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Reopening the Discussion of the Loss of Opportunity Doctrine in New Hampshire: A Look at Decisions Made in Light of Current Times

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INTRODUCTION

A close family member is diagnosed with late-stage breast cancer and now only has a fifteen percent chance of survival. She soon dies. Prior to her diagnosis, she had routine screenings every two years, but her previous doctor failed to detect the then existing cancer when she would have had a fifty percent chance of survival. In New Hampshire, from a legal standpoint, there has been no wrong.[1]

This legal concept of negligent medical care that causes a patient to have a lower percentage of survival, or a less favorable outcome, is referred to as the "loss of opportunity" or "loss of chance doctrine."[2] Generally, acceptance of the loss of opportunity doctrine has been limited to medical malpractice cases.[3] Some courts and scholars have considered extending the loss of opportunity doctrine to other contexts, such as to legal malpractice,[4] or to those who fail to contact emergency help,[5] but with little success.

In restricting loss of chance exclusively to medical malpractice in Massachusetts, the state supreme court identified four reasons why the loss of chance doctrine is "particularly well suited" for medical malpractice cases: (1) the high reliability of expert evidence; (2) the expectation that the doctor will "take every

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[1] *See* N.H. REV. STAT. ANN. § 507-E:2(III) (2010) (stating a defendant cannot recover in a medical malpractice case for the loss of opportunity deprived by a doctor).

[2] *See* RESTATEMENT (THIRD) OF TORTS § 26 (2010). While N.H. courts use the phrase, "loss of opportunity doctrine," most other courts and literature use the phrase, "loss of chance doctrine." *See, e.g.*, Matsuyama v. Birnbaum, 890 N.E.2d 819, 823 (Mass. 2008). *See generally* Lord v. Lovett, 770 A.2d 1103 (N.H. 2001). Therefore, in writing this note, I use the phrase, "loss of opportunity doctrine," unless specifically referring to law from other states or literature.

[3] *Lord*, 770 A.2d at 1104–05 ("The loss of opportunity doctrine, in its many forms, is a medical malpractice form of recovery. . . ."); *see, e.g.*, *Matsuyama*, 890 N.E.2d at 834–35 (explicitly limiting the loss of chance doctrine to medical malpractice cases).

[4] George S. Mahaffey Jr., *Cause-In-Fact and the Plaintiff's Burden of Proof with Regard to Causation and Damages in Transactional Legal Malpractice Matters: The Necessity of Demonstrating the Better Deal*, 37 SUFFOLK U. L. REV. 393, 425 (2004).

[5] Blinzler v. Marriott Int'l, Inc., 81 F.3d 1148, 1152 (1st Cir. 1996).

reasonable measure" to ensure a favorable outcome; (3) the nature of a patient seeking medical care (i.e., patients have pre-existing conditions) can make proving the causation element impossible; and (4) the doctor is in a better position to prevent the harm of his or her own negligence.[6] For these reasons, the court joined other courts throughout the country in limiting the loss of chance doctrine to medical malpractice cases.[7]

The focus of this note is to suggest that New Hampshire take a second look at the loss of opportunity doctrine. While some drawbacks to adopting the doctrine exist, the advantages outweigh the disadvantages. In coming to this conclusion, among other things, this note considers the reasons offered by the N.H. Legislature in abrogating the N.H. Supreme Court's decision to adopt the loss of opportunity doctrine. However, contrary to what the legislature suggested, the doctrine does not appear to increase litigation or insurance premium rates. Therefore, this note implores the N.H. Legislature to re-evaluate its decision.

I. THE ORIGINS OF THE DOCTRINE

Before discussing the merits of the doctrine, it is important to learn the context in which the doctrine was created. A look at the early authority and literature suggest that the loss of opportunity doctrine was created uniquely for medical malpractice. It is only in this context that I suggest that the loss of opportunity be adopted in N.H.

A. Case Law

The seminal case for the loss of opportunity doctrine is *Hicks v. United States*.[8] In that case, the decedent complained to the doctor of intense stomach pains and vomiting.[9] Both parties agreed that the doctor deviated from the accepted procedure of performing a

[6] *Matsuyama*, 890 N.E.2d at 834–35.
[7] *Id.* at 834.
[8] 368 F.2d 626 (4th Cir. 1966).
[9] *Id.* at 628.

rectal examination and inquiring into the existence of diarrhea.[10] Had the doctor followed the accepted procedure for the complaints, the doctor could have identified the problem as an intestinal obstruction, not gastroenteritis, and provided medical care accordingly.[11] The Fourth Circuit found the doctor liable for the decedent's death, despite a pre-existing, life-threatening condition, concluding that: "[i]f there was any substantial possibility of survival and the defendant has destroyed it, he is answerable."[12]

In its reasoning, the *Hicks* court analogized the legal principal above to a case involving the duty to rescue in which a ship captain failed to attempt a rescue mission in search of a missing seaman.[13] Just as the court found the captain liable for the seaman's death by destroying his opportunity for survival, the *Hicks* court similarly found the doctor liable for destroying the patient's opportunity for survival.[14]

While the *Hicks* court is often credited as the seminal case for the loss of chance doctrine, *Kallenberg v. Beth Israel Hospital*[15] is often recognized as the first case to expressly allow recovery under the doctrine.[16] In *Kallenberg*, the doctor prescribed a specific medication to reduce the patient's blood pressure in preparation for surgery.[17] For an unknown reason, the doctor failed to administer the correct medication, and the patient later hemorrhaged three times before dying.[18] In the wrongful death action arising from medical negligence, the plaintiff recovered for the loss of chance of a more favorable outcome (i.e., a reduction by twenty to forty percent in the plaintiff's chance of survival).[19]

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[10] *Id.* at 630.
[11] *Id.*
[12] *Id.* at 632.
[13] *Id.* at 632–33 (citing Gardner v. Nat'l Bulk Carriers, Inc., 310 F.2d 284 (4th Cir. 1962)).
[14] *See id.* at 633 (comparing the ability to prove causation through an inaction causing the loss of opportunity of survival).
[15] 357 N.Y.S.2d 508 (App. Div. 1974).
[16] Margaret T. Mangan, *The Loss of Chance Doctrine: A Small Price to Pay for Human Life*, 42 S.D. L. REV. 279, 287–288 (1997).
[17] 357 N.Y.S.2d at 509.
[18] *Id.*
[19] *Id.* at 510–11.

B. Literature

Despite the existence of the loss of opportunity concept, many credit the widespread popularity of the doctrine to Professor Joseph King's 1981 law journal article: *Causation, Valuation, and Chance in Personal Injury Torts Involving Pre-Existing Conditions and Future Consequences*.[20] In the article, King argued that the loss of chance of "achieving a favorable outcome or avoiding an adverse consequence" should be a cognizable claim and that courts should not accept the limited "all-or-nothing" approach in which recovery is restricted to whether the defendant caused or did not cause the loss.[21] King pointed out that under the traditional approach, a plaintiff is always denied redress when the chance of recovery from the pre-existing condition is fifty percent or less (i.e., below the typical standard of proof for causation).[22] Therefore, he argued, not allowing recovery for loss of chance in said cases contravenes the fundamental tort law goal of deterrence—it does not allow recovery for negligent behavior causing "statistically demonstrable losses."[23] However, King qualified that the loss of chance of recovery should not be a cognizable claim unless the plaintiff actually suffers a harm (e.g., death).[24] If the plaintiff suffers a harm, the defendant should be liable up to the amount proportional to the lost opportunity.[25]

In King's second article, published more than fifteen years later, King recognized the manner in which the courts had interpreted the doctrine, and he offered suggestions for improving the doctrine.[26] In the article, King enumerated four elements he believed were necessary before the loss of chance doctrine should be implicated.[27] These elements were:

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[20] 90 YALE L.J. 1353 (1981).
[21] *Id.* at 1354–63.
[22] *Id.* at 1372, 1376.
[23] *Id.* at 1377.
[24] *See id.* at 1362.
[25] *Id.* at 1356.
[26] Joseph H. King, Jr., *"Reduction of Likelihood" Reformulation and Other Retrofitting of the Loss-of-a-Chance Doctrine*, 28 U. MEM. L. REV. 491, 560 (1998) (stating some of the areas of improvement include suggested limits to the scope of the doctrine).
[27] *Id.* at 495.

> (1) the defendant tortiously failed to satisfy a duty owed to the victim to protect or preserve the victim's prospects for some more favorable outcome; (2) either (a) the duty owed to the victim was based on a special relationship, undertaking, or other basis sufficient to support a preexisting duty to protect the victim's likelihood of a more favorable outcome, or (b) the only question was how to reflect the presence of a preexisting condition in calculating the damages for a materialized injury that the defendant is proven to have probably actively, tortiously caused; (3) the defendant's tortious conduct reduced the likelihood that the victim would have otherwise achieved a more favorable outcome; and (4) the defendant's tortious conduct was the reason it was not feasible to determine precisely whether or not the more favorable outcome would have materialized but for the tortious conduct.[28]

Both of King's articles are almost always cited by scholars[29] and courts[30] when the loss of opportunity doctrine is at issue. The limitations on extending the doctrine discussed in said articles—and the limitations implied through *stare decisis* in restricting the doctrine to medical malpractice—are important restraints on the doctrine and should be considered by any state in deciding how to apply the doctrine.

II. PRESENT DAY TREATMENT AMONG THE STATES

Although a state should not adopt a doctrine simply because other states have adopted it, the N.H. Legislature should at least

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[28] *Id.*

[29] *See, e.g.*, Tory A. Weigand, *Lost Chances, Felt Necessities, and the Tale of Two Cities*, 43 Suffolk U. L. Rev. 327, 350–51, 350 n.149 (2010) (citing both articles to provide a general overview of the loss of chance doctrine).

[30] *See, e.g.*, *Lord*, 770 A.2d at 1105–06 (citing both articles to provide a general overview of the various approaches to loss of chance claims).

consider the significant support for the doctrine in the Northeast. The following is a list of all the Northeastern States from the U.S. Census Bureau: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, and New Jersey.[31] For the purposes of this article, Delaware will also be included in this list since several other sources consider Delaware to be in the Northeast and because of its relative similarity in size and population to New Hampshire.[32] I will focus on these states for the remainder of this article.

A. Adoption v. Non-Adoption

Today, states are relatively evenly split on whether to hold doctors liable in situations where the doctor has deprived the patient of an opportunity for a better outcome.[33] However, the northeastern states appear to favor the doctrine—the regional states that have adopted the doctrine include Massachusetts,[34] New Jersey,[35] Delaware,[36] New York,[37] and Pennsylvania.[38] Connecticut claimed to adopt the doctrine but retained the traditional requirement of at least a fifty-one percent chance of survival prior to the alleged

[31] *Census Regions and Divisions of the United States*, U.S. CENSUS BUREAU, https://www.census.gov/geo/maps-data/maps/pdfs/reference/us_regdiv.pdf (last visited Sept. 19, 2014).
[32] *See, e.g.*, *Regions of the United States*, LIBRARY OF CONGRESS, http://memory.loc.gov/ammem/gmdhtml/rrhtml/regdef.html (last visited Sept. 19, 2014).
[33] *See Lord*, 770 A.2d at 1105; Alice Férot, *The Theory of Loss of Chance: Between Reticence and Acceptance*, 8 FLA. INT'L U. L. REV. 591, 610–11 (2013) (generating a list of states, that includes twenty-one states in favor and twenty states plus D.C. against adoption of the doctrine); *Matsuyama*, 890 N.E.2d at 828 (characterizing the states that have adopted the doctrine as "a substantial and growing majority"); Weigand, *supra* note 29, at 389–90 (criticizing the Matsuyama court for its misleading characterization of the strength of the majority).
[34] *Matsuyama*, 890 N.E.2d at 828–29.
[35] Evers v. Dollinger, 471 A.2d 405, 415 (N.J. 1984).
[36] United States v. Anderson, 669 A.2d 73, 79 (Del. 1995).
[37] *Kallenberg*, 357 N.Y.S.2d at 510–11.
[38] Hamil v. Bashline, 392 A.2d 1280, 1288 (Pa. 1978).

negligence. [39] The only regional state, notwithstanding New Hampshire, that has expressly refused to adopt the doctrine is Vermont.[40] Rhode Island[41] and Maine[42] have neither adopted nor expressly refused to adopt the doctrine.

While the Supreme Court of Vermont refused to adopt the doctrine, it acknowledged that some reasons to adopt it were "appealing."[43] However, the court was concerned with departing from its "strict" pre-established law, expanding litigation to new plaintiffs, and impacting other areas of Vermont life and law.[44] In support of refusing to adopt the doctrine, Vermont cited an Alaskan case in which the District Court found the loss of chance doctrine "particularly ill-suited in small, rural states" where the best medical care is not available "at anything approaching a reasonable cost."[45] New Hampshire's treatment of the doctrine is discussed in section 'V' below.

B. The Three Approaches to Loss of Opportunity Claims

While the Northeastern states treat loss of opportunity claims similarly, there has been more variation among the rest of the country and courts have adopted one of three basic approaches: the

[39] Boone v. William W. Backus Hosp., 864 A.2d 1, 18 (Conn. 2005) ("In order for the plaintiff to prevail on his claim that the defendant's negligent acts decreased the decedent's chance for successful treatment, the plaintiff must show (1) that the decedent had in fact been deprived of a chance for successful treatment and (2) that the decreased chance for successful treatment *more likely than not* resulted from the defendant's negligence. Thus, in order to satisfy the elements of a lost chance claim, the plaintiff must first prove that *prior to* the defendant's alleged negligence, the decedent had a chance of survival of at least 51 percent.") (emphasis in original) (brackets, internal quotation marks, and citations omitted); LaBieniec v. Baker, 526 A.2d 1341, 1345 (Conn. 1987).
[40] Smith v. Parrott, 833 A.2d 843, 848–49 (Vt. 2003).
[41] Malinou v. Miriam Hosp., 24 A.3d 497, 512 (R.I. 2011).
[42] Phillips v. E. Maine Med. Ctr., 565 A.2d 306, 308 (Me. 1989).
[43] *Smith*, 833 A.2d at 848.
[44] *Id.* (discussing concern for the adoption of the doctrine because of the impact on the cost and practice of medicine and the concern for the doctrine's expansion to other areas of law outside medicine in Vermont like law, architecture, and accounting).
[45] *Id.* (quoting Crosby v. U.S., 48 F. Supp.2d 924, 932 (D. Alaska 1999)).

traditional approach, the relaxed standard approach, and the loss of chance doctrine approach.[46]

1. Traditional Approach

The traditional approach is still used by many courts and focuses exclusively on causation.[47] This is the approach that the N.H. Legislature imposed on the state.[48] This approach rejects the loss of opportunity doctrine altogether and is referred to as the "all-or-nothing rule."[49] Under this approach, the plaintiff must prove that the defendant's negligence destroyed the plaintiff's opportunity for a more favorable outcome by fifty-one percent or more.[50] If the plaintiff satisfies this burden, the plaintiff recovers for the entirety of the damages, regardless of the existence of any pre-existing condition.[51] However, if the plaintiff cannot show causation by a preponderance of the evidence, the plaintiff recovers nothing.[52] Therefore, a pre-existing condition that renders a patient with a fifty percent or less opportunity for survival prior to the negligent act will receive no recovery, regardless of the facts of the case and how egregious the medical negligence.[53] That is because, "[b]y definition, it is more probable than not that the pre-existing condition rather than the delayed diagnosis caused the injury."[54]

The all-or-nothing approach has the potential to significantly overcompensate or significantly undercompensate the plaintiff.[55] The defendant overcompensates the plaintiff when the plaintiff

[46] King, *supra* note 26, at 505–509.
[47] *Id.* at 499, 505.
[48] *See* N.H. REV. STAT. ANN. § 507-E:2(III) (2010).
[49] *See, e.g.*, King, *supra* note 26, at 506 (referring to the approach as "the all-or-nothing rule").
[50] *Lord*, 770 A.2d at 1105.
[51] *Id.*
[52] *Id.*; King, *supra* note 26, at 506.
[53] *Lord*, 770 A.2d at 1105.
[54] Weigand, *supra* note 29, at 350.
[55] Mangan, *supra* note 16, at 302 ("It has also been argued that the all-or-nothing approach may either benefit or adversely affect either the plaintiff or the defendant depending upon the circumstances.").

succeeds on his or her claim because the plaintiff recovers all damages, regardless of any pre-existing injury.[56]

However, the defendant undercompensates the plaintiff when the chance of survival is less than fifty-one percent prior to the doctor's negligence because the plaintiff then recovers zero damages, no matter "how flagrant the negligence."[57] This leaves those plaintiffs who are "often least able to exercise independent judgment…at the mercy" of medical professionals who have zero liability, when those plaintiffs are "the most in need of protection against medical malpractice."[58]

The fact that a plaintiff recovers in full if the expert evidence demonstrates by a preponderance of the evidence that the plaintiff had a fifty-one percent chance of survival prior to the negligence, but recovers nothing if it determines the plaintiff had just a one percent less chance of survival, is worrisome.[59] That is because "for every expert witness who evaluates the lost chance at 49%, there is another that estimates it at closer to 51%."[60] This distinction is arbitrary and contrary to the fundamental goals of tort law, as the outcome of the case hinges merely on the "search for a willing witness" to testify to the precise needed percentage.[61]

However, this approach is used in many states perhaps due to a reticence to create new law, the perceived notion that it comports closely with traditional tort law, and the relative ease with which

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[56] *See Lord*, 770 A.2d at 1105.
[57] *See Matsuyama*, 890 N.E.2d at 829–30.
[58] Férot, *supra* note 33, at 619–20 (citing Roberson v. Counselman, 686 P.2d 149, 160 (Kan. 1984)).
[59] *See Lord*, 770 A.2d at 1105; *Matsuyama*, 890 N.E.2d at 830 (describing the loss of chance doctrine as more fairly allocating costs and risks of injuries and more fairly compensating the patient than the traditional method and therefore comporting more closely to "the fundamental aims of tort law").
[60] Férot, *supra* note 33, at 619 (quoting Thompson v. Sun City Cmty. Hosp., 688 P.2d 605, 607 (Ariz. 1984)).
[61] *See Matsuyama*, 890 N.E.2d at 830 (stating that many courts and commenters have noted that the all-or-nothing rule does not advance the fundamental aims of tort law, including failure to: "fairly allocate[] the costs and risks of human injuries[,] . . . deter medical negligence[,] . . . provide the proper incentives[,] . . . [and] fairly compensate[] for the[] loss); Renzi v. Paredes, 890 N.E.2d 806, 812 (Mass. 2008) (stating the rule has become "inappropriate in light of the contemporary realities of medical malpractice"); Férot, *supra* note 34, at 619.

courts can apply the approach.[62] It is important that the N.H. Legislature, in choosing this approach, recognizes the existence of these issues.

2. Relaxed Standard Approach

The relaxed standard approach is the least popular of the three approaches and again focuses on causation.[63] This approach has not been considered in N.H. Under this approach, a plaintiff needs to show that the defendant "negligently increased the risk of harm or destroyed a substantial possibility of achieving a more favorable outcome."[64] The amount of increased chance of harm varies by jurisdiction—some require a "substantial" increase while others require an increase to any degree.[65] Under the traditional conception of the relaxed standard approach, the trier of fact then determines if the plaintiff has shown by a fifty-one percent or more likelihood that the defendant's negligence caused the plaintiff's ultimate injury claimed.[66] However, some jurisdictions adopting this approach have allowed juries to award damages without the plaintiff proving causation by a preponderance of the evidence.[67]
Regardless, recovery in all jurisdictions under the relaxed standard approach, like the traditional approach, only provides full recovery or no recovery at all.[68] King describes this approach as "the worst of both worlds" because, like the traditional approach, it is subject to the arbitrary all-or-nothing rule, but the approach further diverges from just compensation by allowing the plaintiff the opportunity to bypass a judge and convince a jury to award full compensation, despite the existence of a pre-existing injury.[69] Courts adopting this

[62] *See* King, *supra* note 26, at 506.
[63] *See id.* at 506–07 ("A few courts have adopted relaxed proof variations of the traditional rule, while usually retaining its basic all-or-nothing features.").
[64] *Id.* at 507.
[65] *Lord*, 770 A.2d at 1105.
[66] King, *supra* note 26, at 507–08.
[67] *Id.* at 507 n.55.
[68] *See id.* at 508 (stating the relaxed approach is subject to the all-or-nothing rule).
[69] *Id.*

approach often cite to the Restatement (Second) of Torts for authority.[70]

3. Loss of Opportunity Doctrine Approach

Many courts have adopted the loss of opportunity doctrine for medical malpractice cases.[71] It is under this approach that the N.H. Supreme Court adopted the doctrine in 2001.[72] Here, the injury is not the ultimate injury suffered (e.g., death), as is the case with the above approaches.[73] Rather, under the loss of opportunity doctrine, the injury is the loss of opportunity for a more favorable outcome deprived by the defendant.[74] Under this approach, the plaintiff may recover if he or she can show that the defendant's negligence caused the loss of opportunity by a preponderance of the evidence.[75] However, some courts limit recovery only to when the defendant has deprived the plaintiff of an opportunity to a "substantial" degree.[76]

Because the injury is the loss of opportunity, the plaintiff's recovery is limited only to the "damages actually attributable to the defendant's negligence."[77] For example, if a defendant deprives a plaintiff of a thirty percent chance of survival by misdiagnosing the plaintiff, the plaintiff's estate could recover up to thirty percent of

[70] Tory A. Weigand, *Loss of Chance in Medical Malpractice: The Need for Caution*, 87 MASS. L. REV. 3, 8 (2002); *see* RESTATEMENT (SECOND) OF TORTS § 323 (1965) ("One who undertakes, gratuitously or for consideration, to render services to another which he should recognize as necessary for the protection of the other's person or things, is subject to liability to the other for physical harm resulting from his failure to exercise reasonable care to perform his undertaking, if (a) his failure to exercise such care *increases* the risk of such harm, or (b) the harm is suffered because of the other's reliance upon the undertaking.") (emphasis added).
[71] King, *supra* note 26, at 508.
[72] *Lord*, 770 A.2d at 1106 (adopting the loss of opportunity doctrine). However, as discussed later, the N.H. Legislature abrogated the adoption. *See* N.H. REV. STAT. ANN. § 507-E:2(III) (2010).
[73] *Lord*, 770 A.2d at 1105–06.
[74] *Id.*
[75] *Id.* at 1106.
[76] King, *supra* note 26, at 509.
[77] *Lord*, 770 A.2d at 1106.

the value of the plaintiff's life.[78] This has been described as the proportional damages approach for the doctrine.[79] By framing the injury as the loss of opportunity, and by requiring the plaintiff to show that the defendant caused the injury by a preponderance of evidence, the doctrine appears to comport with the traditional tort law principles of causation, while also tailoring the value of the damages more closely to the actual harm.[80] For these reasons, it is no surprise that the N.H. Supreme Court was drawn to the doctrine.

III. UNDERSTANDING THE LOSS OF OPPORTUNITY DOCTRINE

To fully understand this third approach to a loss of opportunity claim adopted initially adopted by N.H., it is important to understand its elements. To recover under a typical loss of opportunity claim, a plaintiff must prove the traditional elements of negligence: (1) the defendant owed the plaintiff a duty of care; (2) the defendant breached his or her duty; (3) the plaintiff suffered an injury; (4) the defendant's breach caused the plaintiff's injury by a preponderance of the evidence; and (5) the plaintiff must have suffered damages.[81] Each element must be proven by a preponderance of the evidence.[82]

A. Duty and Breach

In a typical loss of opportunity claim, the medical professional owes a duty of care to the patient.[83] A medical care provider has breached the duty of care when failing to act in accordance with the reasonable professional practice accepted in its

[78] *See* King, *supra* note 26, at 509 (describing a similar illustration).
[79] *See Matsuyama*, 890 N.E.2d at 839 (describing the valuation process for a loss of chance claim under the proportional damages method).
[80] *See Lord*, 770 A.2d at 1106 (citing Perez v. Las Vegas Med. Ctr. 805 P.2d 589, 592 (Nev. 1991)); Férot, *supra* note 33, at 594–95.
[81] Férot, *supra* note 33, at 595.
[82] *Id.* at 603.
[83] *See id.* at 598 (discussing the breach of the duty of care owed to the patient in a medical setting).

position.[84] Common breaches of the duty of care in medical malpractice cases include: misdiagnosis,[85] delay in diagnosis or treatment,[86] negligent decisions,[87] and negligent execution.[88]

Further, the loss of opportunity doctrine is compatible with, and applied to cases involving, joint liability; the doctrine applies to multiple defendants that have breached the duty of care owed to the plaintiff.[89] For example, in *Renzi*, the Massachusetts Supreme Court found the radiologist and internal medicine physician jointly and severally liable for the plaintiff's loss of chance of survival when both physicians negligently failed to provide the other with patient information that would have led to an earlier diagnosis of breast cancer.[90] The doctrine is also compatible with cases involving comparative negligence.[91]

B. Injury

[84] Francoeur v. Piper, 776 A.2d 1270, 1273 (N.H. 2001) (citing N.H. REV. STAT. ANN. § 507-E:2 (1997)); *accord* Palandjian v. Foster, 842 N.E.2d 916, 920 (Mass. 2006) (stating the proper standard for a general practitioner physician is whether it has "exercised the degree of care and skill of the average qualified practitioner," while the standard for a specialist physician is if it has acted in accordance with the "care and skill of the average member of the profession" practicing the specialty, considering advances in the field).

[85] *E.g.*, *Lord*, 770 A.2d at 1104 (claiming a breach of care because the defendant negligently misdiagnosed the spinal cord injury resulting in exacerbating medical care).

[86] *E.g.*, Bronson v. Hitchcock Clinic, 677 A.2d 665, 668 (N.H. 1996) (claiming a breach of care because the defendant negligently failed to diagnosis and treat the plaintiff with Hodgkins Disease for six months prior to inspection).

[87] *E.g.*, Morrill v. Tilney, 519 A.2d 293, 293–94 (N.H. 1986) (claiming a breach of care because the defendant negligently decided to perform cosmetic surgery rather than amputate the plaintiff's finger).

[88] *E.g.*, Anglin v. Kleeman, 665 A.2d 747, 749 (N.H. 1995) (claiming a breach of care because the defendant negligently left a lap sponge in the plaintiff's knee from reconstructive knee surgery).

[89] Férot, *supra* note 33, at 598.

[90] 890 N.E.2d at 819.

[91] *E.g.*, Scafidi v. Seiler, 574 A.2d 398, 408 (N.J. 1990) ("Our holding [awarding recovery for loss of chance] is also consistent with the principles underlying the comparative-negligence statute. . . . .").

Under the loss of opportunity doctrine, the loss of opportunity for a more favorable outcome is, itself, the injury.[92] The injury is not the actual, unfavorable outcome.[93] However, in order to recover under the doctrine, both the loss of opportunity and the unfavorable outcome are necessary.[94] For example, in *Renzi*, had the doctors successfully treated the breast cancer detected at a later stage due to negligence, the plaintiff would not have a loss of chance claim—that is, because despite the fact that the doctors' negligence caused the plaintiff to have a reduced likelihood of survival, the plaintiff did not suffer an unfavorable outcome.[95] The unfavorable outcome may include: "the death of the patient, aggravated symptoms, or a lack of improvement of the condition of the patient."[96]

But, to recover under the doctrine, the plaintiff must have some chance of survival prior to the negligence.[97] The doctrine also does not apply when the plaintiff has a one hundred percent chance of survival prior to the negligence and the defendant has destroyed the entire percentage.[98] This is because recovering for a reduced one hundred percent chance of survival would be no different from the traditional tort claim of wrongful death.

Although the statistics from which courts determine the loss of opportunity are procured and accepted by the medical community and are increasingly reliable, "they cannot define with absolute certainty what would have been the outcome of the patient's condition in the absence of the tortious act."[99] Rather, they are merely careful estimates.[100] In determining the amount of loss of opportunity, courts must speculate about the "inevitable evolution of the medical condition" and the likely outcome had the physician provided appropriate care.[101] Because the determination does not

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[92] *Lord*, 770 A.2d at 1105.
[93] Férot, *supra* note 33, at 595.
[94] *Id.* at 596–97.
[95] *See generally Renzi*, 890 N.E.2d at 809.
[96] Férot, *supra* note 33, at 597.
[97] *Id.* at 596.
[98] *Id.*
[99] *Id.* at 601–02.
[100] *See Id.*
[101] *Id.* at 600.

account for a scenario when the medical condition takes an unusual path, the court may require the defendant to overcompensate or undercompensate the plaintiff, depending on how the plaintiff's medical condition would have progressed.[102] However, some argue that this uncertainty is acceptable since the tortfeasor created the uncertainty, and thus the tortfeasor should "bear the burden of possibly overcompensating the patient."[103] In eliciting this argument, many courts quote King's article.[104]

C. Causation

Because the doctrine frames the injury as the loss of opportunity, causation appears to be consistent with the traditional principles of tort law.[105] Nonetheless, some critics of the doctrine view the causation element to be inconsistent with traditional tort law because the causation element focuses on whether the negligent behavior caused the loss of opportunity, not whether it caused the ultimate injury.[106]

Therefore, to recover under the loss of opportunity doctrine, the plaintiff must prove by a preponderance that the tortfeasor's negligence caused the plaintiff's injury, with the plaintiff's injury being the diminished likelihood of a more favorable outcome.[107]

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[102] *Id.* at 600–02.

[103] *Id.* at 602; *see Lord*, 770 A.2d at 1108 ("[W]e fail to see the logic in denying an injured plaintiff recovery against a physician for the lost opportunity of a better outcome on the basis that the alleged injury is too difficult to calculate, when the physician's own conduct has caused the difficulty.").

[104] *See, e.g.*, DeBurkarte v. Louvar, 393 N.W.2d 131, 137 (Iowa 1986) (quoting King, *supra* note 21, at 1378) ("[B]ut for the defendant's tortious conduct, it would not have been necessary to grapple with the imponderables of chance.") (brackets omitted).

[105] Férot, *supra* note 34, at 595; *see e.g.*, *Lord*, 770 A.2d at 1107 ("By recognizing loss of opportunity as a cognizable injury, we refute the notion that the plaintiff would be unable to prove that the defendants' negligence probably caused her to suffer injuries which would not otherwise have occurred. The right we recognize today still requires a plaintiff to prove that the injury she suffered-the lost opportunity for a better outcome-was caused, more probably than not, by the defendant's negligence.")(citations omitted).

[106] *See, e.g.*, *Smith*, 833 A.2d at 381 (describing the doctrine as a "significant departure" from the traditional tort law of causation).

[107] *Matsuyama*, 890 N.E.2d at 832.

D. Damages

Determining what metric to use to calculate the loss of opportunity should vary depending on the nature of the case and the availability of the medical evidence.[108] For example, in *Renzi*, the court used a ten-year survival metric to calculate damages for the loss of chance of survival for a deceased patient who had suffered from breast cancer.[109] However, in *Matsuyama*, the court used a five-year survival metric for a defendant suffering from gastric cancer.[110]

Once the metric is chosen, the court must determine how much the defendant owes the plaintiff for the lost chance.[111] As previously discussed, the proportional damages approach is the most common method of valuation for the loss of chance doctrine.[112] Under this method, recovery is limited to loss of chance deprived by the defendant.[113] Courts calculate the amount of damages the defendant owes the plaintiff by completing the following procedure:

> (1) The fact finder must first calculate the total amount of damages allowable for the death under the wrongful death statute…or, in the case of medical malpractice not resulting in death, the full amount of damages allowable for the injury. This is the amount to which the decedent would be entitled if the case were *not* a loss of chance case: the full amount of compensation for the decedent's death or injury.
> (2) The fact finder must next calculate the patient's chance of survival or cure immediately preceding ("but for") the medical malpractice.
> (3) The fact finder must then calculate the chance of survival or cure that the patient had as a result of the medical malpractice.

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[108] *Id.* at 838.
[109] 890 N.E.2d at 811.
[110] 890 N.E.2d at 838.
[111] *Id.* at 839.
[112] *Id.*
[113] *Id.*

> (4) The fact finder must then subtract the amount derived in step 3 from the amount derived in step 2.
> (5) The fact finder must then multiply the amount determined in step 1 by the percentage calculated in step 4 to derive the proportional damages award for loss of chance.[114]

For example, assume in a wrongful death action the court considered factors—such as the age, health, and earning potential of the decedent—and valuated the total amount of damages to be $100,000.[115] Further assume that due to the defendant's negligence, the decedent's chance of survival reduced from fifty percent to ten percent, a forty percent reduction. Because $100,000 times forty percent is $40,000, the total recovery to the plaintiff would be $40,000.

Many courts embracing the loss of opportunity doctrine recognize that this method does not capture the precise cost to the defendant and the precise compensation to the plaintiff for the exact loss of opportunity because the figures are based on estimates.[116] However, many courts view this as the best method out of the menu of options—the Supreme Court of Massachusetts described this method as "the most appropriate way to quantify the value of the loss of chance…because it is an easily applied calculation that fairly ensures that a defendant is not assessed damages for harm he did not cause."[117] The court further advocated for the method while recognizing its imprecision by discussing the long-standing acceptance of statistical estimates in tort law, stating that "probabilistic evidence, in the form of actuarial tables, assumptions about present value and future interest rates, statistical measures of future harm, and the like, is the stock-in-trade of tort valuation."[118] However, some critics have cynically described the calculation of

[114] *Id.* at 840 (emphasis in original).
[115] *See Scafidi*, 574 A.2d at 407 (discussing the factors involved in the method for calculating damages for loss of chance of survival).
[116] *E.g.*, *Matsuyama*, 890 N.E.2d at 840.
[117] *Id.*
[118] *Id.* at 841.

damages under the doctrine as "little more than an elaborate, arbitrary guessing game."[119]

IV. THE LOSS OF OPPORTUNITY DOCTRINE IN NEW HAMPSHIRE

With a basic understanding of the doctrine, this article will now discuss the changing treatment of the doctrine in New Hampshire and explore the various reasons why the doctrine was accepted and then rejected in the state. In exploring these reasons, this article will consider the merits of the arguments given.

A. Tort Reform Legislation followed by Common Law Adoption

Interestingly, there has been some disagreement in New Hampshire between the branches of government with respect to whether or not the loss of opportunity doctrine should be adopted.[120] First, in 1986, the state's legislature enacted comprehensive tort reform in an attempt to promote the availability and affordability of liability insurance for New Hampshire citizens.[121] The legislature believed that tort liability was expanding, which would create a higher risk for insurers and therefore higher insurance premiums and rates for New Hampshire natives.[122] In the statutory scheme, the legislature defined "medical injury" as:

> [A]ny adverse, untoward or undesired consequences arising out of or sustained in the course of professional services rendered by a medical care provider, whether resulting from negligence, error, or omission in the performance of such services; . . . from failure to diagnose; . . . or otherwise arising out of or sustained in the course of such services.[123]

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[119] Paul M. Secunda, *A Public Interest Model for Applying Lost Chance Theory to Probabilistic Injuries in Employment Discrimination* Cases, 2005 WIS. L. REV. 747, 760 (2005).
[120] Weigand, *supra* note 29, at 357.
[121] *Lord*, 770 A.2d at 1109 (Broderick, J., concurring) (citing N.H.S. J. 190 (1986)).
[122] *Id.*
[123] N.H. REV. STAT. ANN. § 507-E:1(III) (2010).

Interpreting the legislature's definition of medical injury, in 2001, the Supreme Court of New Hampshire expressly adopted the loss of opportunity doctrine in *Lord v. Lovett*.[124] In the case, the plaintiff sued the defendants for negligently misdiagnosing her spinal cord injury resulting from an automobile accident.[125] The plaintiff argued that the misdiagnosis caused the defendants to fail to properly immobilize her and administer steroid therapy, thereby depriving her of a substantially better outcome of recovery as she continued to suffer from paralysis, weakness, and sensitivity.[126]

In recognizing the loss of opportunity doctrine, the court found the injury of a loss of opportunity for a favorable outcome to be consistent with the legislature's definition of medical injury.[127] Therefore, the court only considered the plain meaning of the statute, and not its legislative history in determining that the loss of chance was a cognizable "injury" in NH.[128] However, the court suggested that even looking at the legislative history, the loss of an opportunity would satisfy the definition found in the statute because the history suggested that the definition included "all conceivable lawsuits against medical care providers."[129] With the injury established as the loss of opportunity, the court found that the plaintiff could prove by a preponderance of evidence that the defendant's negligence caused the medical injury.[130]

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[124] 770 A.2d at 1106.
[125] *Id.* at 1104.
[126] *Id.*
[127] *Id.* at 1106-07 ("We recognize the right based not upon an "expansive" reading of the statute or a "generous" interpretation of medical injury, but rather, upon a strict application of statutory construction and well-established tort principles to a claim which we confront directly for the first time. We do not drag it from the shadows of the common law but draw it from the light of the legislative enactment.") (quotations in original).
[128] *Id.* at 1107 (stating that when the statute's language is clear, consideration of the meaning does not extend beyond the plain language of the statute).
[129] *Id.*
[130] *Lord*, 770 A.2d at 1107 ("The right we recognize today still requires a plaintiff to prove that the injury she suffered -- the lost opportunity for a better outcome -- was caused, more probably than not, by the defendant's negligence."); *see* N.H. REV. STAT. ANN. § 507-E:2 (2013) ("In any action for medical injury, the plaintiff shall have the burden of proving by affirmative evidence which must include expert testimony of a competent witness or witnesses:… (c) That as a proximate result thereof, the injured person suffered injuries which would not otherwise have

In Justice Broderick's concurring opinion, he acknowledged that the legislation was "broad enough to encompass the loss of chance doctrine."[131] However, he agreed with the majority "with reservation" because the doctrine's adoption "ironically springs from a statute passed in 1986 as part of comprehensive tort reform, which was intended to preempt common law and bring predictability and stability to the insurance market, in part, for the benefit of health care providers."[132] The justice spent the majority of his concurrence explaining the history of the legislation and how its clear intent was to keep tort liability and thus, insurance costs, down.[133] However, in his conclusion, Justice Broderick stated that it was unclear from the legislative history whether the legislature intended merely to codify the then-existing common law causes of action for medical malpractice or rather for it to truly encompass all medical malpractice cases.[134] Therefore, Justice Broderick concurred, but he invited the legislature to take further action if it disagreed with the court's interpretation.[135]

B. The Legislature Abrogates the Supreme Court

Soon thereafter, in 2003, the legislature heeded the words of Justice Broderick and expressed its disagreement with the Supreme Court of New Hampshire's interpretation of its statute by enacting the following amendment:[136]

> The requirements of this section are not satisfied by evidence of loss of opportunity for a substantially better outcome. However, this paragraph shall not bar claims based on evidence that negligent conduct by the defendant medical provider or providers proximately caused the ultimate harm, regardless of

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occurred.").
[131] Lord, 770 A.2d at 1109 (Broderick, J., concurring).
[132] *Id.*
[133] *Id.* at 1109–10.
[134] *Id.* at 1110.
[135] *Id.*
[136] *See* N.H. REV. STAT. ANN. § 507-E:2(III) (2010).

> the chance of survival or recovery from an underlying condition.[137]

Justice Broderick's suspicion that the legislature did not intend for recovery of the loss of opportunity—in light of the overall tort reform aimed at lowering tort liability and insurance costs—proved to be warranted given the legislature's express statement of purpose for the amendment:

> Availability and affordability of insurance against liability for medical injury is essential for the protection of patients as well as assuring availability of and access to essential medical and hospital care. This act reaffirms the intent of the general court legislature to contain the costs of the medical injury reparations system and to promote availability and affordability of insurance against liability for medical injury by codifying the law applicable to recovery of damages for medical injury in RSA 507-E. The decision by the Supreme Court of New Hampshire…departed from that intent by broadening the opportunity to recover damages in medical injury cases through recognition of the so-called "loss of opportunity" doctrine. This act is intended to overrule that decision as well as to restate the legislative policy that this judicial broadening of the opportunity to recover damages in medical injury cases is contrary to the intent of the general court in enacting RSA 507:E.[138]

Because rejection of the doctrine appeared to be motivated by the notion that the doctrine would raise medical costs and therefore limit medical care to NH citizens, this rationale, if true, is quite persuasive in claiming that adoption of the doctrine could harm

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[137] *Id.*

[138] Weigand, *supra* note 29, at 359 (quoting N.H. REV. STAT. ANN. § 507-E:2(III) (2010); S.B. 119, 158th Leg., 1st Sess. (N.H. 2009)) (brackets omitted).

N.H. citizens.[139] Thus, to determine if the increased insurance cost argument is a sound reason to abrogate the law of the New Hampshire Supreme Court, it logically follows that one should consider and analyze the changes in insurance premiums between various states that have and have not adopted the doctrine.

V. THE LOSS OF OPPORTUNITY DOCTRINE AND ITS EFFECTS ON LITIGATION AND INSURANCE COSTS

While the New Hampshire legislature and others have argued that the loss of opportunity doctrine increases both tort litigation and insurance costs for medical care, the evidence suggests otherwise. Statistics in the Northeastern states demonstrate that the loss of opportunity doctrine neither increases tort litigation nor increases insurance premiums. Thus, critics' fears about the doctrine appear to be unfounded.

A. Statistics in the Northeast

Conducting an analysis of the effects of the loss of opportunity doctrine on medical malpractice within each state requires observation of: (1) the change in the number of medical malpractice lawsuits filed before and after adoption of the doctrine; and (2) the change in insurance premium rates for medical malpractice insurance before and after adoption of the doctrine.[140] Conducting a present-day analysis of the effect of the adoption of the loss of opportunity doctrine in Northeastern states appears to alleviate the financial concern over the consequences of adopting the doctrine, perhaps thereby allowing other policy concerns to drive the consideration of whether or not to adopt the loss of opportunity doctrine.

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[139] *See, e.g.*, Mangan, *supra* note 16, at 287 (advocating for adoption of the loss of chance doctrine, *inter alia*, because the value of human life should take precedence over any burdens on the medical profession).

[140] Steven R. Koch, Comment, *Whose Loss is it Anyway? Effects of the "Lost-Chance" Doctrine on Civil Litigation and Medical Malpractice Insurance*, 88 N.C.L. REV. 595, 619 (2010).

1. Litigation

According to statistics of Northeastern states since the 1990s, there does not appear to be a connection between adoption of the doctrine and increases in litigation.

The following statistics are taken from the National Practitioner Data Bank ("NPDB"). Congress created NPDB primarily to improve health care quality, protect the public, and reduce health care fraud and abuse.[141] In 2013, NPDB merged with Healthcare Integrity and Protection Data Bank ("HIPDA"), pursuant to the Affordable Care Act, to create a comprehensive review of health care information.[142] The resulting data bank retained NPDB's name.[143] Organizations that must report to NPDB include, medical malpractice payers (e.g., hospitals), state licensing and certification authorities, various state agencies, and various health care entities.[144] Noncompliance can result in civil penalties.[145] The Bank is widely relied upon and cited by academics and professionals, including those discussing the effects of the loss of chance doctrine on malpractice claims and insurance rates.[146] As of the writing of this article, NPDB data is current up to 2012.[147]

The analysis is based on the number of malpractice payments reported, rather than the number of malpractice claims actually paid, so as to yield the most comprehensive and useful data readily

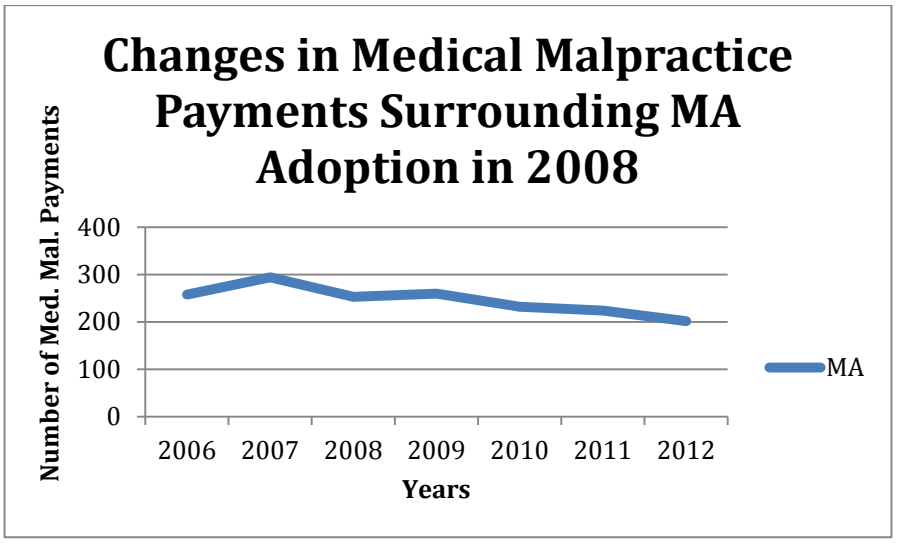
[141] THE NATIONAL PRACTITIONER DATA BANK, http://www.npdb-hipdb.hrsa.gov (last visited Nov. 17, 2014).
[142] *Id.*
[143] *Id.*
[144] *Id.*
[145] Katherine Baicker & Amitabh Chandra, *The Effect of Malpractice Liability on the Delivery of Health* Care, *in* 8 F. FOR HEALTH ECON. & POL'Y 1, 8 (2006).
[146] *See, e.g.*, Koch, *supra* note 140, at 620–26 (finding that the loss of chance doctrine has "no apparent effect on the number of claims being paid" and that "litigation-related costs play a relatively small role" in increasing medical malpractice insurance rates); Baicker, *supra* note 146, at 8–9. While the National Practitioner Data Bank is widely relied upon, observing the Bank overtime has revealed that it occasionally makes slight, *retroactive* changes to the numbers based on new information it receives.
[147] THE NATIONAL PRACTITIONER DATA BANK, http://www.npdb-hipdb.hrsa.gov/resources/npdbstats/npdbStatistics.jsp (last visited Jan. 18, 2014).

available to answer the present inquiry.[148] In gathering the data, the medical professionals were limited to physicians (i.e., those earning their Doctor of Medicine (M.D.) or Doctor of Osteopathic Medicine (D.O.) degrees).

i. Adoption in the Twenty-First Century

Massachusetts is the only Northeastern state—outside New Hampshire's short adoption—that adopted the loss of chance doctrine in the twenty-first century, in 2008.[149] NPDB reported the following medical malpractice payments in Massachusetts: in 2006 there were 258 payments; in 2007 there were 294 payments; in 2008 there were 253 payments; in 2009 there were 260 payments; in 2010 there were 232 payments; in 2011 there were 224 payments; and in 2012 there were 202 payments.[150] For easier reference, see the chart below.

[148] *See* Koch, *supra* note 140, at 620 (using the number of malpractice claims paid by malpractice insurers as an indicator of the number of actual medical malpractice payments made in a particular state because it is the best data set available).
[149] *Matsuyama*, 890 N.E.2d at 828–29.
[150] THE NATIONAL PRACTITIONER DATA BANK, http://www.npdb-hipdb.hrsa.gov/resources/npdbstats/npdbStatistics.jsp (last visited Nov. 17, 2014).



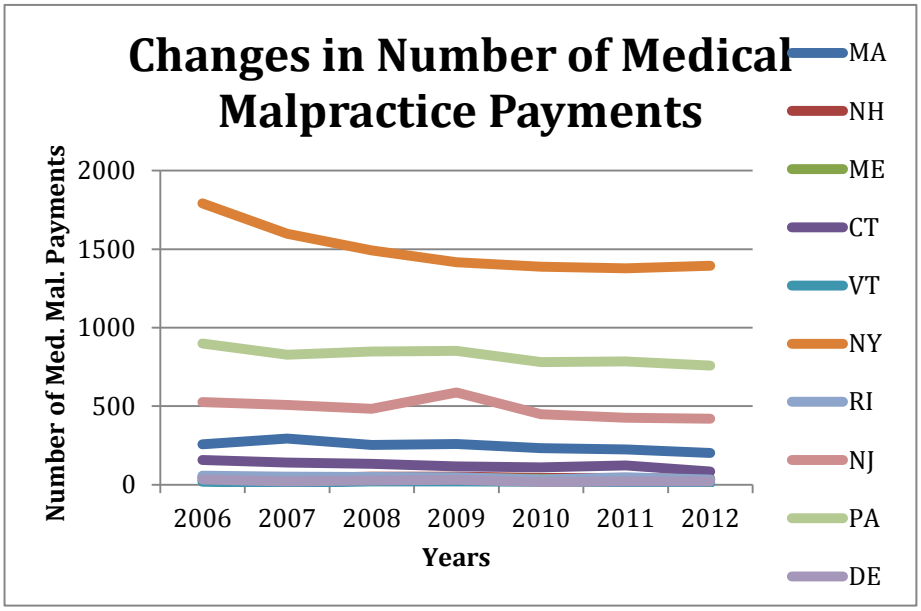
While the number of payments increased by seven in the year directly following the adoption of the doctrine in 2008, payments increased prior to adoption of the doctrine as well.[151] Interestingly, the largest increase in the number of payments between 2006 and 2012 was from 2006 to 2007, the year before the doctrine's adoption.[152] Even more interesting, payments generally tended to decrease following adoption of the doctrine, the latest reported year in 2012 being the lowest of all of the years, 51 less claims paid than in the year of adoption.[153]

Other states also experienced a general decline in the above years, especially in 2012.[154] For example, every Northeastern state except Maine and New York experienced a decline in the number of medical malpractice claim payments in 2012: Connecticut declined from 123 to 84, New Hampshire declined from 44 to 37, Vermont declined from 16 to 8, Rhode Island declined from 48 to 34, New Jersey declined from 426 to 420, Delaware declined from 21 to 20, and Pennsylvania declined from 786 to 759.[155] Further, even though

[151] *Id.*
[152] *Id.*
[153] *Id.*
[154] *See id.*
[155] THE NATIONAL PRACTITIONER DATA BANK, http://www.npdb-hipdb.hrsa.gov/resources/npdbstats/npdbStatistics.jsp (last visited Nov. 17, 2014).

Maine and New York did not decline in 2012, both of their malpractice claim payments declined in 2011.[156]

Looking specifically at New Hampshire, although the present National Data Bank does not offer data prior to 2002, and the doctrine was adopted briefly in 2001, other data does not support a rise in litigation following adoption of the doctrine; to wit, older NPDB data shows a general decline in malpractice litigation from 2000 to 2004, notwithstanding one 12-payment increase from 2002 to 2003.[157] Given these findings, there does not appear to be a connection between adoption of the doctrine and rising litigation. A chart is offered below for comparison.



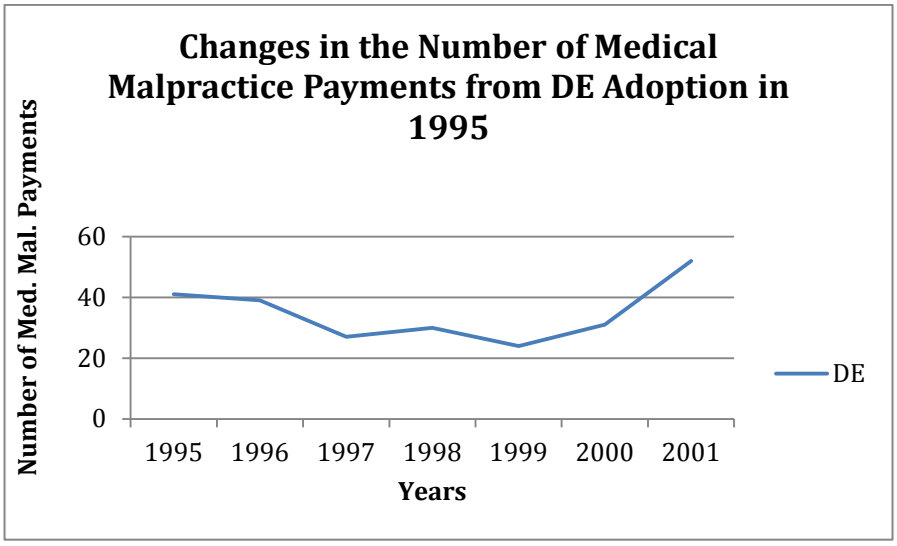
[156] *Id.*

[157] *See id.*; THE NATIONAL PRACTITIONER DATA BANK, http://www.npdb.hrsa.gov/resources/reports/2004NPDBAnnualReport.pdf 67 (2004). I intentionally did not go into detail with respect to the N.H. report payments. The most useful and accurate information is collected from the present NPDB, post merger with HIPDB. *See* THE NATIONAL PRACTITIONER DATA BANK, http://www.npdb.hrsa.gov/resources/npdbMerge.jsp. NPDB's present website was adjusted as far back as 2002, and older reports are not compatible with the present information.

Therefore, considering the data surrounding the adoption of the doctrine in Massachusetts and New Hampshire in the twenty-first century, there does not appear to be a connection between adoption of the doctrine and increased medical malpractice litigation.

ii. Adoption in the 1990s

Delaware was the only northeastern state to adopt the loss of chance doctrine in the 1990s, specifically in 1995.[158] NPDB reported the following medical malpractice payments: in 1995 there were 41 reports; in 1996 there were 39 reports; in 1997 there were 27 reports; in 1998 there were 30 reports; in 1999 there were 24 reports; in 2000 there were 31 reports; and in 2001 there were 52 reports.[159] For easier reference, see the chart below:



[158] *Anderson*, 669 A.2d at 79.

[159] THE NATIONAL PRACTITIONER DATA BANK, http://www.npdb-hipdb.hrsa.gov/resources/reports/2001NPDBAnnualReport.pdf (last visited Nov. 17, 2014). As explained in *supra* note 158, data prior to 2002 is less reliable. And of the available data, 1995 was the earliest year for which readily available and reliable information could be located.

While the number of payments tended to decrease each year, the number of payments began increasing in 2000.[160] Although one could read the above statistics to suggest that the state did not begin to experience the effects of adoption of the doctrine until roughly five years later, similar patterns of increasing numbers beginning in 2000 from other states—which did not adopt the doctrine in that year—suggests that the spike was due to other causes.[161] For example, after decreasing in the number of reported payments from 1998 to 1999, New Jersey's payments spiked from 480 to 617 in 2000, and then again from 617 to 950 in 2001.[162] States further away like Arizona experienced the same decline and then increase beginning in 2000.[163] Like above, it appears that other factors, not adoption of the doctrine, are driving the number of malpractice suits.

Therefore, considering the data surrounding the adoption of the doctrine in Delaware in the 1990s, there does not appear to be a connection between adoption of the doctrine and increased medical malpractice litigation.

iii. A Broader Look

Other Northeastern states have adopted the doctrine, but have done so at a time before comprehensive and accurate statistics were available to conduct the above analysis. However, Koch, in his law review article—also using statistics from NPDB—looked at other states in the country, like Ohio and Illinois, to determine that "no apparent effect" existed between adoption of the doctrine and the number of claims paid, and that other significant factors must be responsible for the significant variations over time.[164]

2. Insurance Premiums

[160] *Id.*
[161] *See id.*
[162] *Id.*
[163] *Id.*
[164] *See, e.g.*, Koch, *supra* note 140, at 622–24 (describing the economic effect of adoption of the doctrine as "nothing more than a proverbial drop in the bucket").

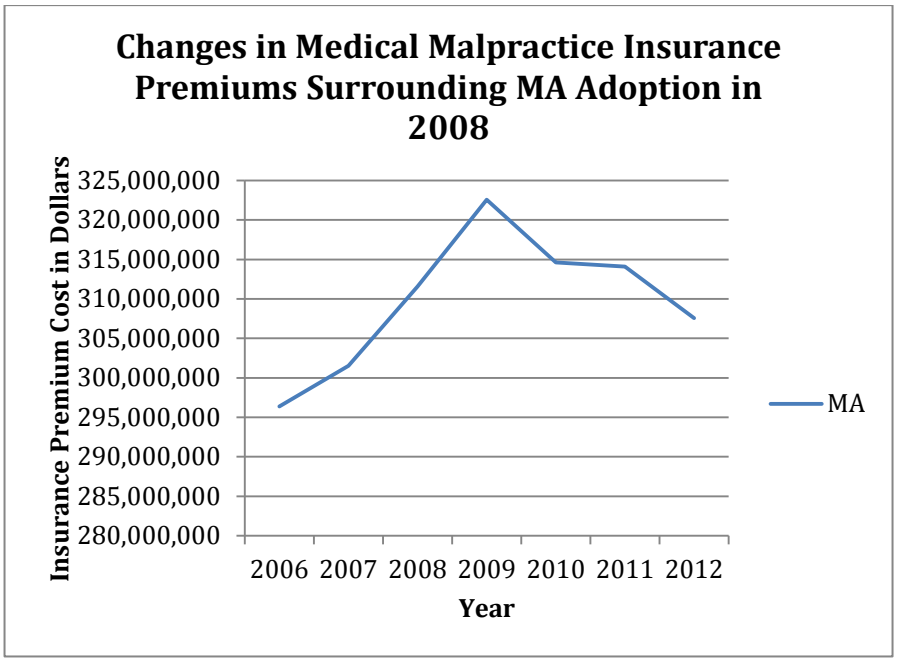
According to statistics of Northeastern states since the 1990s, there does not appear to be a connection between adoption of the doctrine and increases in insurance premiums.

The following statistics are taken from the National Association of Insurance Commissioners ("NAIC"). NAIC was created by the chief insurance regulators from each state[165] NAIC was created to assist state insurance regulators, protect the public interest, and to promote competitive markets.[166] Other legal literature has relied on data from NAIC in determining if adoption of the loss of chance doctrine causes spikes in insurance premiums.[167]

i. Adoption in the Twenty-First Century

As previously discussed, Massachusetts adopted the loss of chance doctrine in 2008 and was the only northeastern state to adopt the doctrine in the twenty-first century, notwithstanding New Hampshire's brief adoption.[168] The following total premiums written by medical malpractice insurance providers in Massachusetts include: in 2006, $296,397,155; in 2007, $301,542,756; in 2008, $311,579,290; in 2009, $322,553,703; in 2010, $314,627,751; in 2011, $314,106,416; and in 2012, $307,565,195.[169] For easier reference, see the chart below.

[165] THE NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS, http://www.naic.org/index_about.htm (last visited Nov. 17, 2014).
[166] *Id.*
[167] *See, e.g.*, Koch, *supra* note 140, at 625.
[168] *Matsuyama*, 890 N.E.2d at 828–29.
[169] NAT'L ASS'N OF INS. COMM'RS,, Countrywide Summary of Medical Malpractice Insurance, Calendar Years 2003-2012 (Nov. 17, 2014), *available at* http://www.naic.org/documents/research_stats_medical_malpractice.pdf.



While the written insurance premiums increased in the year directly following the adoption of the loss of chance doctrine, the preceding years leading to the adoption suggest it was simply following the steady increase, with each subsequent year increasing by roughly the same proportion.[170] However, in the second year after adoption of the doctrine, written insurance premiums began to consistently decline.[171]

While other Northeastern states also experienced a decline in the written medical malpractice insurance premiums beginning in 2010, several northeastern states did not decline in all three consecutive years, like in Massachusetts.[172] For example, in New Hampshire, although insurance premiums declined until 2011, total premiums increased in 2012 from $38,065,299 to $39,145,975.[173] Further, in Rhode Island, total premiums increased in 2010 from $45,764,559 to $47,082,730, declined in 2011 to $38,559,054, and

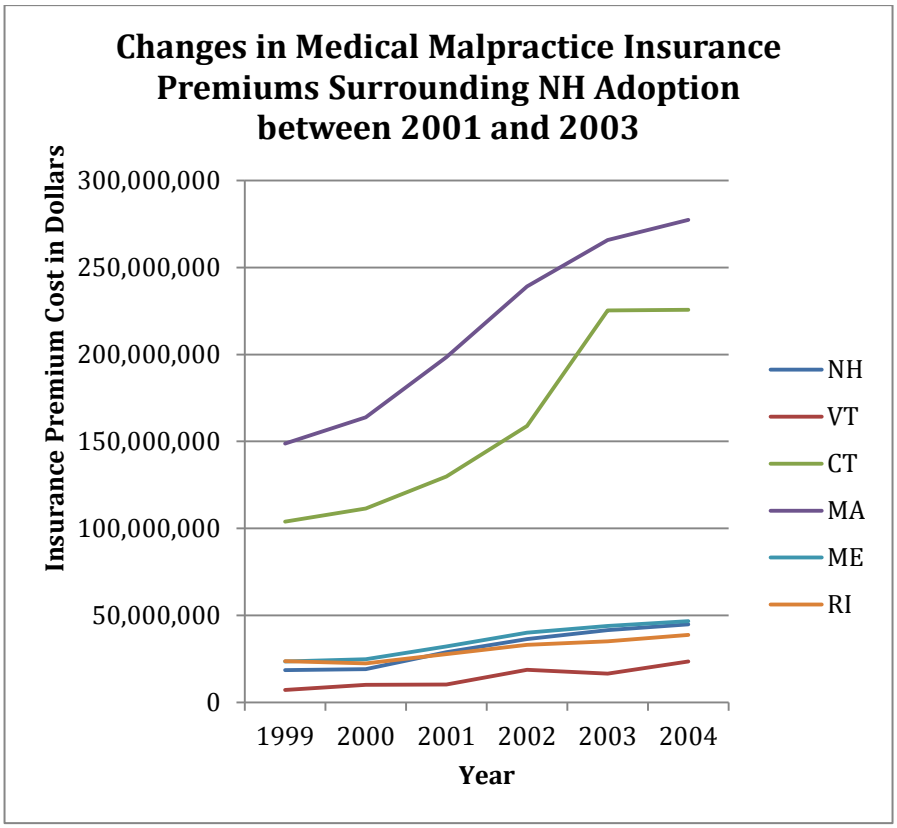
[170] *Id.*
[171] *Id.*
[172] *See id.*
[173] *Id.*

then increased again in 2012 to $42,721,218.[174] New York and Vermont also did not have declining written insurance premiums for three consecutive years like in Massachusetts.[175]

Therefore, because Massachusetts had declining premiums from 2010 through 2012, while other northeastern states did not consistently decline, it appears that no observable causation can be drawn between adoption of the doctrine and increased medical malpractice insurance premiums.

Insurance premium rates in New Hampshire's brief adoption of the doctrine between 2001 and 2003 corroborate this finding.[176] While New Hampshire experienced some increase between these years, the increase did not suggest it was caused by adoption of the doctrine when compared to other states.[177] See below for comparison to New England states.

[174] NAT'L ASS'N OF INS. COMM'RS,, Countrywide Summary of Medical Malpractice Insurance, Calendar Years 2003-2012 (Nov. 17, 2014), *available at* http://www.naic.org/documents/research_stats_medical_malpractice.pdf.
[175] *Id.*
[176] *See id.*
[177] *See id.*



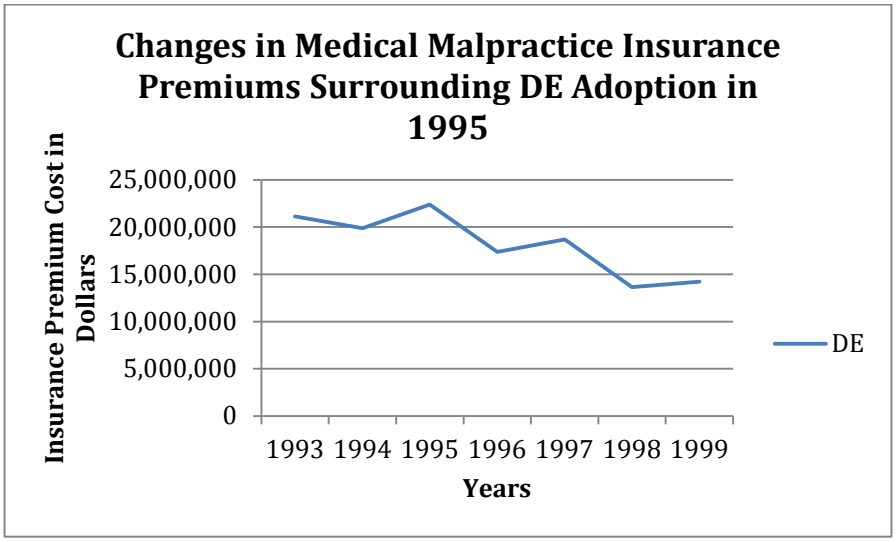
Therefore, considering the data surrounding the adoption of the doctrine in Massachusetts and New Hampshire in the twenty-first century, there does not appear to be a connection between adoption of the doctrine and increased insurance premiums.

ii. Adoption in the 1990s

As previously discussed, Delaware adopted the loss of chance doctrine in 1995 and was the only state to adopt the doctrine in the 1990s.[178] The following total premiums written by medical malpractice insurance providers in the state include: in 1993, $21,119,146; in 1994, $19,892,132; in 1995, $22,371,992; in 1996,

[178] *Anderson*, 669 A.2d at 79.

$17,376,588; in 1997, $18,685,921; in 1998, $13,654,123; and in 1999, $14,223,638.[179] For easier reference, see the chart below.



The premiums in Delaware appeared to decrease in the year immediately following adoption of the loss of opportunity doctrine.[180] Although, in the years preceding and following the adoption of the doctrine, premiums both rose and fell.[181] However, overall, in the four years following the adoption, total premiums decreased by roughly $8,000,000.[182] While some other Northeastern states experienced declines during this time period, only New York and Massachusetts, states with significantly higher populations, experienced greater declines.[183] Further, Connecticut's medical malpractice premiums increased by approximately $18,000,000.[184]

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[179] NAT'L ASS'N OF INS. COMM'RS,, Countrywide Summary of Medical Malpractice Insurance, Calendar Years 2003-2012 (Nov. 17, 2014), *available at* http://www.naic.org/documents/research_stats_medical_malpractice.pdf.
[180] *Id.*
[181] *Id.*
[182] *Id.*
[183] *Id.*
[184] NAT'L ASS'N OF INS. COMM'RS, Countrywide Summary of Medical Malpractice Insurance, Calendar Years 2003-2012 (Nov. 17, 2014), *available at* http://www.naic.org/documents/research_stats_medical_malpractice.pdf.

Similarly, Rhode Island's increased by about $6,400,000[185]. While Delaware's insurance premiums began to steadily increase in 2000, this trend was consistent with all of the northeastern states.[186] This trend suggests that some other factors dictate the significant fluctuations in premiums; one law review article described the adoption of the doctrine's effect on insurance premiums as merely a "proverbial drop in the bucket."[187]

Therefore, considering the data surrounding the adoption of the doctrine in Delaware in the 1990s, there does not appear to be a connection between adoption of the doctrine and increased insurance premiums.

iii. A Broader Look

Other Northeastern states have adopted the doctrine, but have done so at a time before comprehensive and accurate statistics were available to conduct the above analysis. However, Koch in his law review article—also using statistics from NAIC—compared increases in premiums from Delaware and Louisiana, two states that adopted the doctrine, with those of Nebraska and Tennessee, two states that did not adopt the doctrine. He concluded that "factors other than a state's adoption or rejection of the lost-chance doctrine seemingly dictate premium rates for medical malpractice insurance."[188]

B. Studies

1. Litigation

Studies are consistent with the results of this note that the adoption of the loss of opportunity doctrine does not significantly impact the number of claims filed. A common misconception exists that courts are now inundated with "frivolous" medical malpractice

[185] *Id.*
[186] *See id.*
[187] Koch, *supra* note 140, at 624.
[188] *Id.* at 625–26.

and tort claims in general.[189] This misconception by some that too many are filing medical malpractice cases has been mostly disseminated and perpetuated by those with an independent interest in the outcome.[190] These individuals and groups have often used unreliable information in support of reforming medical malpractice and tort law,[191] rather than using empirically valid data, which does not appear to mirror their arguments.[192]

For example, one article argued against adopting the loss of chance doctrine because it would supposedly increase tort litigation and thus promote "defensive medicine," causing doctors to "prescribe unnecessary tests, procedures, hospitalization, or

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[189] Geoff Boehm, Case Study, *Debunking Medical Malpractice Myths: Unraveling the False Premises Behind "Tort Reform,"* 5 YALE J. HEALTH POL'Y, L., & ETHICS 357, 358–59 (2005) (describing a decline in the number of medical malpractice cases, and tort cases in general, filed per capita in the last ten years); Douglas A. Kysar et al., *Medical Malpractice Myths and Realities: Why an Insurance Crisis is Not a Lawsuit Crisis*, 39 LOY. L.A. L. REV. 785, 786–87 (2006) (stating the reality of malpractice suits based on the empirical data is that their filing is "quite stable.").

[190] *See* Boehm, *supra* note 189, at 358 (stating politicians, insurance industry executives, and medical society lobbyists are among the groups peddling misleading information about frivolous medical malpractice claims); Kysar, *supra* note 189, at 786 ("Insurance companies, managed-care organizations, doctors' associations, and other interest groups have heavily invested in media campaigns to convince policy-makers and the public that recent increases in malpractice insurance premiums have been caused by a civil justice system that too easily tolerates meritless malpractice claims.").

[191] *See* Boehm, *supra* note 189, at 358 ("In particular, the insurance industry and other tort reform proponents rely on misinformation and largely anecdotal evidence that the civil justice system is "out of control" and needs to be scaled back. However, the facts reveal a different picture."); Kysar, *supra* note 189, at 785–86 ("Unfortunately, the current debate over the civil justice system [especially by those advocating for medical malpractice reform] is characterized less by careful analysis than by unfounded claims, shrill rhetoric, and spurious anecdote."); William M. Sage, *Medical Malpractice Insurance and the Emperor's Clothes*, 54 DEPAUL L. REV. 463, 471 (2005) (recognizing the discrepancy between the arguments of opinion and the arguments of empirical evidence with respect to tort reform within medical malpractice).

[192] *E.g.*, Kysar, *supra* note 189, at 787–88; Boehm, *supra* note 189, at 362–63 (describing a study by the Office of Technology Assessment that found increased tort liability not to noticeably cause defensive medical practice, and thus not to noticeably increase medical costs).

prolonged hospitalization" in an attempt to avoid liability and thereby raising medical costs.[193]

While this argument is plausible, the article failed to: (1) provide empirical evidence that the loss of chance doctrine meaningfully increases the number of tort claims; and (2) provide empirical evidence that increased liability causes defensive medicine.[194] However, in a different article that criticized many proponents of tort reform for this very reason—for making unsubstantiated accusations that tort litigation substantially increases medical costs—it provided and explained an empirical study conducted by the United States Congressional Office of Technology Assessment that debunked the concern of defensive medicine arising from increased tort litigation.[195] Other studies corroborate the lack of evidence of defensive medicine impacting the cost of medical care from rising tort litigation.[196]

Overall, contrary to what some believe, tort liability has not "exploded"; in fact, contract claims—an area of law not targeted for reform—now outnumber tort claims.[197] This is perhaps due to "various checks and balances" already in place to limit frivolous

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[193] Lisa Perrochet et al., *Lost Chance Recovery and the Folly of Expanding Medical Malpractice Liability*, 27 TORT & INS. L.J. 615, 625 (1992).

[194] *Id.* (citing case studies that state the opinions of physician groups and malpractice insurers who *believe* physicians have *incentives* to engage in defensive medicine and offering no proof that physicians act on these incentives). There is one study supporting the existence of increased hospital costs associated with defensive medicine that the Bush administration appeared to rely solely on in attempting to pass tort reform that was published in the Quarterly Journal of Economics. Kysar, *supra* note 189, at 808. However, the study involved elderly patients with two types of heart disease, and the United States Government Accountability Office stated in a report that "there is little empirical or analytical basis for generalizing the study's limited findings to all patients throughout the entire nation in the manner that the researchers and the Bush administration did." *Id.* at 808–09.

[195] *See* Boehm, *supra* note 189, at 362–63 (describing a study by the Office of Technology Assessment that concluded any defensive practice by doctors due to liability concerns were small, and the reduction of defensive practice would yield "very small" savings).

[196] *See, e.g.*, Baicker, *supra* note 145, at 21 ("[T]here is little evidence of net increases in the use of treatments we studied in response to state-level increases in malpractice costs, although there may be some increase in screening procedure such as mammography.")

[197] Kysar, *supra* note 189, at 801.

lawsuits, like sanctions for irresponsible lawyers and the existence and popularity of attorney compensation via contingency fees—that is, the plaintiff attorney has an incentive only to choose the most meritorious cases since the attorney only recovers payment if the case is won.[198]

In fact, one law review article that looked at the very relationship perhaps most salient to this article—whether adoption of the loss of opportunity doctrine increased the number of medical malpractice claims—found that no relationship existed between the doctrine and the number of claims being paid with medical malpractice insurance, and thus likely no relationship between the doctrine and the number of malpractice lawsuits being filed.[199] In comparing the fluctuations in reported medical malpractice claims among the states both before and after adoption of the doctrine, the article concluded that any impact was negligible.[200] Therefore, the evidence simply does not support the belief that adoption of the doctrine is causing dangerously high tort litigation,[201] and therefore law should not be created under this predication.[202]

2. Insurance Premiums

Studies are consistent with the results of this note that adoption of the loss of opportunity doctrine does not significantly impact medical malpractice insurance premiums.[CDS4] Even assuming that adoption of the loss of opportunity doctrine would meaningfully increase the number of malpractice suits filed, increased lawsuits and awards are not responsible for significant fluctuations in insurance premiums, despite "being frequently

[198] Boehm, *supra* note 189, at 359.
[199] Koch, *supra* note 140, at 624
[200] *Id.* at 622.
[201] *See* Boehm, *supra* note 189, at 363. ("[F]ederal and state lawmakers, regulators, doctors, and the general public are being told by medical and insurance lobbyists that doctors' insurance rates are rising due to increasing claims by patients, rising jury verdicts, and exploding tort system costs in general, despite clear evidence to the contrary.").
[202] *See* Kysar, *supra* note 189, at 786–87.

blamed for this."[203] One comprehensive Dartmouth study used data on malpractice claims from the NPDB and data on malpractice insurance premiums from the Medical Liability Monitor ("MLM") to determine the relationship between medical malpractice claim payments and medical malpractice insurance premiums.[204] After careful analysis, the authors observed "a fairly weak relationship" between payments and premiums, indicating that other factors were at work.[205] Although the study did not investigate other influences, it identified other factors from other studies that have been linked to rising insurance premiums, including: declining investment income, a less competitive insurance market, and increasing reinsurance rates.[206] Other studies corroborate this finding.[207]

Instead of blaming increased litigation for rapid increases in insurance premiums, insurance premiums appear to be based more on the overall economic climate.[208] That is because insurance providers rely on both insurance payments as well as investment capital to offset costs.[209] Because insurance providers hold onto revenue for many years before paying it out, the income on investments play more of a role in dictating premiums.[210] Despite popular belief, it is the returns on investments like bonds—rather than receipts of premium payments—"that generate[] the bulk of

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[203] *See* Emily Chow, *Health Courts: An Extreme Makeover of Medical Malpractice with Potentially Fatal Complications*, 7 YALE J. HEALTH POL'Y, L., & ETHICS 387, 465 (2007) ("Although malpractice litigation is frequently blamed for the current malpractice crisis, researchers have observed that there is no clear-cut correlation between trends in lawsuits and awards and trends in premiums or insurance liability."); Sage, *supra* note 189, at 471 ("[T]he argument that each subsequent malpractice crisis [of surging insurance premiums] reflected surging litigiousness requiring legal restraint is false."); Baicker, *supra* note 145, at 2, 21 (finding based on a comprehensive empirical study that malpractice payments do not appear to be "a driving force" behind rising insurance premiums and therefore indirect and anecdotal evidence to the contrary "is quite misleading").

[204] Baicker, *supra* note 145, at 8-9.

[205] *Id.* at 13.

[206] *Id.* at 2.

[207] *E.g.*, Koch, *supra* note 140, at 625 (stating a "lack of apparent connection" between adoption of the doctrine and elevated malpractice insurance premium rates).

[208] Chow, *supra* note 203, at 415–16.

[209] *Id.*

[210] *Id.* at 416.

insurance-company profits."[211] In fact, insurance premiums increase most rapidly when the insurance company suffers the greatest losses.[212] This occurs with the existence of "short-sited pricing practices" when insurance providers set artificially low rates based on "unduly optimistic projections" of returns or in an "attempt to gain a larger market share," causing it to eventually "boom-and-bust," which is all part of the "underwriting cycle."[213] The false belief of the significant role that tort litigation plays in setting insurance premiums explains why attempts at tort reform have been largely unsuccessful in reducing insurance premium rates.[214]

Furthermore, even if the loss of opportunity doctrine, contrary to evidence, had a substantial effect on insurance premiums, the concern that malpractice litigation is causing the high cost of health care in the United States is erroneous.[215] This is because malpractice litigation costs account for less than two percent of total countrywide health care spending.[216] Therefore, even a significant decrease in insurance premium rates would do little to impact the overall health care spending.[217]

Perhaps even more damning to the arguments of those opposing the loss of opportunity doctrine, for reasons relating to insurance premiums, is the fact that overall medical malpractice insurance premiums have actually been decreasing—not increasing—for about a decade.[218]

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[211] Kysar, *supra* note 189, at 798.
[212] *Id.* at 798.
[213] *Id.*
[214] *E.g.*, *id.* at 795–796 (describing the continued rise in insurance premiums following tort reform in Texas in 1995 as unsurprising).
[215] *See* Chow, *supra* note 203, at 417.
[216] *Id.*
[217] *See id.* (stating that even a twenty to thirty percent insurance savings would only have a "small direct impact" on health care spending).
[218] *See, e.g.*, David Belk, *It Ain't the Lawyers: Medical Malpractice Costs Have Been Dropping*, HUFFINGTON POST (Nov. 1, 2013, 12:03 PM), *available at* http://www.huffingtonpost.com/david-belk/medical-malpractice-costs_b_4171189.html.

VI. LIMITATIONS IN APPLICATION

This article asks the New Hampshire Legislature to reconsider its decision in refusing to adopt the loss of opportunity doctrine. As demonstrated above, there is more than ample literature that supports this argument. However, in the interest of providing a well-rounded evaluation of the doctrine, it is important to acknowledge its limitation in application. Unfortunately, what one imagines in theory is not always what one experiences in practice.[219]

Substituting the injury of death, for example, in place for the injury of the loss of opportunity, has its limitations.[220] Because a death can easily be proven with a death certificate, while the loss of opportunity must be proven by complicated statistics involving estimates and speculation, application of the doctrine sometimes involves manipulation by attorneys and experts, which can lead to confusion of the jury.[221]

Statistics can be manipulated by differing opinions of the significance of data and by altering the range of years, demographic, location, and size.[222] Therefore, an attorney, regardless of the merits of the case, can simply "search for a willing witness" to convince the jury of his or her position.[223] One case that relied on misleading statistics in recognizing the loss of chance was *Falcon v. Memorial Hospital*.[224] In that case, the majority relied on the statistic provided

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[219] Shawn M. Nichols, *Jorgenson v. Vener: The South Dakota Supreme Court Declares Loss-of-Chance Doctrine As Part of Our Common Law in Medical Malpractice Torts*, 46 S.D. L. REV. 618, 638 (2001) (recognizing that while the doctrine has "redeemable qualities," it is too complex for practical use).

[220] *See id.*

[221] Fennell v. Southern Maryland Hosp. Center, Inc., 580 A.2d 206, 213-14 (Md. 1990) ("The use of statistics in trials is subject to criticism as being unreliable, misleading, easily manipulated, and confusing to a jury. When large damage awards will be based on the statistical chance of survival before the negligent treatment, minus the statistical chance of survival after the negligent treatment, times the value of the lost life, we can imagine the bewildering sets of numbers with which the jury will be confronted, as well as the difficulties juries will have in assessing the comparative reliability of the divergent statistical evidence offered by each side.").

[222] Michelle L. Truckor, *The Loss of Chance Doctrine: Legal Recovery for Patients on the Edge of Survival*, 24 U. DAYTON L. REV. 349, 364 (1999).

[223] Truckor, *supra* note 222, at 365.

[224] 462 N.W.2d 44 (Mich. 1990).

by the plaintiff's expert that 37.5% of patients who develop an embolism survive with prompt treatment; however, in relying on this statistic, the majority did not consider the 25% chance of survival even *without* prompt treatment, decreasing the loss of chance from 37.5 to 12.5%.[225]

Further, the loss of opportunity can be confusing to a jury.[226] A death is concrete. A jury can almost never mistake that this injury has occurred. A loss of chance, however, is an "abstract" concept and can only be understood with the presentation of "complicated statistical data…[with the ability to] make a juror's eyes glaze over." [227] Under the loss of opportunity doctrine, a juror is challenged with the task of determining whether, more likely than not, the medical professional caused the loss of opportunity.[228] This involves deciding whether a percentage decreased by a percentage[229]—maintaining the separation of these percentages is an innately confusing task for a lay jury, especially in medical malpractice cases, which often involve complicated and technical testimony and evidence.[230] Keeping all of the various percentages straight is difficult "even for the most learned legal minds."[231] In fact, one article from the University of Texas School of Law devoted the entire piece to reviewing "several various blunders" that judges, lawyers, and commentators have made in attempting to apply the loss of opportunity doctrine.[232] While there are limitations to the application of the doctrine, it stands to reason that, as courts become more familiar with the doctrine, application will become more seamless and courts will receive the full benefit of the doctrine.

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[225] Lars Noah, *An Inventory of Mathematical Blunders in Applying the Loss-of-A-Chance Doctrine*, 24 REV. LITIG. 369, 378 (2005) (discussing *Falcon*, 462 N.W.2d at 59 (Riley, C.J., dissenting)).
[226] Nichols, *supra* note 219, at 642.
[227] *See id.* at 642-43; Perez v. Las Vegas Med. Ctr., 805 P.2d 589, 598 (Nev. 1991).
[228] *Matsuyama*, 890 N.E.2d at 832.
[229] *See id.*
[230] Nichols, *supra* note 219, at 642.
[231] *Id.*
[232] Noah, *supra* note 225, at 370.

VII. CONCLUSION

Although a "reflexive response" to the loss of opportunity doctrine[233] is that it is dangerous in that it expands tort liability, destroys the traditional conceptualization of tort law, and leads to higher medical costs and thus lower medical care affordability—upon closer inspection—this initial reaction is largely unfounded. Instead of having a harmful effect, the loss of opportunity appears to provide some protection for patients with less than a fifty-one percent chance of survival but only allows for recovery up to the amount the jury finds the doctor caused by a preponderance of the evidence.[234] That is quite similar to traditional tort law. Further, there has been almost no evidence of a willingness to expand the loss of opportunity doctrine to other contexts, despite the adoption by some states like New York roughly 40 years ago.[235] The doctrine truly appears to be *uniquely* appropriate for medical malpractice cases.

Last—and perhaps most importantly—while the concern of the New Hampshire Legislature in abrogating the decision by the New Hampshire Supreme Court seemed to be made with the best interests of its citizens in mind, statistics do not support its concerns. Given the research of this law review note, and those of several other corroborating studies, other powerful factors are responsible for spikes in insurance premiums. With premium rates lower across the United States in years, and with roughly one half of the States having adopted the doctrine, perhaps New Hampshire should take a second look at adoption of the loss of opportunity doctrine. While practice-based concerns exist, these concerns will likely abate as courts become more familiar with the application of the doctrine.

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[233] Koch, *supra* note 140, at 638.
[234] *See Lord*, 770 A.2d at 1105.
[235] *See Kallenberg*, 357 N.Y.S.2d at 510–11.