accepted reality. By contrast, this Part shows that the justifications raised by proponents of collective liability theories often rely on assumptions that may have limited applicability, are inconsistent with legal realities, and fail to appreciate the parties' incentives to behave strategically. By providing a more nuanced description of the effect of collective liability regimes, the Article attempts to not only reinvigorate and challenge their use, but also lay the grounds for future empirical work.

#### A. Cross-Monitoring

The initial focus of the literature on collective liability was on preliterate societies.<sup>55</sup> In an influential article, Posner explains that these “primitive” societies rely heavily on group responsibility to achieve deterrence.<sup>56</sup> Thus, when an injurer fails to compensate the victim, the victim's kin group is allowed to retaliate against any of the injurer's kinsmen.

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<sup>55</sup> Richard A. Posner, *A Theory of Primitive Society With Special Reference to Law*, *J. Law & Econ.* 1, 42 (1980); see also Miceli & Segerson, *supra* note 5, at 84; Parisi & Dari-Mattiacci, *supra* note 38.

<sup>56</sup> Grady, *supra* note 12, at 913 (stating that “[t]he most obvious economic interpretation [for *res ipsa* in cases like *Byrne*] is that the normal proof requirements would yield too many false negatives” and explaining that “if *Byrne v. Boadle*-type plaintiffs had to prove specific negligence, defendants would have too little incentive to use precaution”).

This in turn encourages the injurer's kinsmen to weed out potential injurers, control their conduct, and turn them in.<sup>57</sup>

Others have extolled the deterrence effect of group responsibility regimes in modern societies. Varian, for example, discusses the application of communal liability to microfinancing.<sup>58</sup> When banks consider whether to provide small loans to low-income entrepreneurs, they must determine their creditworthiness and monitor their performance. When this is impossible, some banks extend loans but assign the lenders to groups where each lender serves as a co-guarantor.<sup>59</sup> The scheme is reminiscent of the modern One Strike rule. It incentivizes "mutual monitoring" and "mutual insurance."<sup>60</sup> Focusing on product liability law, Guerra, Luppi, and Parisi argue that *res ipsa* deters accidents, reduces the expected liability of evidentiary costs, and fosters the adoption of "new evidentiary technology," such as tracking devices and body cameras.<sup>61</sup>

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<sup>57</sup>Posner, *supra* note 48, at 44. The collective liability is strict. The injurer's kinsmen are liable even if the accident was unavoidable, perhaps because the cost of determining fault is too high. Another possibility is insurance. Strict liability turns the injurer's kinsmen into insurers in case the injurer is unable or unwilling to compensate the victim.

<sup>58</sup>Varian, *supra* note 5, at 155. *Muhammad Yunus, Grameen Bank*, THE NOBEL PEACE PRIZE, <https://www.nobelpeaceprize.org/Prize-winners/Prizewinner-documentation/Muhammad-Yunus-Grameen-Bank> (last visited Nov. 20, 2019).

<sup>59</sup>This model is still used today. See *Credit Lending Models*, GRAMEEN BANK, [www.grameen.com/credit-lending-models/](http://www.grameen.com/credit-lending-models/) (last visited Nov. 20, 2019). The "Grameen Model" is described as follows:

Groups of five prospective borrowers are formed; in the first stage, only two of them are eligible for, and receive, a loan. The group is observed for a month to see if the members are conforming to rules of the bank. Only if the first two borrowers repay the principal plus interest over a period of fifty weeks do other members of the group become eligible themselves for a loan. Because of these restrictions, there is substantial group pressure to keep individual records clear. In this sense, collective responsibility of the group serves as collateral on the loan.

In 2006, the Grameen Bank and its founder, Muhammad Yunus, were awarded the Nobel Peace Prize for their work combatting poverty through micro-financing. See *Muhammad Yunus, Grameen Bank*, THE NOBEL PEACE PRIZE, <https://www.nobelpeaceprize.org/Prize-winners/Prizewinner-documentation/Muhammad-Yunus-Grameen-Bank> (last visited Nov. 20, 2019).

<sup>60</sup>Varian, *supra* note 5, at 155.

<sup>61</sup>Alice Guerra et al., *Presumption of Negligence and the Robustness of Liability Incentives*, at \*6 (Mar. 6, 2019), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3334448](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3334448) (citing Alice Guerra et al., *Presumption of Negligence* (Univ. of Minn. Law Sch., Working Paper No. 15-08 2019), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2577416](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2577416)).



Since the 1990s, the literature has treated collective *res ipsa*, and specifically *Ybarra v. Spangard*, as the canonical example of an effective deterrence regime. Levmore analyzes the doctrine and refers to it as a “shrewd, judge-made law.”<sup>62</sup> Porat and Stein,<sup>63</sup> and Levinson,<sup>64</sup> justify group liability in cases like *Ybarra*, where members of the group are (supposedly) in a better position to monitor and control potential wrongdoers. Miceli and Segerson describe *Ybarra* as “an effective way to encourage monitoring of precaution [and thereby] promoting deterrence.”<sup>65</sup> As the section below shows, however, the deterrence and cross-monitoring rationales may be overstated, and even faulty in cases like *Ybarra*.

### 1. Underinvestment in (Care and) Monitoring

One thing that the prior literature failed to appreciate is that collective liability can lead to under-deterrence. As the number of actors subject to group liability increases, the *individual* incentive of each actor to take care and monitor the others decreases. To illustrate, consider first an alternative care situation, like Example A1 below, where the injury can be avoided by any one of the parties.

**Example A1:** A patient may suffer an expected damage of  $D=\$30$  (e.g., due to a forgotten sponge, administering the wrong drug or inflicting a mysterious burn or trauma).<sup>66</sup> The surgeon can avoid the harm if she exercises care at a cost of  $c=\$20$ . The harm can also be averted if any member of the

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<sup>62</sup> Levmore, *supra* note 14, at 1563–64. Levmore offers an even more “radical” rule that will also deter injurers from engaging in wrongdoing. Under Levmore’s proposed “overextraction rule,” the defendants will be required to pay more than the victim’s injury. This, he explains, may deter the wrongdoing in the first place as it will disgorge the benefits from the wrongful behavior.

<sup>63</sup> PORAT & STEIN, *supra* note 12, at 158.

<sup>64</sup> Levinson, *supra* note 12, at 348–49, 379.

<sup>65</sup> Miceli & Segerson, *supra* note 5, at 87.

<sup>66</sup> For cases applying *res ipsa* in similar situations see e.g., *Schaffner v. Cumberland Cty. Hosp. Sys., Inc.*, 77 N.C. App. 689 (1985) (a burn inflicted during a surgery by a malfunctioning cauterizing device); *Rosales-Rosario v. Brookdale Univ. Hosp. & Med. Ctr.*, 767 N.Y.S.2d 122, 123 (2003) (a heavily sedated plaintiff “sustained a burn on the inner portion of her knee while hospitalized to give birth”). In *Dalley v. Utah Valley Reg’l Med. Ctr.*, 791 P.2d 193 (Utah 1990) an unconscious patient suffered a burn on her leg during a c-section. *Id.* at 195. It was clear one of the team members inflicted the injury, but it was impossible to determine who or what caused the harm. The court applied *res ipsa loquitur* against the entire group explaining that its “purpose...is to compel those who were awake, aware, and in control of all possible injuring instrumentalities to explain the occurrence”). *Id.* at 199. As Example A1 shows, group liability may have the opposite effect.

medical team monitors (e.g., by counting the sponges inserted and removed, reviewing the patient's medical chart or testing the equipment and ensuring it is used properly) and alerts the surgeon of any mistake at a cost  $m = \$20$ .<sup>67</sup>

Consider a medical team consisting of a surgeon and a nurse. Efficiency requires that the surgeon exercises care or the nurse engages in monitoring ( $20 < 30$ ). This could be easily achieved if the law imposed liability on one of the parties, for example, the surgeon. However, if liability is imposed collectively on multiple parties—as the law in most jurisdictions requires—the result could be that none would take care or monitor. To see why, consider the nurse's options.<sup>68</sup> If she monitors the surgeon, she can expect to incur a cost of \$20. By contrast, if she does not engage in monitoring, she can expect one of two outcomes. First, she can expect to pay nothing if the surgeon takes care and thus averts the harm. Or, second, she can expect to pay \$15 if the surgeon fails to take care, in which case both will be collectively liable for the entire harm and consequently each can expect to pay \$15 (half the \$30 damage). The result is a dominant strategy. No matter what the surgeon does, the nurse's best strategy is to forgo monitoring. For the same reason, the surgeon would not take care either ( $0, 15 < 20$ ).

Here, collective liability erodes the parties' incentives to the point that taking care and monitoring is not in the parties' best interest. The result is underdeterrence and more accidents. The incentive to take care and cross-monitor decreases even further as the number of parties subject to collective liability increases. For example, with a medical team of one surgeon and four nurses, no one would be interested in taking care or engaging in monitoring even if the cost of doing so is only \$7 ( $30/5 < 7$ ).

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<sup>67</sup> It is very likely that the surgeon's cost of monitoring while performing a surgery is substantially higher than that of a nurse. Example A2 below explores such a case.

<sup>68</sup> The examples in this section assume that the parties cannot contract around collective liability rules. The assumption may seem unrealistic, improbable, and naïve, especially in the medical context. After all, a surgical team is comprised of a small group of individuals, positioned in close proximity, who must closely work and communicate with each other. On its face, there is no reason to believe that such actors cannot contract with each other. Similarly, the hospital's cost of unilaterally instituting procedures that would assign responsibility to one party is also unlikely to be prohibitive. Still, there are good reasons to believe that bargains may not be easily achieved. First, bargaining over a service (monitoring) can prove a complicated task. Such bargaining may also be infeasible. Healthcare providers—physicians, anesthesiologists, and nurses—often work with different parties in different facilities. As explained in *infra* Part III.A.4, however, the main hurdle for contracting around liability is the *law* of *res ipsa*.

## 2. Overinvestment & the Monitoring Dilemma

In Example A1, collective liability eroded the parties' incentives to avoid the accident and resulted in suboptimal care and monitoring levels. In other cases, collective liability may lead to the opposite result. It may incentivize the actors to overinvest in monitoring. This is illustrated in Example A2 below, which is based on *Deuel* (discussed below).<sup>69</sup>

**Example A2:** There is a 10% chance the victim will suffer a \$300 damage during a procedure (i.e., the expected harm is  $D=\$30$ ). The surgeon can reduce the chance of an injury to 2% if she takes care at a cost of  $c=\$5$ . The remaining risk of harm (e.g., due to a forgotten sponge) cannot be avoided by the surgeon who must focus on the complex surgical procedure. But it can be completely eliminated if any member of the medical team (e.g., a nurse) monitors the surgeon at a cost of \$1.

Consider a medical team that includes a surgeon and two nurses, Nurse-1 and Nurse-2, and suppose the parties are subject to collective liability. Efficiency requires that the surgeon takes care. By investing \$5, the surgeon can reduce the expected harm by \$24, from \$30 ( $300 \times 10\%$ ) to \$6 ( $300 \times 2\%$ ). Monitoring by a nurse is also cost-justified. It can eliminate the residual \$6 expected harm at a cost of \$1.

The parties' actions, however, depend on their private expected cost and payoffs. Game theory predicts that the surgeon will take care<sup>70</sup> but is unable to predict the nurses' actions. The nurses may over- or under- invest in monitoring. Unlike Example A1, this time the problem is not over-dilution. If the nurses fail to monitor the surgeon, the entire medical team—the surgeon and nurses—will be held collectively liable. Still, the cost of monitoring, \$1, will be lower than the amount each nurse can expect to pay if neither monitors the surgeon, \$2 ( $6/3$ ). The problem the nurses face is that of free-riding if each trusts the other to take care or that of mistrust in which case both may monitor.<sup>71</sup>

<sup>69</sup> *Deuel v. Surgical Clinic, PLLC*, No. M2009-01551-COA-R3-CV, 2010 WL 3237297 (Tenn. Ct. App. Aug. 16, 2010).

<sup>70</sup> The surgeon has a dominant strategy to take care. If the surgeon does not take care, she can expect to either pay \$30 if she is solely held liable for the harm or \$10 ( $30/3$ ) if the entire team is held collectively liable (due to *res ipsa*). By contrast, at a cost of \$5, the surgeon can reduce her expected liability to \$2 ( $1/3 \times \$6$ ) if neither nurse engages in monitoring or to 0 otherwise. See *infra* Part III.A.4 (explaining that most jurisdictions will hold the surgeon liable for the nurses' failure to monitor).

<sup>71</sup> For example, in the case of counting sponges, one nurse cannot be sure that the other is actually counting and, even if the other does, that she is not distracted.

To illustrate the nurses' Monitoring Dilemma, suppose, for now, that each member of the team acts independently.<sup>72</sup> Consider Nurse-1's options. Nurse-1 is better off not monitoring the surgeon if Nurse-2 monitors the surgeon (in which case she can free-ride on Nurse-2's efforts). However, Nurse-1 is better off monitoring if Nurse-2 does not (or cannot be trusted).<sup>73</sup> Nurse-2 faces the same dilemma. The dilemma would be easily solved if the parties could agree to assign the task of monitoring to one of them. As explained below, however, tort law does not allow such agreements.<sup>74</sup> Absent coordination, the result is multiple equilibria. In such a case, without a (pure) strategy, it is impossible to predict what the nurses will do. It could be that none, one, or both nurses will end up monitoring the surgeon. The first case—no one monitors—would result in underinvestment in monitoring. The latter—both monitor—would result in overinvestment in monitoring.

### 3. The Low Cost Monitor

Another source of inefficiency can occur if the less efficient party engages in monitoring. To illustrate this point, note first that in Example A2 the nurses are equally efficient in monitoring. Each can reduce the residual risk of harm at a cost of  $m=\$1$ . In reality, it is likely that actors' monitoring costs vary. In that case, when the cost of monitoring is heterogenous, the social cost associated with the Monitoring Dilemma can increase, and substantially so. For example, suppose that the monitoring costs for Nurse-1 and Nurse-2 are  $m_1=\$1$  and  $m_2=\$1.5$  respectively. Efficiency requires that the cheapest cost avoider, Nurse-1, engage in monitoring ( $1<1.5$ ). However, because of the free-riding concern, it could be that Nurse-2 would end up monitoring the surgeon or, even worse, both nurses will. In the latter case, the monitoring cost will reach  $\$2.5$  ( $1+1.5$ ), an increase of 150% compared to the socially desirable level of monitoring.

### 4. (No) Monitoring by Assignment

The concerns above—that cross-monitoring will result in over- or under- investment in care—are the result of collective liability's dilutive

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<sup>72</sup> As *infra* Part III.A.4 explains, in the vast majority of jurisdictions, the hospital and the healthcare providers cannot contract around collective liability rules. For this reason, if the hospital or chief surgeon assigns one nurse with the monitoring task, the entire medical team would nevertheless be held liable if she fails to do so properly.

<sup>73</sup> If Nurse-2 does not properly monitor the surgeon, the entire medical team—the surgeon and two nurses—will be held liable for the entire  $\$6$  harm. Accordingly, each can expect to pay  $\$2$  ( $6/3$ ). Thus, if Nurse-2 does not monitor, Nurse-1 is better off monitoring at a cost of  $\$1$  ( $1<2$ ).

<sup>74</sup> See *infra* Part III.A.4.

effect. When liability is imposed on many, the incentives to monitor could be overly eroded or too strong. These maladies can be easily cured if the parties could contract around the imposition of collective liability. For example, if the parties could agree to assign to one actor (a) the task of monitoring and (b) liability for inadequate monitoring, the parties and society would be better off.

To illustrate, recall that in Example A1 either party could avoid a \$30 injury at a cost of \$20. Yet, neither will avoid the harm because collective liability promises each a loss of \$15 ( $30/2$ ), which is lower than the cost of taking care or monitoring ( $15 < 20$ ). However, if the parties could, they would enter into an agreement that assigns one of them the task of monitoring and splits the cost. The agreement would avoid the victim's harm ( $20 < 30$ ) and reduce the expected loss of each actor to \$10 ( $20/2$ ). In Example A2, an agreement to assign the monitoring task to one of the nurses would allow the parties to overcome the Monitoring Dilemma, avoid over-investment, and impose liability on the cheapest cost avoider. Note that the same (anti-dilution) solution can be instituted unilaterally if the hospital's procedures could assign (a) the monitoring task and (b) any liability related thereto to one of the nurses. Such procedures would reduce the hospital's expected liability, reduce the cost of the operation, and improve the hospital's competitive position.

Parties, however, cannot contract around collective liability rules, and (with a few rare exceptions) hospitals' procedures cannot delegate liability either. The biggest hurdle to the assignment solution—and one that has been conveniently ignored by the literature on collective liability—is not high transaction costs. It is the law itself. Most jurisdictions make such assignment impossible.<sup>75</sup> These jurisdictions do not allow a surgeon to rely

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<sup>75</sup> See e.g., *Breaux v. Thurston*, 888 So.2d 1208 (Ala. 2003) (despite clear hospital procedures assigning the role of counting sponges and instruments to nurses, the court held that such procedures “do not relieve the surgeon of his or her responsibility to remove the sponges in the first place” and explaining that “[t]he nurses’ responsibility of counting [the sponges] amounts to only an added *precaution* taken by the defendant to help insure that he had properly performed his duty”); *Burke v. Wash. Hosp. Ctr.*, 475 F.2d 364, 365 (D.C. Cir. 1973) (noting that the “[surgeon] attempted to shift responsibility for the injury [retained sponge] by asserting the nurse’s sponge count was reported (obviously erroneously) as in order” and explaining that “[w]hile this may be enough to support shared liability on the part of the nurse’s employer, [the hospital], it does not relieve the operating and supervising surgeon of his responsibility”); *Chi Yun Ho v. Frye*, 880 N.E.2d 1192, 1200 (Ind. 2008) (“[A] surgeon may not escape his responsibility to remove sponges used during the surgery simply by delegating responsibility for tracking surgical sponges to attending nurses.”); *Tutton v. Patterson*, 714 S.W.2d 268, 270 (Tenn. 1986) (“reliance on a sponge count does not, as a matter of law, relieve a doctor from liability for leaving a sponge in a patient.”) (citing *Spears v. McKinnon*, 270 S.W. 524 (Ark. 1925)); *Easterling v. Walton*, 208 Va. 214, 216 (1967) (applying *res ipsa*

on the nurses' sponge count even when hospital procedures specifically requires him to do so.

An example is *Deuel v. Surgical Clinic*. In *Deuel*, a sponge was left in the patient's body despite a double count by the two nurses employed by the hospital.<sup>76</sup> At trial, the surgeon, an independent contractor, argued that due to the complicated nature of the surgical task he had to rely on the nurses' count as was customary.<sup>77</sup> The nurses admitted as much. They explained that the "[hospital's] procedure required assisting nurses to count... sponges placed and removed" and "that the surgeon does not supervise the nurse's sponge count and 'has the right to rely upon the nurses to give an accurate account.'"<sup>78</sup> The nurses even conceded that they performed their monitoring task negligently.<sup>79</sup> Based on these findings, the trial court held that collective res ipsa cannot apply and dismissed the case against the surgeon.<sup>80</sup> The Court of Appeals of Tennessee reversed. Siding with the majority of jurisdictions,<sup>81</sup> it held that res ipsa's exclusive control requirement should be broadly interpreted to allow the imposition of liability on many.<sup>82</sup> As in *Domany*, the court held that the surgeon's duty is nondelegable.<sup>83</sup> "While responsibility for sponge counts may be delegated to support staff, liability cannot be."<sup>84</sup> As a result, the surgeon was held liable together with the nurses.

A notable exception to the rule prohibiting contracting around collective liability is *Van Hook v. Anderson*.<sup>85</sup> Similar to *Deuel*, in *Van Hook*, the hospital adopted written procedures that required two nurses to count the sponges inserted and removed and to notify the surgeon if their counts did not match.<sup>86</sup> Consistent with the procedures, at the end of the surgery, the nurses notified the surgeon that all sponges were removed. They were wrong. A sponge was left in the patient's body. The question before the court was whether the surgeon is collectively liable together with the nurses. The Court

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against the surgeon despite the testimony of the plaintiff's sister, a nurse in the hospital, that "it was customary at the hospital for two nurses . . . to keep a count of the lap pads put in and taken out of the wound during an operation"); *Baumgardner v. Yusef*, 144 Cal. App. 4th 1381 (2006); *Coleman v. Rice*, 706 So.2d 696 (Miss. 1997); RESTATEMENT (SECOND) OF TORTS § 328D cmt. g, illus. 9 (AM. LAW INST. 1979).

<sup>76</sup> *Deuel v. Surgical Clinic, PLLC*, No. M2009-01551-COA-R3-CV, 2010 WL 3237297 (Tenn. Ct. App. Aug. 16, 2010).

<sup>77</sup> *Id.* at \*2.

<sup>78</sup> *Id.* at \*3 (emphasis added).

<sup>79</sup> *Id.* at \*8.

<sup>80</sup> *Id.* at \*4.

<sup>81</sup> See *supra* note 75 and accompanying text.

<sup>82</sup> *Deuel*, 2010 WL 3237297, at \*12–13.

<sup>83</sup> *Id.* at \*12–14.

<sup>84</sup> *Id.* at \*16 (citing *Coleman v. Rice*, 706 So.2d 697 (Miss. 1997) (emphasis added)).

<sup>85</sup> *Van Hook v. Anderson*, 824 P.2d 509 (Wash. Ct. App. 1992).

<sup>86</sup> *Id.* at 510.

of Appeals of Washington answered in the negative. Unlike *Deuel*, it gave full power to the hospital's procedure and held that, as a matter of law, a surgeon cannot be held liable when the responsible nurses failed to count the sponges.<sup>87</sup>

*Van Hook* allows a hospital (and the parties) to opt out of the collective liability regime and impose liability on the responsible party—the ones assigned with the task of monitoring. *Van Hook*, however, is a rarity in our legal landscape. The majority of jurisdictions do not allow actors to contract around collective liability rules. Instead, they require innocent actors to subsidize the culprit and the latter to pay only a fraction of the harm she caused. Courts do so in the name of fairness and deterrence.<sup>88</sup> However, the result may be inefficient levels of monitoring and care.

#### 5. Monitoring to Not Take Care

Collective liability can also incentivize the parties to use monitoring as a means to ensure that no one takes care. This can happen, for example, in a case like *Ybarra*, where each actor can be a sufficient cause of the harm, as illustrated in Example A3 below.

**Example A3:** A patient can incur an expected damage,  $D=\$70$  (e.g., due to trauma), unless each member treats her with care at a cost of  $c=\$20$  (e.g., the cost of carefully repositioning her body during the procedure). Each member can monitor the others at a cost of  $m=\$1$ . Absent cross-monitoring, if the victim is injured, it would be impossible to identify the injurer.

With a team of two actors, taking care is cost justified. It would result in a total investment of  $\$40$  ( $20 \times 2$ ) to avert a  $\$70$  harm. But if the parties are subject to collective liability, it is not clear that they will take care. To see why, note first that if both actors take care each can expect to pay only  $\$20$  (the harm is avoided). If neither takes care, both will be liable, and each can expect to pay half of the harm  $\$35$  ( $70/2$ ). Finally, if only one of them takes

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<sup>87</sup> *Id.* at 513. The court held that “a doctor in charge of an operation is in compliance with the medical standard of care if he or she, in the process of closing an incision, relies on a positive assertion by the nurses that the two counts match.” The court also declined to apply the captain-of-the-ship theory—another collective liability theory. It explained that the nurses acted according to a policy established by their employer, the hospital, and that the surgeon had “no reason to doubt the information that they gave him” and that he had no control over them. *Id.* at 515.

<sup>88</sup> RESTATEMENT (THIRD) OF TORTS, § 17 cmt. f (AM. LAW INST. 1979); DOBBS, *supra* note 16, at § 306; W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 36, at 224 (5th ed. 1984); *Ybarra v. Spangard*, 154 P.2d 687, 690 (Cal. 1944).

care, that actor can expect to lose \$55—the \$20 investment in care and an expected liability of \$35 (both must take care to avoid the harm). Consider now Actor-1's choices. Actor-1 is better off taking care if Actor-2 does the same ( $20 < 70/2$ ), but she is better off forgoing taking care if Actor-2 does not take care ( $35 < 55$ ). The analysis of Actor-2's options is identical. The result is multiple equilibria and as a result neither party may elect to take care—an inefficient result.

Here, independent monitoring by the parties can substitute an agreement to take care (or ensure that it is adhered to if the parties can enter into an agreement). Each party can monitor the other's actions and take care so long as the other does the same. The result is that with a total investment of \$42 ( $20+20+1+1$ ), the parties can avoid a \$70 harm.

But monitoring can also help the parties ensure that no one takes care. Consider, for example, a case with a team of five healthcare providers. Here, taking care is inefficient. It would require a total investment of \$100 ( $20 \times 5$ ) to avoid a \$70 harm. The parties would also be better off if they forgo taking care. Even if they would be subject to liability, each can expect to pay only \$14 ( $70/5$ ). An agreement to forgo taking care may be unethical, illegal and unenforceable,<sup>89</sup> but the parties do not need to enter into such an agreement. Each can simply observe (that is, monitor) the others and avoid taking care so long as they do the same. If successful, each can expect to pay \$15 ( $14+1$ ), which is lower than the \$20 cost of care.

#### B. Defensive and Offensive Practices

The prior literature has demonstrated that, in the context of *individual* liability, parties can act strategically to shield themselves from liability, increase their benefits or both. For example, previous studies have shown that a physician can reduce her expected liability by taking excessive care in the form of prescribing unnecessary tests and drugs.<sup>90</sup> Such practices

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<sup>89</sup> Economic efficiency requires that the parties are exempted from liability ( $100 > 70$ ). The parties may nevertheless be held liable because courts often engage in an individual cost-benefit analysis. They compare the cost of precaution of each party, \$20, to the avoidable harm, \$70.

<sup>90</sup> See e.g., Daniel P. Kessler & Mark McClellan, *Do Doctors Practice Defensive Medicine?* 111 Q. J. ECON. 353 (1996); Sabrina Safrin, *The C-Section Epidemic: What's Tort Reform Got to Do with It*, 2018 U. ILL. L. REV. 747 (2018); American college of Emergency Physicians, EMTALA Services Medical Liability Reform (<https://www.acep.org/globalassets/uploads/uploaded-files/acep/advocacy/federal-issues/medical-malpractice-issue-paper.pdf>) (“More than half of emergency physicians responding to a 2011 survey said they order the number of tests they do because they feared being sued”). Defensive medicine can also take the form of an inaction—avoiding beneficial treatments that may involve a higher risk of litigation or liability. See e.g., J. Shahar Dillbary, Griffin Edwards and Fred Vars, *Why*



are known as “defensive medicine.” Defensive medicine shields the provider by allowing her to prove that she took ample (not just reasonable) care.

A service provider can also engage in offensive practices—practices that are aimed to benefit the provider.<sup>91</sup> For example, offensive medicine occurs when a physician induces the patient to choose a treatment that is not in the patient’s interest, but is more advantageous to the physician.<sup>92</sup> A common example is choosing an invasive procedure (e.g., a c-section) over non-invasive, more effective, and less risky treatment (e.g., vaginal delivery) because the former is more profitable for the physician.

Unlike practices that stem from the threat of individual liability, the strategic behavior that may result from collective liability remains undertheorized. This Part takes the first step in remedying this gap in the literature. It reveals that the threat of collective liability can result in new forms of defensive and offensive practices. When liability is collective, actors can reduce their liability and increase their profits by inflating the size of the group, exacerbating the victim’s injury, and inducing patients to choose unnecessary, more dangerous, less effective, and socially undesirable procedures in ways not heretofore known. Collective liability may even incentivize innocent actors—those who were not responsible for the victim’s initial injury—to commit wrongs.

#### 1. Increasing the Group Size

In some cases, actors subject to a group responsibility regime may be able to reduce their expected liability by unnecessarily inflating the group size. To illustrate, consider a group with  $n$  actors (e.g., healthcare professionals) that is engaging in an activity (e.g., surgery) that may cause the victim an expected harm,  $D$ . Knowing that per *Ybarra*, collective liability will apply if one member of the group injures the victim, the chief surgeon

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*Exempting Negligent Doctors May Reduce Suicide: An Empirical Analysis*, 93 IND. L. J. 457 (2018) (discussing liability’s overdeterrence effect).

<sup>91</sup> Both defensive and offensive medicine are in tension with the Hippocratic Oath which requires physician to “prescribe regimen for the good of [their] patients... and never do harm to anyone.” See Sonal Sekhar & N Vyas, *Defensive Medicine: A Bane to Healthcare*, 3 ANN MED. SCI. RES. 295 (2013). For a more modern version see William Shiel, *Medical Definition of Hippocratic Oath*, Medicinenet (requiring doctors to “apply, for the benefit of the sick, all measures which are required, avoiding those twin traps of overtreatment and therapeutic nihilism”) (available at <https://www.medicinenet.com/script/main/art.asp?articlekey=7295>).

<sup>92</sup> Ronen Avraham & Max Schanzenbach, *The Impact of Tort Reform on Intensity of Treatment: Evidence From Heart Patients*, 39 J. HEALTH & ECON. 273 (2015) (“Induced demand or offensive medicine occurs when health-care providers pursue treatments that may not be best for the patient but offer large reimbursements.”). See also *infra* notes 122–126.

may ask additional healthcare providers to join the procedure. With additional  $h$  nurses, the surgeon's expected liability will drop from  $D/n$  to  $D/(n+h)$ . For example, with an expected harm of \$100, adding one additional member to a four-member team, would decrease the individual expected liability by 25% from \$25 ( $100/4$ ) to \$20 ( $100/5$ ). The chief surgeon would thus be inclined to inflate the team size even if adding more physicians and nurses is unnecessary and even if it increases the expected harm to the victim.<sup>93</sup>

The example assumes that the damage is capped—that as more actors join the activity the expected harm remains the same. The assumption may seem at first unrealistic. With more actors engaging in the activity the probability of an injury, its magnitude, or both—and accordingly the expected harm,  $D$ —may increase. As explained below, however, this assumption (although unnecessary for the model) is an important feature of tort law.<sup>94</sup>

## 2. Aggravating the Victim's Injury

### a. The Law of Damages: Killing v. Injuring

Another way actors subject to group liability can reduce their expected liability is by aggravating the injury to the victim. One reason is that damages—because of the way they are calculated—can be much higher for a severely injured person than for a dead victim. A number of reasons account for the wedge between damages in case of an injury versus a death. To begin with, a common measure of one's life is the value of her future earnings.<sup>95</sup> This amount varies with the deceased's age and skill, but it is quite limited—less than \$1 million in half of the cases.<sup>96</sup> By contrast,

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<sup>93</sup> This is so as long as the marginal decrease in liability from adding a member is higher than the marginal increase in liability.

<sup>94</sup> The example assumes that the damage,  $D$ , does not increase with the number of actors or, alternatively, that the individual expected liability,  $D/n$ , is outpaced by the individual benefits that accrue from the activity. The assumption is realistic given, among other things, that in many states damages in survival and wrongful death actions are capped irrespective of the number of defendants. *See infra* Part III. B.2.b. Moreover, under certain circumstances the results hold even if the damage increases with  $n$ . *See e.g.*, *infra* notes 130–132 and accompanying text.

<sup>95</sup> E. Posner & C. Sunstein, *Dollars and Death*, 72 U. CHI. L. REV. 537, 539, 543–44 (2005) (explaining that in the case of a death, “[t]ort law makes damages a function of lost income” based on the unique attributes of the deceased. As a result, tort law treats adults differently than children, and those working differently than those who are retired).

<sup>96</sup> *Id.* at 548 (finding that “when outliers are excluded, the tort system generally values lost lives at well under \$3 million, and about half the time under \$1 million” but hypothesizing that “real amounts are somewhat lower”).

damages for an injured person, often due to required medical treatments and care during the victim's lifetime, can be much higher.<sup>97</sup>

Another reason for the wedge is that, compared to an injured victim, in the case of a death, certain types of damages are not awarded, and others are capped. For example, survival actions (for injuries to the deceased) and wrongful death actions (for loss of support to the deceased's family) provide a much lower compensation compared to what a living victim can receive.<sup>98</sup> In addition, most states do not allow the plaintiff in a wrongful death action to recover punitive damages—damages that would be awarded to living victims.<sup>99</sup> Some of these states also exclude recovery of the deceased's (but not a living victim's) pain and suffering.<sup>100</sup> Others, like Texas, cap recovery in specific types of cases, such as those involving the death of a patient in a medical malpractice case.<sup>101</sup>

The result is that “[p]laintiffs suing on behalf of a [deceased] victim who ha[d] no future income, no dependents, and no spouse, and who die[d] without feeling pain, should ordinarily receive zero damages or damages sufficient only to cover funeral expenses.”<sup>102</sup> In these states, for the injurers,

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<sup>97</sup> *Id.* at 544 (explaining that “[p]laintiffs suing on behalf of a [deceased] victim who ha[d] no future income, no dependents, and no spouse, and who die[d] without feeling pain, should ordinarily receive zero damages or damages sufficient only to cover funeral expenses.”).

<sup>98</sup> DOBBS, *supra* note 16, at 803–04, §294, 805 §296 (“Damages in survival actions are often quite limited in amount.”); 1 *Punitive Damages: Law and Prac.* 2d § 5:10 (2018 ed.). Survival actions allow the decedent's estate to recover damages the *victim* incurred, such as pain and suffering and medical bills incurred while the victim was still alive and income lost between the injury and death. Wrongful death actions are intended to compensate *family members* for injury they suffered as a result of the victim's death. They include compensation for their grief, loss of advice and parental care, and loss of income they would have received from the deceased. Both actions were not recognized in common law and are the result of statutory amendments. *Id.*

<sup>99</sup> RESTATEMENT (SECOND) OF TORTS § 925 cmt c (AM. LAW INST. 1979); DOBBS, *supra* note 16, at 803–04, § 294. Alabama is the only state that restricts recovery in wrongful death actions to punitive damages only. *See e.g.*, *S. & N.A.R. Co. v. Sullivan*, 59 Ala. 272, 278–79 (1877).

<sup>100</sup> For limitation on damages in survival actions, *see e.g.*, Ariz. Rev. Stat. § 14-3110 (2019); Wash. Rev. Code § 4.20.046 (2019).

<sup>101</sup> Tex. Civ. Prac. & Rem. Code Ann. § 74.301 (2019) (limiting liability against physicians and healthcare providers for noneconomic damages to \$250,000 per claimant); Tex. Civ. Prac. & Rem. Code Ann. § 74.303 (2019) (capping healthcare providers' total liability—including economic and noneconomic damages (but excluding medical expenses) to \$500,000 per claimant). Both caps apply in wrongful death and survival action claims. *See Rio Grande Reg'l Hosp., Inc. v. Villarreal*, 329 S.W.3d 594, 627–28 (Tex. App. 2010) (In Texas, “any damage award will be limited by applying the [\$250,000] non-economic damage cap in section 74.301, and then will further be limited by applying the total [\$500,000] cap of section 74.303.”).

<sup>102</sup> Posner & Sunstein, *supra* note 95, at 544.

a dead victim may “cost” much less than a living victim. The result is an incentive to kill those who are severely injured.<sup>103</sup>

b. Collective Liability Regimes & Perverse Incentives to Kill

The limit on damages in case of a death provides a perverse incentive to kill in all cases, but its impact is more prominent in collective liability cases. To see the effect of the law of damages on parties’ actions, consider a case like *Ybarra*, but assume that during the operation the parties realize that the victim is severely injured, likely due to malpractice that would give rise to *res ipsa*. In such a case, due to collective liability, each of the  $n$  actors can expect to pay  $1/n$  of the damage,  $D_1$ , or  $D_1/n$ . Suppose also that if the victim dies, the parties will be held liable for a smaller amount,  $D_2$  ( $D_2 < D_1$ ). Unless the parties are able to exculpate themselves, each would be better off if the victim dies. In such a case, their collective and individual expected liability would be reduced from  $D_1/n$  to  $D_2/n$ . For example, in the case of a team with  $n=4$  members where compensation for an injured victim is expected to be  $D_1=\$12$  million, but for a dead victim,  $D_2=\$1$  million, killing the victim would reduce the expected liability for each actor from  $\$3$  million ( $12/4$ ) to  $\$250,000$ .<sup>104</sup>

The incentive to kill is exacerbated if some members of the group are worried that others would be able to exculpate themselves. In the above

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<sup>103</sup> See e.g., *Martin v. Ohio Cty. Hosp. Corp.*, 295 S.W.3d 104 (Ky. 2009). The issue in *Martin* was whether a surviving spouse can be compensated for a loss of consortium that occurred after the death of her injured spouse. In taking an expansive view, the Supreme Court of Kentucky explained the importance of fully compensating victims:

[A]llowing a loss of consortium claim only if the victim survives would appear to give perverse incentives to potential tortfeasors. *Such a rule could create incentives to kill victims instead of leaving them disabled, as only by instantly killing the victim can the tortfeasor be guaranteed to owe no loss of consortium damages*

(emphasis added). See also *Heath v. Hialeah*, 560 F. Supp. 840, 843 (S.D. Fla. 1983) (holding that under Florida law “it would be more profitable to kill the plaintiff, than to scratch him” and finding such a result inconsistent with § 1983).

<sup>104</sup> For anecdotal evidence, see Michael Daly, *FBI: Texas Hospice Boss Texted Nurses Execution Orders for Patients*, THE DAILY BEAST (Apr. 13, 2017) <https://www.thedailybeast.com/fbi-texas-hospice-boss-texted-nurses-execution-orders-for-patients> (reporting that according to the FBI, “[t]he founder and CEO of a hospice services company instructed nurses to administer fatal overdoses to patients” in order to increase profits); Steve Doughty, *Top doctor’s chilling claim: The NHS kills off 130,000 elderly patients every year*, DAILY MAIL (June 19, 2012), <https://www.dailymail.co.uk/news/article-2161869/Top-doctors-chilling-claim-The-NHS-kills-130-000-elderly-patients-year.html> (arguing that “NHS doctors are prematurely ending the lives of thousands of elderly hospital patients.”).

example, if three members believe that the fourth will be exempted from liability, the expected liability of each will increase from \$3 million (12/4) to \$4 million (12/3) and so will their inclination to aggravate the victim's injuries.

Collective liability thus puts innocent actors in a tough (impossible?) position. Those subject to collective liability must choose between (a) *being wronged* in the sense that they must pay a fraction of a harm they did not inflict or (b) *committing a wrong*—killing a patient—to reduce their own liability. In other words, a group accountability regime may encourage innocent actors to engage in wrongdoing.

Moreover, in collective liability cases, the risk that a maimed victim will be killed is higher and increases with the number of actors in the group. The victim's life will be spared only if *all* actors—each of whom has the incentive to kill the victim—avoid doing so. The incentive to kill may also result in a collusion to kill and the suppression of information *ex post* (the subject of Part C below).

Collective liability regimes exacerbate the concern that actors may succumb under the (law's) pressure and kill the victim for another reason. Some jurisdictions mandate a damage cap in wrongful death and survival actions that cannot be adjusted upward with the number of defendants.<sup>105</sup> The effect of such caps is that killing is not only cheaper compared to injuring, but individual liability is also diluted when collective responsibility is imposed. Texas law provides such a perverse incentive. In the case of a patient's death, liability for non-economic harm is limited to \$250,000 and liability for all damages to \$500,000.<sup>106</sup> Importantly, these caps remain constant "*regardless of the number... of health care providers*".<sup>107</sup> By contrast, damages for an injured person are not capped at all.<sup>108</sup> The result is a strong incentive to kill rather than to maim.<sup>109</sup>

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<sup>105</sup> See *e.g.*, Mo. Rev. Stat. § 538.210 (2019) (capping recovery against healthcare providers in wrongful death and survival actions "irrespective of the number of defendants" but allowing an exception for "catastrophic injuries" as defined in § 538.205); *Sanders v. Ahmed*, 364 S.W.3d 195, 202 (Mo. 2012) (reducing a \$10 million jury verdict in a wrongful death action to less than \$2 million due to Missouri's cap on noneconomic damages).

<sup>106</sup> Tex. Civ. Prac. & Rem. Code Ann. § 74.301 and § 74.303(a) respectively. The \$500,000 cap applies to economic, noneconomic, and exemplary damages. Texas law defines economic damages as compensatory damages and noneconomic damages as non-pecuniary damages including "physical pain and suffering, mental or emotional pain or anguish, loss of consortium," loss of companionship, loss of enjoyment of life, and injury to reputation. Tex. Civ. Prac. & Rem. Code Ann. § 74.001 (2019).

<sup>107</sup> Tex. Civ. Prac. & Rem. Code Ann. § 74.303(a) (2019) (emphasis added).

<sup>108</sup> Tex. Civ. Prac. & Rem. Code Ann. § 74.303(c) (2019).

<sup>109</sup> To illustrate the effect of Texas law on healthcare incentives, consider again the group of four healthcare providers who become aware of the victim's injury during

c. Collective Liability and Civil Rights Violations

The last insight carries an important message to other areas of the law, chief among them are suits filed under Section 1983.<sup>110</sup> Courts adjudicating these suits have been wary about the perverse effect of tort law's damage calculation,<sup>111</sup> but they have failed to recognize that in cases involving multiple actors the incentive to kill an injured victim is substantially higher than that of a single injurer. Moreover, in such cases, even fully compensating the victim would not thwart the pressure to kill. This section explains how collective liability may contribute to constitutional rights violations and offers a new way to remedy its adverse effects.

Derived from the Ku Klux Klan Act of 1871, Section 1983 creates a cause of action for constitutional right violations. One of its primary goals is to “deter racial killing” by officials.<sup>112</sup> While federal law creates a cause of action, the actual amount recoverable in a Section 1983 suit is dependent on state law and, specifically, the state's survival and wrongful death statutes.<sup>113</sup> Federal law, however, allows courts in Section 1983 suits to override state law if it is inconsistent with the Constitution.<sup>114</sup> And this is exactly what courts do when they are concerned that state survival laws incentivize actors to kill.<sup>115</sup>

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a surgery. Recall that an injured victim would be entitled to  $D_1 = \$10$  million but a dead victim to only  $D_2 = \$2$  million. Suppose also that in case of a death, of the \$2 million award, \$1.7 million are for non-economic damages (e.g., pain and suffering). Under Texas law, liability would be first reduced to \$550,000—\$250,000 the maximum allowance for noneconomic harm and the additional \$300,000 (2-1.7). Due to the total cap requirement, this liability would be further limited to \$500,000. This means that killing the patient would reduce each actor's expected liability from \$2.5 million (10/4) to \$125,000 (500/4). Individual liability can be further reduced if the size of the team is inflated (e.g., with  $n=5$  each can expect to pay only \$100,000). See also *Rio Grande Reg'l Hosp., Inc. v. Villarreal*, 329 S.W.3d 594, 627 (Tex. App. 2010), vacated, 2013 Tex. LEXIS 725 (Tex. 2013) (holding that in wrongful death and survival actions, both the noneconomic and total recovery caps apply).

<sup>110</sup> 42 U.S.C. § 1983 (2018).

<sup>111</sup> *Carey v. Phipps*, 435 U.S. 247, 258 (1978).

<sup>112</sup> *Bell v. City of Milwaukee*, 746 F.2d 1205, 1239 (7th Cir. 1984); *Carey*, 435 U.S. at 258.

<sup>113</sup> 42 U.S.C. § 1988 (2018); *Chaudhry v. City of L.A.*, 751 F.3d 1096, 1103 (9th Cir. 2014).

<sup>114</sup> 42 U.S.C. § 1988 (2018).

<sup>115</sup> See *infra* notes 116–119 and accompanying text. See also *Heath v. Hialeah*, 560 F. Supp. 840, 842 (S.D. Fla. 1983) (in a case involving the shooting and killing of a black victim by an off duty policeman and a cover-up conspiracy, the court held that Florida's wrongful death statute is inconsistent with the deterrent rationale of Section 1983 because otherwise “it would be far more profitable to kill the plaintiff than to scratch him”); *Bell*, 746 F.2d at 1239 (declining to follow Wisconsin law in a case involving the shooting of black driver and a cover-up attempt by his colleague, explaining that if Wisconsin law—which would preclude recovery for the decedent's

An example is *Guyton v. Phillips*.<sup>116</sup> *Phillips* involved two undercover policemen who shot and killed an unarmed fourteen-year-old black boy. The incident began when the two policemen suspected that the victim and another black man were either “dirty or going to rip off [a nearby] car.” At one point, a car chase ensued. It ended when the policemen, wearing civilian clothes, rammed their unmarked vehicle into the victim’s car. One of the policemen shot and injured the victim who then attempted to escape on foot. After a short pursuit, the victim was captured, but before he was handcuffed, he was shot again, this time in his back. The gunshots were fatal. Although the policemen’s testimonies were inconsistent, it was clear that the policemen did not see any weapon in the victim’s possession, did not observe any threatening gestures, and did not attempt to stop the victim by way of warning.

The court found the policemen’s use of deadly force was excessive and unreasonable. It then held that California’s survival statute is inconsistent with the goals of §1983.<sup>117</sup> The statute limited damages to losses that the decedent sustained prior to his death and excluded non-economic damages.<sup>118</sup> It therefore did not allow recovery of pre-death pain and suffering and post-death funeral fees. These constraints, the court reasoned, would result in a perverse incentive to kill:

The clear purpose of §1983 is... hardly served when the police officer who acts without justification suffers a harsher penalty for injuring or maiming a victim than for killing him. The court must be able to fashion a remedy that will... serve as a deterrent to abusive conduct in the future.<sup>119</sup>

The analysis of this Part supports the overruling of state law when it undercompensates victims in Section 1983 cases. But this Article does more than that. It also proposes a new basis for overruling state law in civil right violation actions. The Article reveals that even when state law *fully* compensates the victim, those acting under the color of the law may still have a perverse incentive to kill when damages cannot increase with the number

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loss of life—applied, “deterrence would be further subverted since it would be more advantageous to the unlawful actor to kill rather than injure”); *Chaudry*, 751 F.3d at 1104 (holding that California’s “prohibition against pre-death pain and suffering awards for a decedent’s estate has the perverse effect of making it more economically advantageous for a defendant to kill rather than injure his victim”).

<sup>116</sup> *Guyton v. Phillips*, 532 F. Supp. 1154, 1156 (N.D. Cal. 1981).

<sup>117</sup> *Guyton*, 532 F. Supp. at 1166–67.

<sup>118</sup> *Id.* at 1164, 1166–67.

<sup>119</sup> *Id.* at 1167. The court awarded the plaintiff a sum of \$100,000 for the deprivation of constitutional right to life, \$15,000 for pain and suffering, \$487 for funeral expenses, and a total of \$85,000 in punitive damages. *Id.* at 1169.

of actors. To avoid such a perverse effect, punitive damages—or other antidilution devices—must be introduced. Currently, however, the majority of states do not allow the plaintiff in a wrongful death suit to recover punitive damages. Those states that do allow punitive damages often impose arbitrary limitations or base their measure on “fault.”<sup>120</sup>

### 3. Actors’ Induced Demand

Another well-documented form of offensive practice is supplier induced demand.<sup>121</sup> In the medical context, physician induced demand (PID) is defined as cases in which “the physician influences a patient’s demand for care against the physician’s interpretation of the best interests of the patient.”<sup>122</sup> The choice between Cesarean Section (C-section) and vaginal delivery provides a good example. For low-risk patients, vaginal delivery is considered the preferred option. Yet, many empirical studies now show that physicians perform many unnecessary C-sections.<sup>123</sup> Some scholars focus on

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<sup>120</sup> See e.g., *Gen. Chem. Corp. v. De La Lastra*, 852 S.W.2d 916 (Tex. 1993); 1 *Punitive Damages: Law and Prac.* 2d § 5:10 (2018 ed.). One exception is Alabama’s wrongful death statute. The statute allows only recovery of punitive damages. As such, it has the potential to deter actors from killing injured victims. See *S. & N.A.R. Co. v. Sullivan*, 59 Ala. 272, 278–79 (1877) (explaining that Alabama law is designed “to give greater security to human life [and] to prevent homicides”).

<sup>121</sup> See e.g., Fuchs, *The Supply of Surgeons and the Demand for Operations*, 13 J. OF HUM. RESOURCES, POLICY AND LAW 35, 36 (1978) (finding “considerable support for the hypothesis that surgeons shift the demand for operations”); Rice and Labelle, *Do Physicians Induce Demand for Medical Services?*, 14 J. OF HEALTH POLITICS, POLICY AND LAW 587, 588 (1989) (“there is great deal of evidence to indicate that physicians do induce demand for economic gain”); Jeffrey Clemens and Joshua D. Gottlieb, *Do Physicians’ Financial Incentives Affect Medical Treatment and Patient Health?*, 104 A. ECON. REV. 1320, 1321 (2014) (finding that “financial incentives significantly influence physicians’ supply of health care”).

<sup>122</sup> Erin Johnson & Marit Rehavi, *Physicians Treating Physicians: Information and Incentives in Childbirth* \*1 (Nat’l Bureau of Econ. Research, Working Paper No. w19242, 2013), <https://ssrn.com/abstract=2295856> (explaining that patients who are not in a position to evaluate alternative treatments may be persuaded by doctors to take a course of action that is less desirable to the patient but is more profitable to the healthcare provider); Feldman and Sloan, *Competition Among Physicians, Revisited*, 13 J. OF HEALTH POLITICS, POLICY AND LAW 239, 239 (1988) (defining physician induced demand as “whether the demand curve for physician services is subject to shifts induced by physicians in pursuit of their own interests.”).

<sup>123</sup> There is evidence that for-profit hospitals are more likely to perform unnecessary C-sections, implying that the benefits from C-sections are higher or that the costs (including the risk of litigation) are low enough (or both) to justify many unnecessary procedures. See, e.g., Tara Haelle, *Your Biggest C-Section Risk May Be Your Hospital*, CONSUMER REPORTS (May 10, 2018), <https://www.consumerreports.org/c-section/biggest-c-section-risk-may-be-your-hospital/> (reporting that “C-section rates



the cost side of the equation. They blame the doctor's choice on "defensive medicine"—the doctor's interest in reducing her expected liability.<sup>124</sup> Others focus on the monetary benefits the physician receives from the activity, arguing that the incentives to engage in the less desirable activity (e.g., C-section) are hard to resist.<sup>125</sup> However, all agree that asymmetric information plays an important role. The authors of a recent study explain that

[B]ecause patients do not have the necessary medical knowledge to make independent treatment decisions, physicians both recommend treatments and profit from performing them. The PID hypothesis posits that physicians can therefore shift patient demand and move treatment quantity in the direction of their own preferences.<sup>126</sup>

As this Part shows, collective liability regimes such as *res ipsa* may enhance PID of the worst type. For example, in the medical context, the very existence of a collective liability regime may incentivize physicians to choose an unnecessary procedure that involves full anesthesia over one that does not. The reason is that, in some cases, by choosing a procedure that will be more likely to subject parties to collective *res ipsa*, a physician can reap a higher payoff due to *res ipsa*'s cost sharing effect. Example B1 below is illustrative.

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for low-risk deliveries in the U.S. vary dramatically from hospital to hospital, even between those located in the same communities" and that "half of the C-sections performed in the U.S. are not required" and "can pose added risks to the mother and her child").

<sup>124</sup> See, e.g., Clark Johnson & Erika Werner, *The Nationwide Relationship Between Malpractice Rates of Vaginal and Cesarean Delivery*, 123 OBSTETRICS & GYNECOLOGY 119S, 120S (2014) ("States with higher malpractice rates have lower vaginal delivery rates and higher cesarean delivery rates than states with lower malpractice rates."); Y. Tony Yang et al., *Relationship Between Malpractice Litigation Pressure and Rates of Cesarean Section and Vaginal Birth After Cesarean Section*, 47 MED. CARE 234, 234 ("[R]educed litigation pressure would likely lead to decreases in the total number [sic] cesarean sections and total delivery costs.").

<sup>125</sup> Nathaniel Johnson, *For-Profit Hospitals Performing More C-Sections*, KAISER HEALTH NEWS (Sept. 13, 2010), <https://khn.org/news/californiawatch-profit-hospitals-performing-more-c-sections/> ("A database compiled from state birthing records revealed that, all factors considered, women are at least 17 percent more likely to have a cesarean section at a for-profit hospital than at one that operates as a non-profit. A surgical birth can bring in twice the revenue of a vaginal delivery."); Shankar Vedantam, *Money May be Motivating Doctors to do More C-Sections*, NAT'L PUB. RADIO (Aug. 20, 2019, 3:06 AM ET), <https://www.npr.org/sections/health-shots/2013/08/30/216479305/money-may-be-motivating-doctors-to-do-more-c-sections>.

<sup>126</sup> Johnson et al., *supra* note 122, at \*1.

**Example B1:** A physician must choose between two procedures. The cost of performing the procedures and the utility therefrom are the same. However, the procedures differ in the risk they pose to the patient and the payoffs to the healthcare providers.

The expected harm to the patient is lower from Activity-I (e.g., a vaginal delivery) compared to Activity-II (e.g., a C-section). The idiosyncratic costs and benefits to the patient can be estimated *ex ante* by the healthcare providers, but they cannot be discerned *ex post* by the fact finder.<sup>127</sup> Accordingly, the physician and his team are not likely to be held liable for simply choosing Activity-II over Activity-I (although they should be).<sup>128</sup>

Although the physician and his team will (likely) not be held liable for choosing one action over the other, they will be liable if they fail to meet the standard of care expected in each activity. (For example, if an actor causes a uterine rupture during a vaginal delivery or leaves a sponge inside the patient during a C-section.)

Collective liability can encourage the wealth-maximizing doctor to prefer the less desirable Activity-II. To see why, consider first a case where the physician operates alone, and assume first that her benefits from the two activities are identical. Suppose Activity-I comes with an expected liability of \$10 and Activity-II with an expected liability of \$16. When liability is imposed on one party, the patient's and the physician's interests are aligned. The physician would prefer to engage in Activity-I ( $10 < 16$ )—the socially desirable activity.

Consider now the effect of the application of collective *res ipsa loquitur* on a physician who works with another healthcare provider (for example, a nurse). *Res ipsa* is more likely to apply in suits involving Activity-

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<sup>127</sup> *Id.*

<sup>128</sup> See *supra* notes 122–124 and accompanying text. See also Ariel Porat, *Misalignments in Tort Law*, 121 *YALE L.J.* 82, 121 (2011) (investigating the effect of individual liability and concluding that a physician is unlikely to be held liable “even if he negligently chooses the cesarean procedure”); Ariel Porat, *Offsetting Risks*, 106 *MICH. L. REV.* 243, 265 (2016) (noting that “cesarean deliveries are performed in the United States at a much higher than optimal rate” and explaining that this is so due to defensive medicine”). While Porat finds that when liability is individual “[l]owering physician liability would decrease defensive medicine”, *id.*, this article shows that, when collective liability applies, under certain circumstances, increasing the expected liability of each actor may be more effective.

II (C-section) because in such cases the control requirement is satisfied.<sup>129</sup> Thus, so long as the accident bespeaks of “negligence,” both healthcare providers would be held liable for the entire harm. As a result, the physician can expect to pay only \$8 if she chooses Activity-II (16/2) and \$10 if she chooses Activity-I. Now, the interests of the patient and her healthcare providers diverge. Here, collective *res ipsa loquitur* incentivizes the physician to take the less efficient course of action.

Collective liability may also encourage physicians to choose the less desirable activity even if the harm increases with the number of actors. Consider a case in which the expected liability associated with each activity and the benefits therefrom to the parties are the same. Specifically, assume that in each activity the physician expects to benefit \$100 and inflict a harm of \$60, whereas the nurse expects to benefit \$30 and inflict a harm of \$10. Activity-I, where each pays for her own harm, comes with an expected gain of \$40 (100-60) to the physician and \$20 (30-10) to the nurse. Once again, a collective liability regime such as *res ipsa loquitur* may incentivize the parties to switch to the less desirable (in fact, tortious) Activity-II. If the physician is joined by four nurses (thereby raising the expected harm to the victim from 70 to 100),<sup>130</sup> the physician’s expected payoffs from Activity-II would increase. The physician can expect a gain of \$80—the difference between her \$100 benefit and her \$20 portion of the damage ((60+10x4)/5).<sup>131</sup> The result is an unnecessary procedure with an exorbitant number of healthcare providers. The hospital—often the employer of the assisting staff—would also be happy to pick up the bill for the additional wages if its benefit from Activity-II is substantially higher compared to Activity-I.<sup>132</sup>

The analysis above ignores the rate at which *res ipsa loquitur* applies in Activity-II cases—and for a good reason. Even if *res ipsa* applies in only a fraction of Activity-II cases, say 1%, the actors’ monetary incentive to

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<sup>129</sup> Compared to a vaginal delivery, in a C-section, patients may be unconscious or semi-conscious and thus likely have less access to information.

<sup>130</sup> The expected harm is \$70 (60+10) when the team includes one doctor and one nurse and \$100 (60+10x4) when the team is comprised of one doctor and four nurses.

<sup>131</sup> This assumes that *res ipsa loquitur* would apply to the aggregate \$120 (60+20x3) harm. The assumption is later relaxed. Each nurse can expect a loss of \$20 (50-(60+20x3)/4).

<sup>132</sup> This is the case in C-sections. *See, e.g.,* Johnson et al., *supra* note 122, at \*3, \*6 (reviewing the literature and reporting that “PID models predict over-provision of care under fee-for-service and under-provision of care under capitated payment systems” and noting that “Cesarean birth ends up being a profit center in hospitals, so there’s not a lot of incentive to reduce them” (citing Lisa Girion, *More cesareans, more problems*, L.A. TIMES (May 17, 2019, 12AM), <https://www.latimes.com/archives/la-xpm-2009-may-17-fi-cover-birth17-story.html>)).

engage in the tortious activity could remain strong.<sup>133</sup> Of course, the higher the rate—implying that more unnecessary actions are taken resulting in accidents that bespeak negligence—the higher the gain to the physician.

The previous variants of Example B1 focused on the cost side of the actors' calculus while keeping the benefit from the activities constant. In many cases, however, the benefits associated with different activities are heterogeneous. An investigation of the impact of these benefits reveals that they, with the help of a collective liability theory like *res ipsa*, may exacerbate the incentive to steer patients to less desirable procedures. Once again, the choice between C-sections and vaginal deliveries provides a good example. Compared to vaginal deliveries, C-sections are more profitable to the hospital and, in many cases, to the physicians performing the procedure. They also take less time to perform, implying that a vaginal delivery comes with an even higher opportunity cost to the actors.<sup>134</sup> To explore the impact of the benefit calculus, suppose that in Example B1 the team comprises two physicians, MD1 and MD2, whose payoffs from the two activities are described in Table 1 below.

<sup>133</sup> With some simplifying assumptions, it is easy to show that, despite a low rate of *res ipsa*, the physician would prefer the tortious activity. By denoting  $b_{MD}$  as the benefit to the physician, MD, it is possible to express the physician's profit function from Activity-II (the left-hand side argument in Equation 1) relative to Activity-I (the right-hand side argument in Equation 1), as follows:

$$(1) \quad t \left( b_{2MD} - \frac{\sum D}{n} \right) + (1-t)(b_{2MD} - D_{2MD}) > (b_{1MD} - D_{1MD})$$

where  $n$  is the number of actors,  $t$  is the rate of *res ipsa*,  $D_{ij}$  is the expected liability faced by actor  $j$  from activity  $i$  (i.e.,  $D_{1MD}$  is the physician's expected liability from Activity-I), and  $\sum D$  is the total expected liability from Activity-II. Rearranging the expression yields:

$$(2) \quad \left( D_{2MD} - \frac{\sum D}{n} \right) > 0$$

From Equation 2, it is apparent that, so long as the expected harm caused by the physician is higher than the average expected harm, (the tortious) Activity-II would remain more profitable to the physician. To illustrate, consider a *res ipsa* rate of  $t=1\%$ . The physician can expect to gain \$80  $(100-(60+10 \times 4)/5)$  in *res ipsa* cases and \$40  $(100-60)$  otherwise. With a rate of 1%, the physician's expected gain is \$40.4  $(1\% \times 80 + 99\% \times 40)$ . Each nurse can expect a gain of \$19.9  $(1\% \times (30-(60+10 \times 4)/5) + 99\% \times (30-10))$ .

<sup>134</sup> J. Gruber & M. Owings, *Physician Financial Incentives and Cesarean Section Delivery*, 27 RAND J. OF ECON. 99 (1996). J. Gruber et al., *Physician fees and procedure intensity: the case of cesarean delivery*, 18 J. OF HEALTH ECON. 473 (1999); I. Shurtz, *Malpractice Law, Physicians' Financial Incentives, and Medical Treatment: How Do They Interact?*, 57 J. L. & Econ. 1 (2014); J. Currie & W. MacLeod, *Diagnosing Expertise: Human Capital, Decision Making and Performance Among Physicians*, 35 J. LABOR & ECONOMICS (2016).

	Activity I			Activity II		
	Benefit	Ex. Harm	Gain	Benefit	Ex. Harm	Gain
MD1	100	30	70	200	150	50
MD2	100	20	80	400	50	350

Table 1: The Parties' Payoffs from the Different Activities

Activity-I promises a gain of \$70 (100-30) to MD1 and \$80 (100-20) to MD2. Activity-II promises a gain of \$50 (200-150) to MD1 and \$350 (400-50) to MD2. Without a cost-sharing doctrine like *res ipsa*, MD1 would not agree to engage in (the tortious) Activity-II (70>50). But if *res ipsa* applies in Activity-II cases, both actors would be better off if they engage in Activity-II rather than Activity-I. In such a case, MD1 can expect to gain \$100 (200-(150+50)/2) and MD2 can expect \$300 (400-(150+50)/2).<sup>135</sup>

### C. The Information Extraction Fallacy

The second justification for applying collective liability is extracting from a group of actors information that would identify the wrongdoer.<sup>136</sup> The claim is that collective liability encourages innocent actors—witnesses—to share information that identifies the culprit. Levmore illustrates this information forcing function using a hypothetical that includes six elevator passengers.<sup>137</sup> At one point during the ride, one of them feels that her wallet

<sup>135</sup> For reasons explained earlier, this is also true if *res ipsa* applies only in a fraction of Activity-II cases. See *supra* note 133 and accompanying text.

<sup>136</sup> *Ybarra v. Spangard*, 154 P.2d 687, 689 (Cal. 1944) (explaining that “the particular force and justice of the rule . . . consists in the circumstance that the chief evidence of the true cause is practically accessible to [the defendants] but inaccessible to the injured person,” and noting that “without the aid of the doctrine [the victim] would be entirely unable to recover unless the doctors and nurses in attendance voluntarily chose to disclose the identity of the negligent person and the facts establishing liability”); RESTATEMENT (THIRD) OF TORTS § 17 cmt. f (AM. LAW. INST. 1979) (collective *res ipsa loquitur* “provid[es] incentives to ‘smoke out’ relevant evidence” and identify the careless party); Ronald J. Allen, *Burdens of Proof, Uncertainty, and Ambiguity in Modern Legal Discourse*, 17 HARV. J.L. & PUB. POL’Y 627, 631 (1994) (explaining that *res ipsa* allows judges to “pry information from litigants”); Editor Note, *Res Ipsa Loquitur: Its Nature and Effect*, 3 UNIV. CHI. L. REV. 126, 129 (1935) (“The universal justification for whatever benefit *res ipsa loquitur* gives the plaintiff is that the defendant apparently has greater access to the evidence and therefore is the proper one to furnish an explanation.”); David W. Robertson, *The Common Sense of Cause in Fact*, 75 TEX. L. REV. 1765, 1783 (1997) (noting that in *Ybarra*, the court used *res ipsa* to overcome “the hurdle presented by the defendants’ wall of silence”).

<sup>137</sup> Levmore, *supra* note 14 (introducing the over-extraction mechanism to incentivize the tortfeasor to confess her wrongdoing).

containing \$100 has been taken. It is clear that one of the other five other passengers stole the wallet, but the victim cannot identify the thief and no passenger volunteers to be searched or to identify the culprit. Collective liability would require the innocents and the thief to pay \$20 (100/5). This, according to Levmore, “might encourage otherwise silent witnesses to help identify the chief culprit who would then bear the entire liability.”<sup>138</sup> Levmore explains that the rule (collective liability) “is surprisingly similar to the famous case of *Ybarra v. Spangard*,” which he christens as a “shrewd, judge-made law, because of its information forcing potential.”<sup>139</sup>

This Part shows that the information extraction rationale may be limited in scope and that collective liability may even lead to opposite results. To begin, in many cases, the parties do not have any information about the accident.<sup>140</sup> Nor are they in a position to collect and produce *ex ante* such information. Moreover, as this Part illustrates, even when the parties know what in fact happened, collective liability regimes such as *res ipsa* may be a poor mechanism to extract *useful* information.

#### 1. The Witnesses’ Incentive to Suppress Information and Over-Investment

To analyze the incentive of actors to volunteer information or invest in its production, consider the following example.

**Example C1:** In breach of her duties, T, a tortfeasor, caused the victim damage,  $D > 0$ . T could be a doctor in a surgery gone wrong or an elevator passenger who stole the victim’s wallet. W, a witness, can produce and share information that would shed light on the accident at an expected cost of  $s > 0$ . This includes the cost of communicating the information as well as the inconvenience involved in “ratting out” another or the loss of colleagues’ friendship and trust.<sup>141</sup> W garners

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<sup>138</sup> *Id.*

<sup>139</sup> *Id.*

<sup>140</sup> See, e.g., DOBBS, *supra* note 16, at § 306 (explaining that “[h]olding all the defendants hostage would itself be a justified response if evidence showed that all of them had knowledge of the facts,” but noting that in *Ybarra* this “was not the case and it is inherently improbable that everyone in an operating room knows exactly what everyone else is doing every second of the time; at least one person’s eyes should be on the scalpel.”); *Clark v. Gibbons*, 66 Cal. 2d 399, 410 (1967) (“noting that “*Ybarra* involved an injury which may not have been received during the operation”).

<sup>141</sup> Such non-monetary cost can be high and even prohibitive. See, e.g., DAVID LOUISELL & HAROLD WILLIAMS, *MEDICAL MALPRACTICE* § 14.01 (Gordon Ohlsson

a (moral) benefit,  $b$ , from identifying  $T$  and assisting the victim.

$W$ 's net cost from producing and communicating the information can be denoted by  $\mu = s - b$ . When  $b > s$  (that is, when  $\mu < 0$ ),  $W$ 's moral benefits from producing and sharing information outweigh the inconvenience and expected losses associated with such acts. In these cases,  $W$  has an internal motivation to produce and provide information. In other words, when  $\mu < 0$ ,  $W$  already has a dominant strategy to identify  $T$ , and accordingly, the case for *res ipsa loquitur* is weak. Table 1 below describes the parties' payoffs without a collective liability scheme such as *res ipsa loquitur*.

Witness Tortfeasor	Provide Information (Identify $T$ )	Keep Silent
Confess	$T$ $W$	$T$ $W$
	$D$ $\mu$	$D$ $0$
Keep Silent	$T$ $W$	$T$ $W$
	$D$ $\mu$	$0$ $0$

Table 1: The Actors' Payoffs Absent *Res Ipsa Loquitur*

The more interesting case, and the one that courts need to deal with, is when  $b < s$  (or  $\mu > 0$ )—that is, when  $W$ 's moral motivation to share information is not strong enough. This may happen, for example, when the parties are repeat players, part of a close-knit group, or both (e.g., a team of doctors and nurses). In these cases, without a collective liability doctrine such as *res ipsa*, actors would keep silent.  $W$  would have a dominant strategy to avoid providing information ( $\mu > 0$ ), and knowing this,  $T$  would not confess. As a result, the plaintiff would remain remediless.

Consider now the effect of *res ipsa loquitur*, described in Table 2 below. If  $T$  and  $W$  keep silent, *res ipsa loquitur* will help the plaintiff prove her case against both  $T$  and  $W$ , and accordingly each can expect to pay half of the harm,  $D/2$ . When  $\mu < D/2$  (e.g., when  $D = \$100$  and  $\mu = \$20$ ), the result is a unique Nash equilibrium:  $W$  provides information whereas  $T$  is silent.<sup>142</sup> In

Rev., Oct. 2018) (discussing the stigma and retaliation doctors experience when they testify against others and providing examples).

<sup>142</sup> Here, the parties do not have a dominant strategy. For example,  $W$  is better off keeping silent if  $T$  confesses ( $0 < \mu$ ), but  $W$  is better off divulging information if  $T$  is silent ( $\mu < D/2$ ). However, a cell-by-cell analysis reveals that  $T$  will keep silent and  $W$  will provide condemning information. The reason is that neither party has an incentive to deviate and adopt a different strategy (if  $W$  shares information,  $T$  does

other words, *res ipsa loquitur* incentivizes the witness, W, to provide information as Levmore envisioned.

Witness Tortfeasor	Provide Information (Identify T)		Keep Silent	
Confess	T	W	T	W
	D	$\mu$	D	0
Keep Silent	T	W	T	W
	D	$\mu$	D/2	D/2

Table 2: The Actors' Payoffs with *Res Ipsa Loquitur*

But when  $\mu > D/2$ , *res ipsa* can lead to the opposite result: collective liability may incentivize the witness to *suppress* information. For example, suppose for simplicity that W does not have an internal motivation to share information ( $b=0$ ). Assume also that the cost of producing and sharing information is  $s=\$60$  and the expected damage is  $D=\$100$ . In such a case, W would suppress the evidence because *res ipsa* dilutes her expected liability to the point that sharing is too costly. In other words, W would prefer to keep silent and be held liable together with T. W would prefer an expected judgment of \$50 ( $100/2$ ) rather than incurring the \$60 expected cost associated with turning in a colleague.

Moreover, even in cases when *res ipsa* would incentivize W to produce and share information, the result may be inefficient. One source of inefficiency is over-investment in evidence production. To see why, suppose that in Example C1 the expected damage to the victim is  $D=\$100$ , that W's net cost of producing and sharing the information is  $s=\$40$ , but the cost of another actor to do so is lower: \$30. Here, *res ipsa* is effective (i.e., it would incentivize W to share information) because  $\mu < D/2$  ( $40 < 100/2$ ). But this result would be inefficient because another can do so at a lower cost ( $30 < 40$ ). Moreover, even if W is the best cost avoider, a welfare loss may occur, and the loss may increase with the number of actors, if multiple parties would invest in producing evidence where only one should. For example, in Levmore's elevator hypothetical, if each of the five passengers can invest \$10 in producing and keeping exculpatory evidence, *res ipsa* may incentivize

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not have an incentive to confess—either way she will pay D, and if T keeps silent, W is better off sharing information because  $\mu < D/2$ . Note that if we assume that when T is silent an adjudication process will impose some additional cost on T, it is impossible to tell what the parties will do (there is no Nash equilibrium).



each to do so ( $10 < 100/5$ ). As a result, evidence that can be produced at a cost of \$10 would be produced at a cost of \$50 ( $10 \times 5$ ).

To date, the claim that collective liability can serve as an effective information forcing mechanism has not been proved empirically. This Article shows that the theory behind its support is also lacking and overly optimistic. In some cases, collective liability regimes such as *res ipsa* can incentivize witnesses to suppress information. In other cases, collective liability may encourage them to produce and communicate information but inefficiently so.

## 2. The Blame Game

The second justification for collective liability—that, in some cases, it may incentivize actors to produce information—relies on an empirical assumption: that W can *corroborate* her account using objective evidence that would make her testimony more likely than that of the injurer. For example, in a surgery gone wrong, W may be able to prove T's carelessness by providing records showing T used the wrong type of clamp or by furnishing the clamp actually used by T. In the elevator hypothetical, W may be able to provide information that would lead to the victim's wallet and place it within T's possession. In such cases, if T lies, T would not only have to compensate the victim but would also incur litigation costs, which makes lying a losing strategy. By contrast, if W only knows what happened but is unable to provide corroborating evidence, W's account would be as likely as T's. In these cases, a collective liability regime such as *res ipsa loquitur* may indeed break the "conspiracy of silence," but would result in the production of false information. In other words, it would incentivize lying.<sup>143</sup>

Courts and scholars have failed to appreciate the perverse incentive to supply false information.<sup>144</sup> They focus on and laud the information-forcing aspect of *res ipsa*. But they overlook the fact that the justification for the doctrine, if any exists, is to encourage actors to supply (1) *truthful* information that (2) would help *identify* the tortfeasors.<sup>145</sup>

*Res ipsa loquitur* may fail on both accounts. To illustrate, reconsider Example C1, but assume now that W does not have any external evidence to corroborate her account. For example, assume that in the elevator

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<sup>143</sup> See e.g., *Jones v. Harrisburg Polyclinic Hosp.*, 437 A.2d 1134, 1138 (1981).

<sup>144</sup> Professor Levmore, for example, avoids the issue by providing a variant of the elevator hypothetical, in which during an elevator ride one of five passengers steals the victim's wallet. Levmore, *supra* note 14, at 1562–63. In this hypothetical, if the thief decides to confess her wrongdoing, she can prove that she was the true culprit using external evidence (i.e., by returning the wallet). Similarly, information provided by a witness can identify the true thief. When no external evidence exists, however, the prospects of lying loom larger.

<sup>145</sup> See *supra* note 136 and accompanying text.

hypothetical T did not steal the passenger's wallet but instead stole a \$20 bill.<sup>146</sup> Or assume that in the surgery, W witnessed T's careless behavior but is not in possession of the clamp that could prove T's fault. In such cases, *res ipsa* may encourage the parties to lie. To escape liability, T could claim that W was at fault. Similarly, under certain circumstances (discussed in the next section), W may falsely take responsibility for the careless conduct of another. Table 3 below shows the parties' payoffs when lying is considered and *res ipsa loquitur* does not apply.

Witness Tortfeasor	Provide Information (Truthfully Pin T)	Keep Silent	Lie (Falsely Admit)
Confess (Truthfully Admit)	T    W D $\mu$	T    W D    0	T    W D/2    D/2
Keep Silent	T    W D $\mu$	T    W 0    0	T    W 0    D
Lie (Falsely Pin W)	T    W 0 $\mu$	T    W 0    D	T    W 0    D

Table 3: The Actors' Payoffs Without *Res Ipsa Loquitur* (Lying Is an Option)

When  $\mu < D$  (e.g., when  $D = \$100$  and  $\mu = 20$ ), there are two equilibria:<sup>147</sup> (1) both actors keep silent and (2) T lies when W confesses. Note that in these equilibria the victim cannot recover her damages as each of the actors' account is, by definition, equally probable.<sup>148</sup>

By contrast, when the doctrine applies, there is only one equilibrium: T lies and W confesses. The reason is that when the parties keep silent or provide contradictory accounts (e.g., when each tries to pin liability on the other), both will be held liable (because *res ipsa* applies), and each can expect to pay half of the damage. As a result, when W has (or can be incentivized to produce *ex ante*) corroborating evidence, *res ipsa* may incentivize her to identify T. But when W does not have corroborating evidence, *res ipsa*

<sup>146</sup> For simplicity, assume both T and W have a \$20 bill, in which case it cannot be determined who is the thief.

<sup>147</sup> For T, confessing is dominated by lying ( $0 > -D/2, -D$ ), and for W, lying is dominated by keeping silent ( $0 < D/2, D$ )

<sup>148</sup> Assuming the testimonies are equally probable.

incentivizes T to lie, in which case the fact-finder, by definition, will not be able to identify the true injurer.

What courts and scholars have missed is that *res ipsa loquitur* is useful only if a witness can also corroborate her testimony with objective evidence. The reason is that absent *res ipsa*, when neither is at risk of liability, everyone is better off keeping silent. By contrast, when *res ipsa* applies, *both* have an incentive to provide information: the witness may try to exculpate herself by pinning liability on T, and the tortfeasor will try to avoid liability by arguing that W is the culpable party. In other words, *res ipsa* incentivizes lying.

*Ybarra* may have been such a case. On remand, all defendants testified “that they did not observe any incident that could have caused the injury.”<sup>149</sup> It could be that all but the injurers were honest. Or it could be that everyone lied because lying was each actor’s best strategy. Another possibility is that they all colluded to lie—the subject of the next section.<sup>150</sup>

### 3. Collusion to Lie and Suppress Evidence and Insurance (and Private Bargaining Over Collective Liability)

Collective liability regimes such as *res ipsa* are justified as a means to break the defendants’ wall of silence.<sup>151</sup> In practice, however, such communal liability schemes may incentivize injurers to *collude* with others and lie in order to suppress evidence.

#### a. Hedging the Risks and Shifting Liability to Innocent Defendants

To see how collective liability can benefit both the wrongdoer and those who witnessed the culprit, and even help co-conspirators shift liability to innocent parties, consider Example C2 below:

**Example C2:** In breach of her duties, T, a tortfeasor, caused the victim damage,  $D > 0$ . T could be a doctor in a surgery gone wrong or an elevator passenger who stole from the victim. T was part of a group of actors that included two additional parties, W and N. The victim is not in a position to identify the injurer, and N does not have any external evidence that can identify the tortfeasor.

<sup>149</sup> *Ybarra v. Spangard*, 208 P.2d 445, 446 (Cal. App. 1949).

<sup>150</sup> See also *Dalley v. Utah Valley Reg’l Med. Ctr.*, 791 P.2d 193, 200 (Utah 1990) (applying *res ipsa* after all members of the medical team denied knowing “anything... that could have caused the burn” on the plaintiff’s thigh during a c-section).

<sup>151</sup> See Grady, *supra* note 12, at 887; *Jones v. Harrisburg Polyclinic Hosp.*, 496 Pa. 465, 472 (1981).

Suppose T and W are more likely than N to be liable for the victim's harm. For example, it could be that in a surgery gone wrong, T and W were the doctors while N was the nurse-anesthetist, and it is more likely the injury was caused by a doctor.<sup>152</sup> Another example is a case like *Leonard*, where T and W, but not N, operated on the plaintiff's body part that suffered the injury.<sup>153</sup> Or it could be that in the elevator ride T and W stood next to the victim whereas N was farther away.

In such cases, both T and W would be interested in the application of a collective liability regime such as *res ipsa*. Once applied, a collective liability regime would allow T and W to corroborate each other's false narrative. They would be able—and may even collude—to argue that N, the innocent party, was the one at fault. If successful, both T and W would get off scot-free, and the innocent party would be held liable. But even if liability is imposed on all, T and W would be still better off. T would be required to pay only a fraction (1/3) of the harm she caused. And W, the innocent party, would be able to hedge (i.e., minimize) the risk that she would be solely liable for the entire harm (a false negative).<sup>154</sup> W's incentive to collude with T would be even stronger if W stands to benefit from exculpating T, for example if the two are colleagues or if T paid W to present a unified front.

*Cavero v. Franklin General Benevolent Society* provides an example of such a possible setting.<sup>155</sup> *Cavero* involved the death of a three-year-old child during a tonsillectomy. The team included two doctors, a mother and son, aided by a nurse-anesthetist. The latter was employed by the hospital. In an interesting turn of events, “[a]t the request of the *defendant doctors*[,] the court gave a *res ipsa loquitur* instruction... against the doctors [themselves] and the hospital.”<sup>156</sup> The doctors then claimed that it was the nurse's carelessness that led to the death of the child—a version the jury accepted. The doctors may have used *res ipsa* to *hedge* their risk of liability. By asking for *res ipsa* they ensured that each one would pay a fraction of the damage, even nothing if the verdict against each was within the insurance limit. Moreover, once the burden shifted to the defendants, the doctors were able to corroborate each other's testimonies and shift liability to the nurse.

One would think that the actors' insurance would dull the incentive to collude. However, it is possible to show that insurance can actually *increase* the risk of collusion. Suppose, for example, that each defendant is insured up to \$1 million and the victim's injury is \$3 million.<sup>157</sup> If liability is

<sup>152</sup> The example is based on *Cavero v. Franklin General Benevolent Society*, 223 P.2d 471 (Cal. 1950) discussed in *infra* notes 160–165 and accompanying text.

<sup>153</sup> See *infra* notes 160–163 and accompanying text.

<sup>154</sup> The impact of the actors' insurance is discussed below.

<sup>155</sup> *Cavero v. Franklin Gen. Benevolent Soc'y*, 223 P.2d 471 (Cal. 1950).

<sup>156</sup> *Id.* at 477 (emphasis added).

<sup>157</sup> James Sweeney, *Malpractice Guide*, Medical Economics (Sep. 19, 2018) (<https://www.medicaleconomics.com/business/malpractice-guide/page/0/1>) (“In

imposed on one party only, say W (due to a mistake), she can expect to pay \$2 millions (3-1) out of pocket. By contrast, if *res ipsa* applies and T, W, and N collude and deny any knowledge of what happened, each will be held liable for \$1 million (3/3).

The interest of T and W in colluding remains even when it is expected that N will be able to exculpate herself. The reason, once again, is insurance fraud. Without *res ipsa*, T can expect to pay \$2 million out of pocket. But if *res ipsa* applies to T and W, each can expect to pay only \$500,000 out of pocket (their respective insurance policies will pay the remaining \$2 million). The collusion thus allows T to reduce her liability from \$2 million (3-1) to \$500,000 and more than compensate W.<sup>158</sup> Note that collective liability provides the parties with another benefit. It creates a “veil of ignorance” that allows T and W to maintain their “innocence” (each can argue she was not the truly liable party). And, at least to some extent, mitigate the market sanctions (e.g., reputational damage) that often follow from a liability judgment.<sup>159</sup>

In the examples above, collusion among the insureds allows them to hedge a number of risks. First, by suppressing information and committing a fraud against their insurance, they are able to reduce their individual exposure. The conspiracy allows the insureds to remain within the insurance limit and avoid paying the victim out of their pockets. Their respective insurance companies will pick up the entire bill. Second, the conspiracy is itself a form of insurance. It protects the innocents from the possibility that one of them will wrongly be held solely liable for the entire harm, and the culprit from fully internalizing the consequences of her negligent behavior.

#### b. Self-Implicating Testimonies

In Example C2 and its variants, the victim was fully paid. As this section shows, in some cases, collective liability may incentivize the parties

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general, carriers’ standard coverage limits are \$1 million per claim and \$3 million aggregate, which is the most the policy will pay in a year for all claims”); Katherine Zeiler et al, Physicians’ Insurance Limits and Malpractice Payments: Evidence from Texas Closed Claims, 1990–2003, 36 *Journal of Legal Studies* (noting that “The conventional wisdom is that most doctors buy medical malpractice policies with \$1 million per occurrence limits” and finding that “Out-of-pocket payments are infrequent even though many physicians purchase policies that are well below mean and median jury awards”).

<sup>158</sup> For example, a promise to pay W \$700,000 will make both better off. T would be paying only \$1.2 millions—\$500,000 to the plaintiff and \$700,000 to W—which is lower than the \$2 millions she would pay out of pocket if she is held solely liable. W would be subject to a \$500,000 judgment but will receive \$700,000 from T, and as explained above, can maintain she was not at fault but was found liable only due to a collective liability regime, which by definition, hold innocent parties liable.

<sup>159</sup> See *infra* Part IV and accompanying text.

to enter into collusions that result in exculpating the injurer at the expense of the victim.

Consider, for example, a leading case like *Leonard v. Watsonville Community Hospital*.<sup>160</sup> In *Leonard*, a clamp was left in the plaintiff's abdomen during an operation performed by doctors Lacy and Slegal with the assistance of doctor Eiskamp and the hospital's nurse. At trial, Eiskamp's denial of any wrongdoing was corroborated by Lacy and Slegal, who testified that they were the only doctors who used the forgotten clamp.<sup>161</sup> The court found their testimony to be of such compelling evidentiary power that it exempted Eiskamp from liability. Lacy and Slegal's statements, the court explained, "did not in any way tend to benefit Lacy or Slegal."<sup>162</sup> Rather, the statements were "disadvantageous to [Lacy and Slegal] because the exoneration of one defendant would have the *necessary* effect of increasing the possibility of liability on the part of each of the other defendants."<sup>163</sup> In other words, the court held that the self-implicating testimonies should be believed, because by exempting one defendant (Eiskamp), each of the remaining defendants faces a higher expected liability ( $D/2 > D/3$ ).

But this is not necessarily so. Self-implicating testimonies can in fact benefit all defendants. The *Ybarra* and *Leonard* courts were aware of the possibility of collusion among defendants.<sup>164</sup> But what they did not realize was that their prescribed antidote—the doctrine of collective *res ipsa*—was itself instrumental in incentivizing the parties to collude and suppress evidence. In fact, there are reasons to suspect that in many cases, collusions do take place and that victims are not in a position to unravel them.<sup>165</sup> Example C3 below illustrates such a hard-to-detect collusion enabled by a collective liability regime.

**Example C3:** T1 and T2 are doctors who perform many operations together. T1 and T2 are codefendants in two trials involving different surgeries that resulted in injuries to patients. The subject of Trial-I is a surgery in which T1's careless behavior caused a patient a damage,  $D_1$ , under circumstances in which *res ipsa* applies. The subject of Trial-II is a surgery in which T2's careless behavior caused a patient an injury,  $D_2$ . In Trial-II *res ipsa* does not apply, but T1 has external evidence of T2's wrongdoing.

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<sup>160</sup> *Leonard v. Watsonville Cmty. Hosp.*, 305 P.2d 36 (Cal. 1956).

<sup>161</sup> *Leonard*, 305 P.2d at 38.

<sup>162</sup> *Id.* at 42.

<sup>163</sup> *Id.* (emphasis added).

<sup>164</sup> *Leonard*, 305 P.2d at 41–42; *Ybarra v. Spangard*, 154 P.2d 687 (Cal. 1944).

<sup>165</sup> Moreover, *Leonard's* holding—that a nonsuit would be granted when the exculpatory evidence is "uncontradicted"—likely imposes an impossible burden on the plaintiff. *Id.* at 41.

Suppose T1 approaches T2 and makes the following offer: “If you take responsibility for my actions in Trial-1, I will suppress the evidence against you in Trial-2.” The parties’ payoffs are therefore a function of T2’s action in Trial-I.<sup>166</sup> Consider first the parties’ payoffs if T2 rejects the deal—that is, if T2 refuses to falsely take responsibility for T1’s actions in Trial-I. In such a case, because *res ipsa loquitur* applies, absent any exculpatory evidence, T1 and T2 will both be held liable in Trial-I. Accordingly, each can expect to pay half the injury,  $D_1/2$ . In addition, T2 can expect to pay  $D_2$  in Trial-II (because T1 will turn in the evidence against her). As a result, T1 can expect to pay a total of  $D_1/2$ ; and T2 a total of  $D_1/2+D_2$ . Consider now the parties’ payoffs if T2 takes the deal and (falsely) admits responsibility in Trial-I. Per *Leonard*, T2 will be the only party liable in Trial-I and can expect to pay  $D_1$ . In Trial-II neither T1 nor T2 will be held liable (because, per the deal, T1 will suppress the condemning evidence against T2). The result is that T1 will not be responsible for her actions and T2 can expect to pay  $D_1$ . The parties’ payoffs are summarized in Table 4 below.

	T1	T2
Deal	0	$D_1$
No Deal	$D_1/2$	$D_1/2+D_2$

Table 4: The Parties’ Total Payoffs as a Function of Their Actions in Trial-I

From Table 4, it is easy to see that T2 will take the deal if  $D_1 < D_1/2+D_2$  or  $D_1 < 2D_2$ . In other words, T2 will take the deal unless the expected judgment in Trial-II is very low. A simple numerical example may be helpful. Suppose that in Trial-I the expected harm is  $D_1 = \$10,000$ . T2 will take the deal so long as  $D_2 > \$5,000$ . To illustrate, consider T2’s choices when  $D_2$  is equal to \$6,000, \$20,000 and \$50,000. If T2 takes the deal, she can expect to pay \$10,000. By contrast, if she forgoes the deal, T2 can expect to pay substantially more: \$11,000 ( $10/2+6$ ), \$25,000 ( $10/2+20$ ), and \$55,000 ( $10/2+50$ ) respectively.<sup>167</sup> As the example illustrates, the incentive to enter into the deal increases as the gap between the expected damages ( $D_2-D_1$ ) in the two trials grows.

The result is that in cases where the parties are involved in repeated activities, they may have an incentive to collude and suppress evidence. Once again, a collective liability regime such as *res ipsa loquitur* may incentivize the parties to “talk,” not to provide truthful information that would identify the wrongdoer, but rather to simply reduce their total expected cost.

<sup>166</sup> For simplicity, assume that Trial-I will be tried first, that if T2 takes the deal she can expect T1 to perform, and that  $\mu=0$ .

<sup>167</sup> If T2 forgoes the deal, she stands to pay half of the expected damage in Trial-I, \$5000 ( $10/2$ ). In addition, T2 stands to pay the expected damage,  $D_2$ , in Trial-II as T1 will provide the damning evidence.

Moreover, unlike Example C2, in Example C3, the collusion allows T2 to reduce her exposure by falsely taking responsibility for the action of another and render a victim (the plaintiff in Trial 2) remediless.

The concern of collusion may be exacerbated due to the fact that the parties may have been “efficiently negligent,”<sup>168</sup> in the sense that their careless behavior was due to their human nature. People simply cannot avoid mistakes when they act repeatedly over time, even if they attempt to take care at all times. Drivers sometimes speed up or ignore a sign even when they try to drive carefully. Similarly, healthcare providers are not immune to human fallibilities. When the parties are efficiently negligent, the moral cost of colluding may be very low.<sup>169</sup>

#### IV. THE INFORMATIONAL ROLE OF NEGLIGENCE

Collective liability suffers from another major problem that to date has been wholly ignored by the prior literature and that weighs heavily against applying it. First and foremost, collective liability dulls the informational role of a negligence verdict. Consider first a negligence verdict against an individual service provider. The verdict serves a number of important functions. First, it alerts *future customers* that the service provider’s practices fall below the acceptable standard of care. In the short run, the information will likely result in a reduced demand and reduced price for the provider’s services and allow better providers to distinguish themselves. In the long run, market forces may encourage the service provider to increase her quality to the accepted level.

Second, negligence has a public good attribute in the sense that a verdict of carelessness inures to the benefit of the entire industry. It informs other *service providers* what is the expected level of precaution, whether a certain procedure is outdated and what steps they must take. For example, a negligence verdict against one producer informs others that a behavior (e.g., the use of a certain method) comes with a higher expected liability.

By contrast, collective liability mutes these important signals. A verdict against a team of healthcare providers does not, by definition, identify the culprit. As a result, it does not help consumers avoid careless actors. The

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<sup>168</sup> See Grady, *supra* note 12, at 897–98 (explaining that, due to the high cost of consistent performance, actors often “commit efficient ‘compliance errors’”—that is, inadvertent departure from the required rate of precaution).

<sup>169</sup> Courts do not exempt efficiently negligent doctors from liability, although at least one court exempted a lawyer who admitted his malpractice, perhaps because of the high compliance cost. See *id.* at 900–01 (contrasting *Myers v. Beem*, 712 P.2d 1092 (Colo. Ct. App. 1985) (legal malpractice for failure to submit a complaint on time) with *Ravi v. Williams*, 536 So. 2d 1473 (Ala. 1988) (holding surgeon liable for leaving a sponge in the patient’s body).



result could be a market for lemons.<sup>170</sup> If better providers will not be able to distinguish themselves and command the high price that is necessary to maintain a high quality service, they may need either to stop offering their services or reduce their quality. If the verdict against a collective is also unable to identify what truly happened, it will not be able to inform other service providers what is the acceptable standard.

Moreover, collective liability does not come with the same moral indignation and reputational harm that accompanies individual liability. Rather, it allows each defendant to maintain her innocence and argue that others, but not her, were careless. In other words, collective liability allows a defendant to portray herself as a victim not a villain. This latter insight may fuel the parties' incentive to collude in order to suppress information.

To illustrate, recall Example C2. If W takes the deal (and agrees to be subject to *res ipsa* together with T, the true tortfeasor), she would be held liable for something she did not do. But the cost of doing so may not be prohibitive. Even if W does not avoid the stigma of a court record by settling, she will be fully indemnified by T, who would likely also pay her a premium for her willingness to share the initial burden—her share of \$500,000.<sup>171</sup> Importantly, for the conspiracy to work (i.e., for collective liability to apply), both W and T would have to deny responsibility. This, in turn, will allow W and T to maintain their innocence, by blaming each other and N (if N was not able to exculpate herself) for the mishap. In other words, collective liability creates a smoke screen or a veil of ignorance that allows culpable parties to escape moral indignation and market sanctions.

Example C3 highlights another concern. Collective liability may result in *individual* liability, but against the wrong party, thereby tampering with the informational function of negligence. If T2 fails to take the deal, she will be found liable in Trial-I for something she did not do (due to *res ipsa*) and in Trial-II for her own wrongdoing (due to the damning evidence). By contrast, if T2 takes the deal, she would be liable for the lighter injury and may escape the stigma of a court record (if T2 admits, the parties will likely settle). Moreover, the lighter injury is more likely to be within the policy limit of T2's medical malpractice insurance, thereby reducing her personal (immediate monetary) cost to a fraction of the harm she caused. In both cases, however, the verdict will fail to serve its information function. In fact, it may help disseminate false information.

This, of course, does not mean that collective liability should never be applied. Collective liability may be the best option under the circumstances. The informational role of negligence and the detrimental effects discussed in Part III and IV above simply suggest that group liability

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<sup>170</sup> G. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 QTRLY J. ECON 488 (1970).

<sup>171</sup> See *infra* note 158–159 and accompanying text.

should be applied with caution and avoided if better alternatives exist. Part V below discusses such alternatives.

## V. RECONSIDERING COLLECTIVE LIABILITY

To date, the prior literature on collective liability focused on finding the culprit.<sup>172</sup> The recognition that collective sanctions can reduce care and activity levels and incentivize collusion calls into question its usefulness and should be alarming to those who seek justice and efficiency alike. This Part explores two alternatives to the *Ybarra*-style collective liability regime and illustrates their effect using real-life examples. In deviation from the prior literature, both alternatives *abandon* the quest for the true injurer altogether.

### 1. Collective Liability

#### a. Theory and Application

One possible alternative is not just to hold everyone liable, but also to ensure that the incentives to take care and monitor are not overly diluted. This can be done, for example, by requiring each member of the group to fully internalize the consequences of the injurer's actions.<sup>173</sup> Many collective

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<sup>172</sup> See *supra* Part III.C. Levmore, for example, explains how collective *res ipsa* can extract information that would identify the injurer. Levmore, *supra* note 14. Similarly, Grady posits that courts apply the doctrine in cases where compliance with the standard of care is especially difficult, because in such cases “the defendant was probably negligent.” Grady, *supra* note 12, at 922–25 (arguing that *Byrne* is a “strong *res ipsa* case” because it involved a dangerous activity—moving barrels above a public sidewalk—that necessitated a high compliance rate).

<sup>173</sup> See also Levmore, *supra* note 14, at 1563. Levmore’s “overextraction” rule would require each group member to pay more than the damage incurred by the victim. Despite the similarity, the solutions advanced in this section are different in nature. To begin with, Levmore lauds the ability of collective liability to force information out of witnesses. *Id.* His goal is to allow collective liability regimes to also persuade the *tortfeasor*, not just the witnesses, to confess. *Id.* By contrast, this Article doubts the ability of collective liability to extract useful information and shows that collective liability can result in suppression of information, lying and inefficient levels of monitoring. The Article’s goal is to mitigate these concerns by offering anti-dilution mechanisms. These differences between the solutions are not merely theoretical. Levmore’s article focuses on the *tortfeasor*, and accordingly, under his rule “it is imperative that the target group contain the actual wrongdoer.” *Id.* at 1576. Conversely, this Article bypasses the identification problem altogether. Moreover, Levmore’s rule faces hurdles that require it to “remain a thought experiment.” *Id.* at 1578. For example, the rule necessitates mechanisms that would allow the *tortfeasor* to confess anonymously, or otherwise avoid additional penalties (beyond payment). *Id.* at 1575. The solutions pressed here, although not free of concerns and shortcomings, do not focus on the *tortfeasor* and do not require such mechanisms.

liability regimes have taken this route. Consider, for example, the twin case discussed in the introduction. The court required each of the brothers to fully pay child support. With two fathers, the child received a windfall. She was awarded twice the child support a similarly situated children would have received. Yet, by doing so the court ensured that neither would escape liability and that the incentive for each to divulge information remained strong. The One Strike rule employs a similar solution. Each member of the household suffers the full breadth of the law, not just a fraction thereof. If one of them (or their guests) engages in drug activity, all are evicted.

Many historical and modern examples of collective liability regimes follow this pattern: they impose on each member of the group full responsibility for the culprit's actions. Consider, for example, the "nine familial exterminations" rule of the Qin and Tang dynasties in ancient China. The rule was a tactic to identify and eliminate political dissidents. Under the rule, when one was suspected of a crime, nine levels of relatives were punished. These included the suspects' parents, grandparents, children, grandchildren, siblings and siblings-in-law, uncles and aunts and their spouses, cousins, spouse, and the spouse's parents.<sup>174</sup>

Classrooms and the army are familiar forms of non-dilutable sanctions. The act of one subjects everyone to the same severe sanctions. A recent example is the punishment of one thousand Canadian military cadets in 2018. A few cadets wore jeans during off-campus hours in violation of the institution's rules. As a result, all one thousand cadets were confined to their rooms, had to endure inspections, and were required to parade in frigid weather without proper clothing.<sup>175</sup>

The solution—holding the innocents and the culprit liable without overly diluting their liability—comes with a number of shortcomings. One concern is a moral hazard. When the expected award to the victim exceeds her injury, the victim may be interested in being subject to accidents that would give rise to group liability.<sup>176</sup> The victim may even seek to collude

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<sup>174</sup> Meghan, *One Thousand Cuts...Terrifying Ancient Chinese Torture and Execution Methods*, CVLT NATION (Oct. 23, 2014), <https://cvltnation.com/one-thousand-cuts-terrifying-ancient-chinese-torture-and-execution-methods/> (reporting that in one case 873 individuals were killed because of the refusal of one to write a speech for the emperor).

<sup>175</sup> David Pugliese, *Updated – Battle over jeans at the Royal Military College results in 1,000 cadets being punished*, OTTAWA CITIZEN (Mar. 2, 2018) <https://ottawacitizen.com/news/national/defence-watch/battle-over-jeans-at-the-royal-military-college-results-in-1000-cadets-losing-privileges>.

<sup>176</sup> Consider an accident with an expected harm of \$100. If each of five defendants will be required to fully compensate the victim, the latter can expect a net gain of \$400—the total compensation, \$500 (5x100), minus the actual damages, \$100. There are ways to mitigate the moral hazard concern. For example, a court can direct any

with others to orchestrate such a tort. Another concern, likely a more serious one, is a reduction in activity levels. If an actor is unable to shield herself from liability by taking care—that is, when being faultless is not a defense (or impossible to prove)—she may try to avoid activities that may give rise to group liability.

These two insights help explain why the solution was applied in some cases but not others. In the twin case, requiring each brother to fully pay child support did not pose a substantial risk of moral hazard. It is unlikely that the verdict will incentivize a would-be-mother or the biological father to engage in a similar activity to gain more child support for their offspring.

The second concern—a reduction of activity levels—also explains why the solution may be suitable in the examples above but not in other cases. Lower activity levels may be less of a concern—in fact, they may be the very reason—for holding faultless actors liable. This is the case when the behavior at stake is considered undesirable. For example, in the twin case, holding the innocent brother liable may encourage him to avoid impersonating another. Similarly, in the context of the nine-familial-exterminations rule, class punishment and army sanctions, collective liability may incentivize actors to chill speech when the speech is considered by the rule-maker (i.e., the emperor, teacher or commander) to be undesirable.

#### b. Res Ipsa and Frankpledge

The compulsory system of law enforcement and policing in medieval England known as the frankpledge is another famous example that law and economic scholars rely on. Levmore, for example, explains that under the frankpledge “small groups of (at least ten) individuals forfeited their bonds or deposits when one of their number escaped arrest for a crime.”<sup>177</sup> He then immediately draws an analogy to *res ipsa*. The frankpledge, he notes, “is surprisingly similar to the famous case of *Ybarra v. Spangard*, where a patient was able to recover from a number of health professionals for an injury sustained during an operation.”<sup>178</sup> Levinson draws a similar analogy. He explains that “[v]iewed functionally, pre-modern collective sanction regimes like blood feud and frankpledge seem continuous with similar regimes in more developed societies.”<sup>179</sup> According to Levinson, modern

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compensation in excess of the victim’s damage—the \$400 in the above example—to a third party (e.g., a charity).

<sup>177</sup> Levmore, *supra* note 14.

<sup>178</sup> *Id.*

<sup>179</sup> Levinson, *supra* note 12, at 351.

analogs include *Ybarra* (i.e., collective *res ipsa*).<sup>180</sup> In such a case, he argues, collective liability has an “information forcing” feature.<sup>181</sup>

The analogy, however, is incomplete. The frankpledge, blood feuds, and military sanctions are very different than the liability imposed in *Ybarra*. To begin with, collective sanctions such as the One Strike Rule and the twin case can be viewed as a form of strict liability.<sup>182</sup> By definition, they impose liability on faultless members of the group. As explained above, a known side effect of holding innocent actors liable is a possible reduction in activity levels. The no-fault liability can be justified when the goal is to curb actions that are deemed undesirable or immoral. For example, in public housing, the “no-fault” eviction rule may incentivize tenants to socialize less if they are worried that their guests may bring drugs with them.<sup>183</sup> And in the twin case, holding the innocent brother liable would result in less social fraud and (what is in essence) rape. Similarly, in the frankpledge, a compulsory system, there was no concern that liability on the innocent members of the group would result in less individual enlisting for the tithing. By contrast, in the medical context, a reduction in activity levels is a source of much concern. For example, to shield themselves from liability for a harm they did not cause, physicians may decide to conduct fewer surgeries (even when a surgery is in the patient’s best interest) or elect to specialize in non-surgical medicine.

*Res ipsa* is also different in another important aspect from its purported analogs—the frankpledge and military sanctions. If taken as described, in these collective liability regimes, the act of one person imposes the same level of sanction on innocent parties. In the army context, if one cadet wore jeans, all run in the rain. In the said frankpledge system, each member of the tithing could lose her bond or deposit. In these cases, the expected sanction was not diluted as the number of actors in the group increased. By contrast, collective *res ipsa* is different. Since liability is often capped, as the number of actors increases, the individual expected liability of each actor may decrease. As Part III explains, the result could be inefficient levels of care and monitoring, and the suppression of information. *Res ipsa*,

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<sup>180</sup> *Id.* at 379 (arguing that *Ybarra* exemplifies the “information-forcing feature of collective sanctions [that] is familiar from the frankpledge system, which was designed to motivate neighbors to help enforce the law by snitching on one another”).

<sup>181</sup> *Id.*

<sup>182</sup> The Supreme Court in *Rucker* referred to the rule as a “no-fault” rule and one that imposes “[s]trict liability.” *Rucker*, 535 U.S. at 134.

<sup>183</sup> This was the court’s stated goal in *Rucker. Id.* (“With drugs leading to “murders, muggings, and other forms of violence against tenants,” and to the “deterioration of the physical environment that requires substantial government expenditures,” 42 U.S.C. § 11901(4) (1994 ed., Supp. V), it was reasonable for Congress to permit no-fault evictions in order to “provide public and other federally assisted low-income housing that is decent, safe, and free from illegal drugs,” § 11901(1) (1994 ed.).

in that sense, is more of an exception rather than the rule that law and economic scholars portray it to be.<sup>184</sup>

Analogizing *res ipsa* to the frankpledge system may in fact be correct, but for the opposite reason: to show collective liability's shortcomings. There is evidence that at least some forms of the frankpledge system were very different than that described by the legal scholars. Unlike its monolithic description in the literature on collective liability, the frankpledge system is subject to much confusion—not surprising given that the system originated in 1066, a millennium ago.<sup>185</sup> To begin with, notwithstanding its description in the legal literature, there is no one uniform frankpledge system.<sup>186</sup> Rather, the frankpledge system took different forms in different localities and morphed over time.<sup>187</sup> The number of people in the group also varied. In some cases, the number was as small as 10 (a tithing) or lower, whereas in others, it included 100 members and even an entire village—an important feature which the legal literature ignored.<sup>188</sup>

Importantly, according to leading accounts, dilution of liability was not only possible, but it may have also accounted for the decline of the frankpledge system. Some historians report that when the tithing failed to fulfill its mission, the fine was amerced on the tithing, implying that all members were responsible, that liability was *collective* and as such subject to dilution.<sup>189</sup> Other are more explicit. Morris, the leading frankpledge historian, reports that “if...the tithing failed to perform its duty, all were still amerced in *common*.”<sup>190</sup> The fact that the fine was imposed on all

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<sup>184</sup> This may be due to the fact that *res ipsa* was designed to impose individual liability before it morphed, perhaps immaturely, into a collective liability regime.

<sup>185</sup> Bruce R. O'Brien, *For Mordor to Mordrum: The Preconquest Origin and Norman Revival of the Murder Fine*, 71 *SPECULUM* 321, 337 (1996).

<sup>186</sup> D.A. Crowleye, *The Later History of Frankpledge*, 48 *BULLETIN OF THE INSTITUTE OF HISTORICAL RESEARCH* 1, 2 (1975) (exploring regional differences).

<sup>187</sup> *Id.*

<sup>188</sup> O'Brien, *supra* note 185, at 322, 327 (1996); Crowleye, *supra* note 186 (describing the evolution of different tithings).

<sup>189</sup> *See. e.g.*, O'Brien, *supra* note 185, 322 (reporting that “when a Frenchman was found slain, the districts surrounding the site would be amerced for a substantial fine unless the English identified or turned the slayer”). William Alfred Morris, *THE FRANKPLEDGE SYSTEM* 96 (1910) (explaining that the fine was “exacted... from the tithing”), 96 (1910) (explaining that the fine was “exacted...from the tithing”), *id.* at 99 (the “tithing... paid the fine”).

<sup>190</sup> *Id.* at 108 (emphasis added), 128; Stephen C. Yeazel, *FROM MEDIEVAL GROUP LITIGATION TO THE MODERN CLASS ACTION* 44 (1987) (“The penalty for [the tithing’s] failure in either of [its] tasks was a fine—again, imposed on the *collectivity* of the frankpledge”) (emphasis added); Stephanie Juliano, *Superheroes, Bandits, and Cyber-nerds: Exploring the History and Contemporary Development of the Vigilante*, 7 *J. OF INTER. COMM. L & TECH.* 44, 50 (2012) (reporting that if one member was fined “the rest of the group could be held accountable”).

collectively—and as such subject to dilution—is also evident from the makeup of the tithings. The group included poor men who “were in danger of ejection from their communities” and could barely pay “the very small payment made on admission to a tithing”, thereby making it unlikely that any one of them could alone pay the fine.<sup>191</sup>

It is thus not a surprise that such forms of frankpledge resulted in collusion to suppress information—as Part III above predicts. For example, Summerson reports cases where the frankpledge led vills to “close ranks against officials” and “unite to conceal a felony or protect a fellow.”<sup>192</sup> Morris focuses on another concern highlighted in Part III—a decreased incentive to monitor. He explains that as the number of the group members,  $n$ , increased, and the fine,  $D$ , remained constant, the individual incentive of each member to monitor dissipated:

To bring home to each locality a realizing sense of its responsibility, therefore, [in 1285] Edward I enacted a new law, making people of each hundred and franchise responsible for robberies and damages arising through their failure to produce the offenders. The half mark usually paid by the tithing for the escape of an offending member in the time of Henry II [i.e., 1100s)—so heavy a burden that in some instances the sheriff seems to have been compelled to defer its collection for a year or even longer—had now come to represent a far slighter value, the payment of which was *inadequate to spur community to capture a fugitive neighbor with whom it was often in sympathy.*”<sup>193</sup>

Note that as the number of members in the tithing,  $n$ , increased by a factor of 10 (from 10 to 100), the expected liability was reduced by the same factor ( $D/10n < D/n$ ).<sup>194</sup>

These accounts show that the frankpledge system (or at least, some forms of it), was far from the ideal liability regime portrayed by the prior literature. It was ineffective and incentivized group members to lie and collude with others to lie.<sup>195</sup> To sum, to the extent the frankpledge can be

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<sup>191</sup> H.R.T. Summerson, *The Structure of Law Enforcement in Thirteenth Century England*, 23 AMER. J. OF L. HISTORY 313, 316 (1979); Crowleye, *supra* note 186, at 1 (“The clergy and wealthy free tenants were [] exempted” from the tithing); MORRIS, *supra* note 189, at 70–75.

<sup>192</sup> Summerson, *supra* note 191, at 317. Yeazel, *supra* note 190, at 49–50.

<sup>193</sup> MORRIS, *supra* note 189, at 152–53 (emphasis added).

<sup>194</sup> The individual liability,  $D/10n$ , decreased even further to  $D/20n$  as “[t]he actual sum collected...in the reign of Edward I, as well as in the reigns of his son and grandson, was often... just half of the original amount”. *Id.* at 153.

<sup>195</sup> It was clear already in the late 1200s that the frankpledge failed to fulfill its primary objects. *Id.* at 151–52.

analogized to *res ipsa*, it highlights many of the shortcomings and concerns that can plague collective liability regimes.

## 2. Imposing Liability on One (Non-Random) Innocent Party

Another solution that abandons the quest for identifying the culprit is to hold only one innocent party liable for the culprit's behavior. To the extent possible, the *single* faultless liable party should be the one in the best position to *ex ante* avoid the harm and *ex post* identify the injurers. To ensure adequate *ex ante* incentives, the actor should also be solvent enough to pay the expected judgment. Although imposing liability on one clearly innocent party may initially sound patently unfair, such a regime can be justified on economic and fairness grounds.

Consider for example the anti-graffiti ordinance proposed in 2009 by residents and local businesses of Orange County, California. The proposal came after annual graffiti abatement costs reached \$2.4 million. The ordinance proposes to hold faultless parents responsible for their minor children's actions. This includes responsibility "for paying the fine, for paying restitution and for scrubbing out the graffiti [and] accompany[ing] their children for at least some of the community service."<sup>196</sup> The underlying assumption—whether factually correct or not—is that the parents are in the best position to control their kids.<sup>197</sup>

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<sup>196</sup> Doug Irving, *Santa Ana residents want to punish parents for graffiti*, ORANGE CTY. REGISTER (June 8, 2009, 3:00 AM), <https://www.oregister.com/2009/06/08/santa-ana-residents-want-to-punish-parents-for-graffiti/>; Santa Ana Code of Ordinances § 10-224.1 (2019), [https://library.municode.com/ca/santa\\_ana/codes/code\\_of\\_ordinances?nodeId=14452](https://library.municode.com/ca/santa_ana/codes/code_of_ordinances?nodeId=14452) (imposing collective liability on the parents and their "minor for payment of all fines"); Santa Ana Code of Ordinances § 10-229(a) (2019), [https://library.municode.com/ca/santa\\_ana/codes/code\\_of\\_ordinances?nodeId=PTIITHCO\\_CH10CRMILAENPR\\_ARTIVGRRE\\_S10-222SAPO](https://library.municode.com/ca/santa_ana/codes/code_of_ordinances?nodeId=PTIITHCO_CH10CRMILAENPR_ARTIVGRRE_S10-222SAPO) (imposing collective liability for abatement expenses on a minor engaged in graffiti violations and on "parent(s) or legal guardian(s) having custody and control of the minor"); Santa Ana Code of Ordinances § 10-229(d) (2019), [https://library.municode.com/ca/santa\\_ana/codes/code\\_of\\_ordinances?nodeId=PTIITHCO\\_CH10CRMILAENPR\\_ARTIVGRRE\\_S10-222SAPO](https://library.municode.com/ca/santa_ana/codes/code_of_ordinances?nodeId=PTIITHCO_CH10CRMILAENPR_ARTIVGRRE_S10-222SAPO) (extending parents' liability to "all costs to the city or any person or business incurred in connection with the removal of graffiti caused by conduct of said minor, and for all attorney's fees, court costs, and civil penalties incurred in connection with the civil prosecution of any claim for damages or reimbursement up to twenty-five thousand dollars").

<sup>197</sup> By contrast, under the common law, parents are not vicariously liable for the kids. See KEETON ET AL, *supra* note 88, at 913 § 123. When only one tenant is the formal lessee, as was the case with Ms. Rucker, the One Strike rule can be viewed, at least on its face, as a modern version of the one-innocent-party-pays-all solution. However, because the sanction—an eviction—works equally against all members of



Another example is the frankpledge system. Recall that because the fine was collectively imposed on a group of actors, the individual liability of each was diluted and so was the incentive of each to monitor. The dilution concern was mitigated to some extent by nominating one (and in some cases two) members as chief pledge. Chief pledges were men who “had security of at least a modest holding of land and a permanent place in the village community”.<sup>198</sup> Part of their role was to collect from members of the tithing the amounts amerced on the group. Because most members were poor and there was no right of contribution, the chief pledge had more at stake. Chief pledges “occupied the unenviable position of being responsible... for the behavior of the groups they represented without being able to invoke the aid of those courts to call the members to task”.<sup>199</sup> It is thus not a surprise that some concluded that “collective liability was in fact thinly disguised individualism.”<sup>200</sup> In other words, the chief pledge’s incentive to see that the group succeeds in its tasks was stronger than others’. Being at high risk of solely paying the amount owned by the tithing, the chief pledge had a strong motivation, and the authority, to select reliable members, replace incompetent ones, and take other actions that would mitigate their liability.<sup>201</sup>

Medical cases like *Ybarra* and *Anderson* are also good candidates for such an alternative regime. In these cases, both practice and theory teach us that attempts to find the injurer by imposing liability on many are futile. By contrast, holding the hospital—the one party who clearly did not injure the victim—vicariously liable for the injurer’s actions may mitigate many of the concerns highlighted above. Importantly, the harm should be imposed only on one party (e.g., the hospital or the chief surgeon).

To begin with, such a regime will eliminate the ills of dilution of liability. Being the sole liable party, the hospital will have a strong incentive

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the household, the rule incentivizes each member to monitor against drug activities. As such it seems to fall under the first solution—group liability.

<sup>198</sup> Crowleye, *supra* note 186, at 3; MORRIS, *supra* note 189, at 104.

<sup>199</sup> Yeazel, *supra* note 190, at 86; *id.* at 89 (“when the chief pledge returned from the view with the inevitable news that the tithing had been amerced... liability simply lay where it fell, with the representative of the group bearing individual responsibility for collective obligations”); Crowleye, *supra* note 186, at 3–4; MORRIS, *supra* note 189, at 103.

<sup>200</sup> Yeazel, *supra* note 190, at 89 (citing Frederic W. Maitland, *Township and Borough* 78 (Cambridge, U.K. 1898)).

<sup>201</sup> Crowleye, *supra* note 186, at 3; MORRIS, *supra* note 189, at 108–9 (discussing the chief pledge’s ability to “keep the best possible men in the position” and have “troublesome person transferred” and his collection duties). The chief pledge position was so unpopular that some tried to escape it, even by paying a large bribe. *Id.* at 110; Yeazel, *supra* note 190, at 89; Crowleye, *supra* note 186, at 10 (reporting that in the “thirteen-fifties surety obligations were removed from the chief pledges” so that they were only “held responsible for tithingmen failing to attend the view, but even that degree of corporate responsibility... was abandoned by 1357”).

to ex ante invest in care, select the best procedure and machinery, hire and contract with the appropriate healthcare providers, and ensure that they are adequately trained. Second, the hospital is also in the best position to monitor and reduce doctors' compliance errors—the main rationale underlying *res ipsa* according to Professor Grady.<sup>202</sup> The hospital can do so by requiring healthcare providers to use techniques or supply machinery that would reduce the risk of avoidable harm, by instituting procedures that would reduce the rate of compliance errors and installing monitoring devices.

Third, the hospital—the only (vicariously) liable party—will also have the incentive and likely the means to identify the true injurer. It is true that finding the culprit will not exculpate the hospital (liability would be absolute). However, identifying the injurer will allow the hospital to reduce future exposure. This is especially so given the repeat nature of the activity at hand: doctors and nurses engaging in multiple surgeries. The hospital is also uniquely positioned to produce identifying evidence that would help it track and punish the culprit. It can do so by using recording technology and by creating logs of proper chains of custody over instruments and unconscious patients. Moreover, as the sole liable party overseeing multiple surgeries, the hospital will also have the incentive to accumulate and review injury data in order to identify surgeons who fail (or likely failed) to meet the standard of care, even if they did not cause a serious injury or were not sued by patients.<sup>203</sup>

Holding the hospital liable comes with other benefits. Hospital insurers will likely act as a second monitoring agent and put pressure on the hospital to properly monitor its healthcare providers. The fact that the hospital, patients, and insurance companies are all bound by a contractual framework will likely result in better and more transparent risk spreading and help set the price of medical services at the right level. It may even lead to better competition between hospitals (where such competition is possible).<sup>204</sup>

Finally, it should be noted what the solution is not. Under this proposed alternative, the innocent party *cannot* be chosen randomly. The reason is that a random selection would also have a dilutive effect. With a

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<sup>202</sup> Grady, *supra* note 12, at 913.

<sup>203</sup> Reputation and competition—two related market mechanisms—may provide a similar incentive, but because of healthcare market structure and local monopolies enjoyed by certain hospitals, they may not be effective enough.

<sup>204</sup> One could argue that like collective liability, holding one innocent party liable—a form of absolute liability—creates a veil of ignorance that mutes important signals to consumers and producers alike. However, unlike collective liability, which may incentivize parties to suppress information and lie, the imposition of liability on one innocent party who is better able to take care, monitor, and incentivize others to do the same, should mitigate the concern. Furthermore, the reputational damage may not fall on the actual injurer, but it will fall on the hospital thereby providing a clear market signal to third parties.

group of  $n$  actors, a random selection means that each group member faces a  $1/n$  chance to be elected and thus an expected liability of  $D/n$ . Rather, a rule that imposes liability on one innocent actor should specify who will be subject to liability.

## VI. CONCLUSION

Collective liability—defined as the imposition of liability on a group that may include innocent actors—is commonplace. From ancient to modern times, legislators, regulators, courts, and market actors were and still are willing to impose such liability when they believe that the culprit is in the group.

Although collective liability regimes are ubiquitous, they remain under-theorized and under-studied. The few articles that have investigated the effects of communal liability regimes justify their application on two grounds: deterrence and information sharing. This Article questions these rationales and shows that, in some cases, collective liability regimes may lead to the opposite results and perverse outcomes. The Article reveals that imposing liability on many may lead to under-deterrence. Group liability can even incentivize actors to aggravate injuries, inflate the group size, and engage in new forms of offensive and defensive practices.

The Article also shows that cross-monitoring can be impossible or inefficient. Even when cross-monitoring is justified, tort law raises hurdles that make cross-monitoring infeasible. The information extraction rationale is also limited. Using a simple model, the Article shows that, contrary to conventional wisdom, communal liability may incentivize parties to suppress evidence and provide false information, either unilaterally or in cahoots with others. These findings call into question the usefulness of collective liability regimes and should concern those who seek justice and efficiency alike.

The Article continues to challenge the prior literature by also showing that not all collective liability regimes are born equal. Some (like *res ipsa*) raise more concerns than others. The Article ends with a call for much caution in applying collective liability regimes. It recommends the re-institution of anti-dilution measures that were removed by many tort reforms, and it offers two alternatives that could remedy the ills that plague many collective liability regimes without falling into the identification trap.