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Note, Identifying and Valuing the Injury In Lost Chance Cases

Todd S Aagaard, *Villanova University School of Law*

NOTES

Identifying and Valuing the Injury in Lost Chance Cases

Todd S. Aagaard

Any plaintiff seeking to recover in tort must prove that the defendant has breached the duty of care.[1] Even after the plaintiff has established the defendant's breach of duty, however, issues of causation and damages remain.[2] These two issues are frequently vexing, both conceptually and in terms of evidentiary demonstration. For example, if a plaintiff proves that a defendant acted negligently, it still may be unclear whether the plaintiff would have been injured even in the absence of the defendant's negligence. Similarly, in assessing damages, factfinders often find it difficult to attach a monetary value to a plaintiff's nonpecuniary losses such as pain and suffering.

So-called "loss of chance" cases — medical-malpractice cases in which a defendant's negligence injures a plaintiff who has a preexisting medical condition by reducing the plaintiff's likelihood of recovering from the condition — pose a particularly difficult challenge to courts seeking to define the scope of and place a value on a defendant's liability.[3] According to traditional tort doctrine, in such cases the plaintiff must prove that the decreased likelihood of recovery attributable to the defendant's negligence — as opposed to the preexisting condition itself — more likely than not directly caused her subsequent failure to recover.[4] A person suffering from a preexisting condition with less than a fifty-percent chance of recovery even before diagnosis thus would have no cause of action against a doctor who negligently failed to diagnose the condition, even if the delay brought about by the missed diagnosis caused the person to lose a significant chance of recovering from the condition.[5] For example, a person with a thirty-five percent chance of

1. *See* W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 53, at 356 (5th ed. 1984) (defining the duty as "an obligation, to which the law will give recognition and effect, to conform to a particular standard of conduct toward another").

2. *See id.* § 41, at 263 ("An essential element of the plaintiff's cause of action for negligence, or for that matter for any other tort, is that there be some reasonable connection between the act or omission of the defendant and the damage which the plaintiff has suffered.").

3. *See* John D. Hodson, Annotation, *Medical Malpractice: "Loss of Chance" Causality,* 54 A.L.R.4TH 10, 17 (1995).

4. *See* Cooper v. Hartman, 533 A.2d 1294, 1296-97 (Md. 1987).

5. This "loss of chance" factual scenario is typical. *See, e.g.,* DeBurkarte v. Louvar, 393 N.W.2d 131 (Iowa 1986); Delaney v. Cade, 873 P.2d 175 (Kan. 1994). As noted above, the

recovering from her cancer would, according to traditional tort doctrine, have no cause of action against a doctor whose failure to diagnose the cancer caused the person's chance of survival[6] to fall to twenty percent, or even to zero.

On the other hand, a person with an eighty-percent initial chance of recovery *would* have a cause of action against a doctor whose negligent misdiagnosis reduced that chance to twenty percent. In fact, under the traditional doctrine a plaintiff with an initial eighty-percent chance of recovery would have a cause of action against a doctor whose negligent misdiagnosis reduced that chance to anything less than sixty percent if the plaintiff subsequently failed to recover;[7] in such a case, the doctor's negligence is more likely than the preexisting condition to have caused the plaintiff's death. The important factor is not the absolute reduction in the plaintiff's probability of survival, but whether the reduction that the preexisting condition caused exceeds the reduction that the defendant's negligence caused. If this is the case, then the plaintiff cannot show that the defendant's negligence most likely caused the plaintiff's failure to recover.

Traditional tort doctrine's total denial of compensation in cases in which a doctor's negligence has increased but has not more than doubled[8] a plaintiff's likelihood of injury or death seems manifestly unfair. The traditional doctrine allows such a doctor to avoid any liability to a patient even though the doctor's failure to provide a timely diagnosis of the patient's malady clearly deprived the patient of an opportunity to recover from her condition. Courts and commentators, noting the traditional doctrine's failure to fulfill the fun-

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loss of chance doctrine was designed to address problems arising in medical malpractice cases, and its use has been limited almost exclusively to such cases. Plaintiffs' attempts to apply the loss of chance doctrine to analogous factual circumstances outside of the medical malpractice context have not been successful. *See* David W. Robertson, *The Common Sense of Cause in Fact*, 75 TEXAS L. REV. 1765, 1786 n.91 (1997) (citing Hardy v. Southwestern Bell Tel. Co., 910 P.2d 1024 (Okla. 1996) (declining to extend application of the loss of chance doctrine to a case involving the failure of the emergency telephone system operated by the defendant)).

6. Although the paradigmatic lost chance case involves a lost chance of survival, the ultimate harm in a lost chance case is not always death. *See* Fennell v. Southern Md. Hosp. Ctr., Inc., 580 A.2d 206, 208 (Md. 1990) ("Loss of chance may include loss of chance of a positive or more desirable medical outcome, loss of chance of avoiding some physical injury or disease, or a loss of chance to survive.").

7. If the plaintiff recovers from the condition, there is no cause of action under traditional tort law, irrespective of the magnitude of the decrease, because the plaintiff would be unable to show damages resulting from the defendant's negligence. *Cf.* RICHARD A. EPSTEIN, CASES AND MATERIALS ON TORTS 731 (5th ed. 1990) ("Proof of damages is an essential element of the plaintiff's case in most civil litigation.").

8. If the doctor's negligent misdiagnosis of the plaintiff's condition more than doubles the plaintiff's likelihood of suffering injury or death, then the plaintiff may recover under the traditional doctrine. In such a case, the doctor's negligence, rather than the preexisting condition itself, is the proximate cause of the plaintiff's injury or death.

damental tort goals of deterrence and compensation in these types of lost chance cases,[9] developed what is known as the *loss of chance doctrine* in response.[10] The loss of chance doctrine addresses the perceived injustice of the traditional doctrine by recognizing a potential cause of action in any case in which the defendant's negligent conduct decreased the plaintiff's chance of recovery from a preexisting condition. Thus, the loss of chance doctrine gives a cause of action to the hypothetical plaintiff whose doctor's negligence decreased her likelihood of survival from thirty-five percent to twenty percent.

Although advocates of the doctrine agree that lost chance cases demand compensation, they disagree as to the theoretical basis for allowing lost chance claims to proceed.[11] Disagreement about the nature of the compensable injury in a lost chance case spills over into confusion about how to value that injury. Unfortunately, the considerable attention that the loss of chance doctrine has generated among academic commentators[12] and in the courts[13] has

9. *See* Herskovits v. Group Health Coop., 664 P.2d 474, 486 (Wash. 1983) (Pearson, J., concurring) (arguing that awarding damages for the lost opportunity to recover promotes the deterrence objective); Beth Clemens Boggs, *Lost Chance of Survival Doctrine: Should the Courts Ever Tinker with Chance?*, 16 S. ILL. U. L.J. 421, 440-44 (1992) (evaluating the effectiveness of various approaches to loss of chance cases in meeting the deterrence and compensation objectives); Joseph H. King, Jr., *Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences*, 90 YALE L.J. 1353, 1377 (1981) (arguing that denying compensation in such cases "subverts the deterrence objectives of tort law by denying recovery for the effects of conduct that causes statistically demonstrable losses").

10. Observers commonly trace the origin of the loss of chance doctrine to Professor King's widely cited 1981 article promoting its adoption. *See generally* King, *supra* note 9. In fact, Professor King drew many of his ideas from a 1978 article in the *Personal Injury Annual*. *See* Leon L. Wolfstone & Thomas J. Wolfstone, *Recovery of Damages for the Loss of a Chance*, *in* PERSONAL INJURY ANNUAL — 1978, at 744 (1978). Since the landmark Washington Supreme Court case of *Herskovits v. Group Health Cooperative*, 664 P.2d 474 (Wash. 1983), the majority of courts that have considered the issue of whether to adopt the loss of chance doctrine have decided to allow claims for a lost chance of survival. *See* Hodson, *supra* note 3, at 34-48 (listing 24 states as having adopted the doctrine, 12 as having rejected the doctrine, and 4 as having conflicting case law on the issue); *see also* Robert A. Reisig, Jr., Note, *The Loss of a Chance Theory in Medical Malpractice Cases: An Overview*, 13 AM. J. TRIAL ADVOC. 1163, 1170 (1990) (citing cases from state courts in 20 states and federal courts in 5 additional states in which courts adopted the doctrine). *But see* Bryson B. Moore, Note, *South Carolina Rejects the Lost Chance Doctrine*, 48 S.C. L. REV. 201, app. A at 216-18 (1996) (classifying 16 states as having adopted some form of the doctrine and 18 as not adopting the doctrine).

11. *See infra* notes 18-27 and accompanying text (discussing the "causation approach" and "damages approach" to the doctrine).

12. *See, e.g.*, Boggs, *supra* note 9; King, *supra* note 9; Vern R. Walker, *Direct Inference in the Lost Chance Cases: Factfinding Constraints Under Minimal Fairness to Parties*, 23 HOFSTRA L. REV. 247 (1994); Moore, *supra* note 10.

13. *Compare, e.g.*, Waffen v. United States Dept. of Health & Human Servs., 799 F.2d 911 (4th Cir. 1986) (holding that Maryland law recognizes a cause of action for loss of chance) *and* Falcon v. Memorial Hosp., 462 N.W.2d 44 (Mich. 1990) (recognizing a loss of chance doctrine under Michigan law) *and* McKellips v. St. Francis Hosp., Inc., 741 P.2d 467 (Okla. 1987) (recognizing a loss of chance doctrine under Oklahoma law) *with, e.g.*, Dumas v.

served only to perpetuate rather than alleviate this doctrinal confusion. These courts and commentators have focused almost exclusively on the issue of whether jurisdictions should adopt the lost chance doctrine,[14] while largely ignoring the equally important issue of how courts in jurisdictions that have adopted the doctrine should determine the appropriate compensation in a particular case.[15] Proponents of the doctrine have proffered arguments for *why* the law should compensate plaintiffs in lost chance cases without addressing *what* the compensation should be.

For example, proponents argue that denying compensation to plaintiffs in lost chance cases would allow tortfeasors to avoid responsibility for the consequences of their tortious conduct.[16] Without further elaboration as to the injury being compensated, however, this argument begs the question it purports to answer. That is, *negligent* conduct is not always *tortious* conduct; an act gives rise to liability only to the extent that it causes an injury.[17] Until proponents of the loss of chance doctrine identify the injury suffered as a result of the negligent conduct, it is not at all clear that the defendant has in fact "avoided" liability for her conduct, because it is not clear that such conduct was tortious.

This Note seeks to define precisely the tort injury in lost chance cases and to ascertain the proper method for measuring the damages associated with that injury. Part I defines the types of losses that constitute the tort injury in lost chance cases and argues that

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Cooney, 1 Cal. Rptr. 2d 584 (Ct. App. 1991) (refusing to recognize a loss of chance doctrine under California law) *and* Gooding v. University Hosp. Bldg., Inc., 445 So. 2d 1015 (Fla. 1984) (refusing to recognize a loss of chance doctrine under Florida law).

14. *See, e.g.,* sources cited *supra* notes 9, 12, & 13.

15. *See* Smith v. State Dept. of Health & Hosps., 676 So. 2d 543, 547 n.8 (La. 1996) ("While the loss of a chance of survival doctrine has spawned a plethora of commentary and has been recognized by a majority of the states, little attention has been given to the complex issue we focus on today of the appropriate methodology for calculating the value of the loss of a chance of survival." (citations omitted)); Nancy Levit, *Ethereal Torts,* 61 GEO. WASH. L. REV. 136, 173 (1992) ("Many of the courts that presently do allow [recovery for loss of chance] are vague or silent about the nature of the value that is lost, and simply rely on prior precedents as justification.").

In a sense, this Note inverts the standard analysis of the loss of chance doctrine by identifying the cognizable injury in lost chance cases and determining how it should be compensated without first inquiring whether it should be compensated. This Note does not address directly the latter question of whether courts should adopt the loss of chance doctrine. Yet insofar as it demonstrates that the compensable injury in a lost chance case is cognizable under the same principles of causation as are employed in a traditional tort case, *see infra* section I.A, this Note's analysis arguably obviates the need to justify further the compensation of lost chance claims. *Cf.* 1 DAN B. DOBBS, LAW OF REMEDIES § 1.7, at 28 (2d ed. 1993) ("The [traditional] scheme of analysis . . . works when we have a clear conception of the plaintiff's right and want to know what the remedy is. Sometimes, however, the process is reversed and we know what the right is only because we see it exemplified in the remedy.").

16. *See* Herskovits v. Group Health Coop., 664 P.2d 474, 477 (Wash. 1983); Wolfstone & Wolfstone, *supra* note 10, at 762.

17. *See infra* note 19 and accompanying text.

courts have, for the most part, failed to identify these losses properly. For this reason, they have failed to measure damages in a way that accurately compensates for these losses. Part II advocates a method of damages determination that relies on direct assessment of the tort injury by the factfinder, informed by a clear understanding of the distinct tort injury at issue and by the guidance traditionally offered by the judge's instructions. In advancing such a formulation, Part II criticizes two alternative methods of damage valuation. This Note concludes that the loss of chance doctrine can achieve legitimacy as a valid extension — rather than an ill-fitting alteration — of traditional principles of tort law only by defining in precise terms the losses that constitute the tort injury in lost chance cases and by allowing juries the discretion to assess the value of those losses without undue constraints.

I. Conceptualizing the Tort Injury in Lost Chance Cases

Neither judges nor juries can accurately measure damages in lost chance cases without an adequate conceptualization of the precise nature of the injury they are compensating. A judge must have a clear vision of the nature of the injury so that she can rule on evidentiary matters, properly instruct the jury in its deliberations, and subsequently evaluate the validity of the jury's verdict. A jury must understand thoroughly the nature of the injury if it is to determine accurately whether the injury has occurred and, if it finds that such injury has occurred, to measure accurately the loss that the plaintiff has suffered.

This Part conceptualizes the harm suffered in a lost chance case in order to enable the development of a framework for measuring the damages associated with such harm. Section I.A addresses the antecedent issue of distinguishing the compensable losses from the noncompensable losses — an area of particular confusion to courts and commentators. It concludes that the plaintiff's tort "injury" in a lost chance case is actually an amalgamation of losses, all directly related to the plaintiff's deprivation of an opportunity for a better result. Section I.B identifies the types of compensable losses that arise in lost chance cases and describes the case-specific, fact-intensive inquiry necessary to identify, first, which of these losses are present and, second, which of the losses that are present have occurred as a consequence of the defendant's negligent conduct — which of these harms make up the tort injury in a given case.

A. *Distinguishing the Tort Injury from the Underlying Injury*

The coexistence of multiple injuries — some of which the defendant's negligence proximately caused and some of which are at-

tributable to the preexisting condition — makes identification of the lost chance tort injury particularly difficult. The fact that courts have adopted two competing premises for compensating lost chance plaintiffs — the *causation approach* and the *damages approach* — further confuses this task, because a court's rationale for compensating lost chance plaintiffs affects how it conceptualizes the plaintiff's tort injury. This section argues that the damages approach properly focuses on those portions of the plaintiff's losses that the defendant's negligence proximately caused. It then distinguishes these losses from the losses resulting from the underlying condition and asserts that only the former constitute the compensable tort injury in lost chance cases.

The loss of chance doctrine represents a departure from traditional tort doctrine.[18] There has been considerable dispute, however, as to the precise nature and extent of this departure. Because the loss of chance doctrine allows a legal claim in cases in which the plaintiff cannot prove that the defendant more likely than not caused the plaintiff's ultimate failure to recover, some courts and commentators conceptualize the doctrine as an exception to the "basic rule of legal cause," which holds that "[a] negligent actor is legally responsible for that harm, and only that harm, of which his negligence is a cause in fact."[19] Courts employing this causation approach[20] to the loss of chance doctrine award compensation to lost chance plaintiffs on the ground that the lost chance factual scenario necessitates a relaxation of the traditional requirement of proximate causation.[21] In other words, adherents of the causation approach sacrifice tort law's usual means of establishing liability — the demonstration of a clear causal nexus between negligent act and harmful result — in order to vindicate fairness values.[22]

An alternative approach to the doctrine, the damages approach,[23] conceives of the loss of chance doctrine differently, and in doing so avoids the need to carve out an exception from the traditional causation standard. According to the damages approach, the loss of chance cause of action does not depend on a relaxation of

18. *See supra* notes 9-10 and accompanying text.

19. ROBERT E. KEETON, LEGAL CAUSE IN THE LAW OF TORTS 4 (1963) (emphasis omitted).

20. *See* Cooper v. Hartman, 533 A.2d 1294, 1297 (Md. 1987).

21. *See* Robert S. Bruer, Note, *Loss of a Chance as a Cause of Action in Medical Malpractice Cases:* Wollen v. DePaul Health Center, 59 MO. L. REV. 969, 983 (1994); Reisig, *supra* note 10, at 1171.

22. In awarding compensation for the plaintiff's entire loss, the causation approach successfully avoids the difficult issues involved in valuing the tort injury — but only by overextending the scope of the defendant's liability to reach losses that the defendant's negligence did not cause. *See infra* text accompanying notes 71-74 (criticizing the practice of awarding full damages in loss of chance cases).

23. *See Hartman*, 533 A.2d at 1297.

the causation standard, but on a clarification of the injury for which the plaintiff seeks compensation.[24] Courts adopting this approach hold that the plaintiff may sue only for the harms specifically attributable to her lost chance of recovering from the condition, and not for the harms that were as likely, or more likely, caused by the condition itself.[25] This separate cognizable injury is distinct from the plaintiff's ultimate failure to recover,[26] for which the preexisting condition is by definition the legal cause in a case involving the loss of chance doctrine.[27]

Lost chance cases thus involve two injuries:[28] the *underlying injury*[29] caused by the preexisting condition and the *tort injury* caused by the loss of a chance to recover from the preexisting condition.[30] The coexistence of these two distinct, yet closely related, injuries exacerbates the difficulty of the court's task beyond that of the typical negligence case. Courts in these cases must distinguish carefully the losses associated with the tort injury from the losses associated with the plaintiff's underlying injury.[31] This distinction, however, eludes many courts.[32]

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24. *See* 533 A.2d at 1297.

25. *See* 533 A.2d at 1297.

26. *See* Reisig, *supra* note 10, at 1170-71.

27. *See* Falcon v. Memorial Hosp., 462 N.W.2d 44, 52 (Mich. 1990); Herskovits v. Group Health Coop., 664 P.2d 474, 481 (Wash. 1983) (Pearson, J., concurring).

28. The underlying injury is always present in cases to which the loss of chance doctrine applies; the plaintiff alleges, but may or may not be able to prove in a particular case, also to have suffered the tort injury.

29. In addition to the ultimate harm, *see infra* text accompanying note 33, of which the preexisting condition is the clear but-for cause, the underlying injury consists of a set of physical, emotional, and consequential damages separate from those caused by the loss of chance, *cf. infra* note 43 (discussing the physical, emotional, and consequential losses associated with the lost chance). The set of injuries that the preexisting condition caused are not compensable, while the set of injuries that the loss of chance caused are compensable.

30. As noted above, although the loss of chance potentially also bears some causal relation to the plaintiff's ultimate failure to recover, by definition, the lost chance is not a *but-for* — a more-likely-than-not — cause of her failure to recover; otherwise, the case would be a straightforward tort claim. Even so, most courts identify the tort injury in terms of its potential relationship to the failure to recover. *See, e.g., infra* note 76 (criticizing the proportional valuation method of damages assessment as making such a mistake). As the balance of this section argues, that nebulous relationship need not and should not be the basis for compensation in a lost chance case. Rather, courts should compensate lost chance plaintiffs for a loss solely on the same basis as in any other tort case — the plaintiff's ability to demonstrate, first, that the plaintiff has suffered the loss and, second, that the defendant's negligence proximately caused the loss.

31. *See* Delaney v. Cade, 873 P.2d 175, 186 (Kan. 1994) ("[T]he damages recoverable [in a lost chance case] should be limited to the amount attributable to the lost or reduced chance itself and not the total damages, which would include those resulting from the preexisting condition."); *see also* Levit, *supra* note 15, at 155 (observing that the central premise of the loss of chance doctrine is that "[c]ourts permit plaintiffs to sue for the lost possibility of improvement, rather than for the defendant's contribution to or enhancement of the plaintiff's illness or injury").

32. For example, some courts award plaintiffs in lost chance cases the full value of the losses that both injuries caused, rather than limiting the damages award to the loss that the

Just as with any other tort case, the tort injury in a lost chance case is the set of harms for which the plaintiff can show that the defendant's negligence was a but-for cause. This injury does not include compensating for the possibility that the defendant's negligence caused the *ultimate harm* — usually, but not always, death[33] — resulting from the plaintiff's failure to recover. The fact that *both* the preexisting condition and the lost chance of recovery may have contributed to a plaintiff's failure to recover does not logically entail that the underlying injury and the tort injury are indistinguishable. The fact that multiple potential causes — including the defendant's negligence — may exist for those harms associated with the underlying injury does not mean that the usual, straightforward, "more likely than not" test for causation should not apply. Neither does it provide an excuse for courts to aggregate all the plaintiff's harms and apportion liability based on some overall percentage likelihood of causation.[34]

Many courts obscure the distinction between the tort injury and the ultimate harm by requiring that the plaintiff must actually have suffered the ultimate harm before seeking damages for the loss of the chance of recovery.[35] These courts worry that if the tort injury is truly distinct from the underlying injury, then no principled basis appears to exist for limiting liability to those cases in which the preexisting condition develops into physical loss; the chance has been lost regardless of whether the plaintiff recovers from the preexisting condition. In the course of an opinion declining to adopt the loss of chance doctrine, the Maryland Court of Appeals noted this problem: "If courts are going to allow damages solely for the loss of chance of survival, logically there ought to be recovery for loss of chance regardless of whether the patient succumbs to the unrelated pre-existing medical problem or miraculously recovers despite the

lost probability of recovery caused. *See, e.g.,* Thompson v. Sun City Community Hosp., 688 P.2d 605, 615-16 (Ariz. 1984); Kallenberg v. Beth Israel Hosp., 357 N.Y.S.2d 508, 510-11 (App. Div. 1974), *affd.,* 374 N.Y.S.2d 615 (1975); *see also infra* text accompanying notes 71-74 (criticizing this approach). The causation approach to the loss of chance doctrine perpetuates this problem by framing the loss of chance simply as an exception to conventional principles of causation. The damages approach, on the other hand, properly distinguishes between the tort injury and the underlying injury. *See supra* notes 18-27 and accompanying text (discussing the causation and damages approaches). This Note therefore advocates the damages approach.

Even among those courts that purport to recognize the distinction between the tort injury and the underlying injury, many that apply the proportional valuation method do so in a way that exhibits a failure to discriminate adequately between the two injuries. *See infra* text accompanying notes 75-79.

33. *See supra* note 6 (noting the possibility of ultimate harms other than death).

34. *Cf. infra* section II.A (criticizing the proportional valuation method of assessing damages in lost chance cases for taking such an approach).

35. *See* Fennell v. Southern Md. Hosp. Ctr., Inc., 580 A.2d 206, 213 (Md. 1990) ("Loss of chance of survival in itself is not compensable unless and until death ensues.").

negligence and unfavorable odds."[36] Based on this perceived fundamental weakness in the doctrine — its apparent application even in cases in which the plaintiff experiences no ultimate harm — these courts deny *any* compensation in lost chance cases.

In doing so, these courts commit precisely the conceptual error noted above. They fail to recognize that the reduced probability of recovering from the preexisting condition — the lost chance itself — is not the tort injury. Rather, the tort injury in a lost chance case is the set of harms that proximately result from the loss of the chance. The lost chance plaintiff's claim to damages for a tort injury therefore is contingent not just on her lost chance of survival but also on her ability to show damages resulting from the loss of the chance.[37] The plaintiff's ability to show damages will hinge on the occurrence of the ultimate harm — her ultimate recovery or failure to recover from the preexisting condition — only to the extent, if any, that it reflects the existence or nonexistence of these losses.

If the plaintiff has suffered no ultimate harm, the claim is not a claim under the lost chance doctrine but a typical medical malpractice claim. For example, a plaintiff may well recover from the preexisting condition but require additional medical care, or experience additional pain due to her doctor's negligently delayed diagnosis. Such a plaintiff has suffered no ultimate harm but clearly has suffered a tort injury. Indeed, this tort injury resembles the injury in a conventional medical malpractice case.

Yet, an opponent might argue, if the lost chance doctrine does *not* limit liability to cases in which the mere likelihood that the plaintiff will fail to recover develops into an actual failure to recover, then the doctrine threatens to become indistinguishable from a claim for compensation for an as-yet unmanifested injury. Courts have looked upon such risk-based compensation claims with considerably less favor than the loss of chance doctrine.[38] They have refused to recognize a cause of action for increased risk primarily on the ground that the law can best compensate plaintiffs facing possible future harm by waiting to see if the harm materializes and then allowing the plaintiff to bring a claim if and when the harm does

36. *Fennell*, 580 A.2d at 213.

37. *Cf. infra* section I.B (describing the physical, emotional, and consequential losses that the lost chance can cause).

38. *See* 2 DOBBS, *supra* note 15, § 8.1(7), at 410 (noting that courts usually have denied compensation to plaintiffs pursuing claims for enhanced risk); Terry Morehead Dworkin, *Fear of Disease and Delayed Manifestation Injuries: A Solution or a Pandora's Box?*, 53 FORDHAM L. REV. 527, 527 (1984) (same); Fournier J. Gale III & James L. Goyer III, *Recovery for Cancerphobia and Increased Risk of Cancer*, 15 CUMB. L. REV. 723, 736-41 (1985) (same). Unlike the increased-risk claim, which looks to the possibility of future injury, the loss of chance claim is based entirely on an injury that has already occurred.

materialize.[39] No such future cause of action, however, is available to the plaintiff asserting a loss of chance claim. The loss of chance doctrine does not enable a plaintiff to sue based on the chance of incurring a future ultimate harm; she will not have a cause of action based on the ultimate harm even after it occurs. Unlike the increased-risk claim, which seeks compensation for the possibility that an as-yet unmanifested injury will occur in the future, the harm in a lost chance case already has materialized; all the losses that the lost chance plaintiff will suffer either have occurred or will occur by the time the case comes before a court.[40]

In sum, every loss of chance case involves a defendant whose negligent behavior increased the likelihood that a plaintiff suffering from some preexisting condition would fail to recover from the condition — that is, would suffer some ultimate harm. The loss of chance doctrine applies to those cases in which the plaintiff suffers the ultimate harm but cannot show that the defendant's negligence — as opposed to the preexisting condition — was the proximate cause of the ultimate harm. The ultimate harm is therefore ancillary to the plaintiff's claim for compensation. But whether or not the plaintiff has suffered the ultimate harm, the defendant's negligence may have caused other losses for the plaintiff. It is these losses, for which the plaintiff *can* demonstrate that the defendant's negligence was the proximate cause, that form the tort injury.

B. *Identifying the Consequences of the Defendant's Negligence*

A defendant doctor whose negligent misdiagnosis deprives a plaintiff of a chance to recover from a preexisting condition potentially has caused several different types of compensable harms. Five categories of harm potentially occur in a lost chance case: the ultimate harm, the lost chance of survival itself, increased physical pain and other physical losses,[41] emotional losses, and consequential damages such as additional medical costs.[42] A prevailing plaintiff in a case invoking the lost chance doctrine by definition has suffered from the first two types of injury — the ultimate harm and the lost chance — but neither of these injuries is compensable.[43] Some

39. *See* 2 DOBBS, *supra* note 15, § 8.1(7), at 410.

40. *See id.*

41. For example, a doctor's failure to diagnose or treat a patient's breast cancer in a timely manner may result in progression of the cancer to the point where a mastectomy rather than radiation therapy is needed to treat the cancer.

42. *See* Allen E. Shoenberger, *Medical Malpractice Injury: Causation and Valuation of the Loss of a Chance to Survive*, 6 J. LEGAL MED. 51, 69 (1985).

43. As previously discussed, the ultimate harm is *not* compensable under a loss of chance claim. *See supra* section I.A. This Note takes the position that the lost chance also is *not* compensable in and of itself; courts should compensate only the identifiable loss to the plaintiff caused by the lost chance, rather than the lost chance itself. *Cf.* Werner v. Blankfort, 42 Cal. Rptr. 2d 229, 234-36 (Ct. App. 1995) (distinguishing between lost chance cases that do

combination of the remaining three categories of losses forms the tort injury in a particular lost chance case.

At its core, the task of identifying the tort injury in a lost chance case therefore involves determining, first, which of these types of loss the plaintiff has suffered and, second, which of these demonstrated losses the defendant's negligence proximately caused. This requires a highly case-specific and fact-intensive inquiry.[44] The opinions in two cases, *James v. United States*[45] and *Evers v. Dollinger,*[46] illustrate quite effectively the three categories of loss suffered in typical lost chance cases — physical, emotional, and consequential — and how these losses are distinct from the underlying injury. *James* and *Evers* exemplify the careful analysis that courts applying the lost chance doctrine must adopt; they stand in marked contrast to the muddled and truncated analyses that dominate most judicial examinations of tort injury.[47] The two cases involved very similar factual scenarios. The plaintiffs, William James and Merle Evers, both received medical examinations from doctors who negligently failed to discover cancerous tumors developing inside their bodies, thus delaying medical treatment to treat the tumors.[48]

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not seek direct compensation for the lost chance of recovery, which are cognizable under "established principles of causation," and those that seek direct compensation for the lost chance). These losses will fall into one of the three remaining categories of injury — physical, emotional, or consequential.

44. *See* Shoenberger, *supra* note 42, at 69 (asserting that proper analysis of a lost chance case requires "finer discrimination with respect to causation, allowing close examination of the question, 'causation of what?' "). Although any tort case involves a case-specific inquiry into the facts of the case, the need for such an inquiry is particularly acute in the lost chance context, in which the coexistence of, and close relationship between, the compensable tort injury and the preexisting condition exacerbate the difficulty of the factfinder's causation inquiry.

45. 483 F. Supp. 581 (N.D. Cal. 1980).

46. 471 A.2d 405 (N.J. 1984).

47. *See, e.g.,* Mays v. United States, 608 F. Supp. 1476, 1482-83 (D. Colo. 1985) (applying, without explanation, the proportional valuation method to the net pecuniary losses suffered by the plaintiff but not to damages arising out of loss of consortium, although both similarly arose out of the death of plaintiff's decedent); Polischeck v. United States, 535 F. Supp. 1261, 1266 (E.D. Pa. 1982) (applying proportional valuation to adjust the life expectancy, rather than to determine the overall damages — much less the particular damages resulting from the loss of chance — of the plaintiff's decedent); Gordon v. Willis Knighton Med. Ctr., 661 So. 2d 991, 1000-01 (La. Ct. App. 1995) (applying the loss of chance doctrine even after noting that the evidence established that the defendant's negligence more likely than not killed the plaintiff's decedent).

48. The federal district court in *James* applied California law to a Federal Tort Claims Act action arising out of a negligently delayed cancer diagnosis. Due to a clerical error, the preemployment physical examination of James, a naval shipyard worker, failed to identify that James was suffering from lung cancer. Approximately two years later, after James began experiencing chest pains, shortness of breath, and coughing, his personal physician discovered the tumor in his lung. By this time, however, the tumor had become inoperable. After radiation therapy, James's cancer went into remission. *See* 483 F. Supp. at 583. According to James's experts, the government's negligent failure to diagnose his lung cancer resulted in a 10-15% reduction in his probability of surviving five years. *See* 483 F. Supp. at 585. It ap-

Both James and Evers claimed physical losses as components of their lost chance injuries. The *James* court conceptualized James's physical loss as "the loss of the opportunity for earlier and possibly more effective treatment."[49] The *Evers* court similarly described the physical aspect of Evers's tort injury, which involved the exacerbation of her cancer due to Dr. Dollinger's failure to diagnose and commence treatment: "As a proximate result of [the defendant's negligence], the tumor not only remained in her body, it grew in size. Plaintiff was unquestionably more seriously diseased as a result of the growth of the malignancy."[50] Both courts thus correctly limited the plaintiff's compensation for physical loss to the physical harm that the exacerbation of the preexisting condition caused rather than the physical harm that the preexisting condition itself caused.

James and Evers also both claimed that their delayed diagnoses caused them emotional pain and suffering. The *James* court described "the mental anguish from the awareness of th[e] lost opportunity," the damages for which were to be offset by "the psychological benefit from not having known of his cancer [for the two years prior to the delayed diagnosis]."[51] The *Evers* court noted the "anxiety, emotional anguish and mental distress"[52] caused by the defendant's negligent failure to diagnose Evers's cancer and found that "[d]amages for Mrs. Evers'[s] emotional and mental suffering should be awarded upon proof that this distress resulted from defendant's negligent failure to diagnose her tumor and effectuate prompt and proper treatment."[53] As the *Evers* court was careful to note, the mental suffering caused by the preexisting condition — which was not compensable and not part of the tort injury — must be distinguished from the mental suffering caused specifically by the plaintiff's knowledge "that defendant's delay in her treatment

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pears from the opinion that James's cancer had become conclusively terminal at the time the court decided the case.

Evers arose out of the delayed diagnosis of Evers's breast cancer. Evers had visited the defendant, Dr. Kenneth Dollinger, after feeling a small lump in her breast. Dollinger assured Evers that the lump was not of concern. *See* 471 A.2d at 407. After noticing that the lump was increasing in size and growing increasingly painful, Evers again visited Dr. Dollinger's office but again was told that the lump was not cancerous. *See* 471 A.2d at 407. Unsatisfied with the diagnosis, Evers consulted another doctor, who diagnosed her breast cancer and performed a mastectomy. *See* 471 A.2d at 407. Evers's cancer was subsequently found to have spread to her lungs and become terminal. *See* 471 A.2d at 407-08.

49. *James*, 483 F. Supp. at 587.

50. *Evers*, 471 A.2d at 410 (footnotes omitted).

51. *James*, 483 F. Supp. at 587-88.

52. *Evers*, 471 A.2d at 410.

53. *Evers*, 471 A.2d at 411.

had increased the risk that she would again fall victim, perhaps fatally, to the disease," which was compensable.[54]

With respect to the third type of loss, consequential harm, Evers was more successful in obtaining damages than was James. Evers alleged that the defendant's negligently delayed diagnosis had resulted in additional medical costs.[55] In analyzing Evers's claim, the *Evers* court was careful to exclude the medical costs that would have occurred even in the absence of Dr. Dollinger's negligence, noting that Evers had not claimed "that absent the seven months delay in diagnosis the mastectomy would not have been required."[56] Because Evers's cancer would have required a mastectomy even if the defendant had not failed to diagnose it during his examinations of Evers, Evers had no claim for the medical expenses or physical pain and suffering resulting from the mastectomy. James, on the other hand, did not claim additional medical expenses, but he did ask for other consequential damages. The *James* court, however, properly refused to award James damages for lost earnings from his employment or to award his wife damages for loss of support and loss of consortium, as it found that the underlying cancer, rather than the exacerbation of James's condition due to the government's delayed diagnosis, caused those elements of the James' loss.[57]

In sum, the losses that comprise the tort injury in a lost chance case fall into three broad categories: physical, emotional, and consequential. Identifying the tort injury requires the factfinder not only to ascertain what losses the plaintiff has suffered, but also to exclude carefully the losses associated with the underlying injury rather than the tort injury. As *James* and *Evers* demonstrate, the lost chance tort injury may involve different sets of losses even in similar cases. Identification of the tort injury thus necessitates careful case-by-case analysis.

II. Valuing Damages to Compensate the Lost Chance Tort Injury

Identification of the tort injury is a necessary, but not sufficient, step in the process of clarifying the loss of chance doctrine's application; the doctrine must also articulate a method for translating the identified injury into monetary damages. Professor King defined valuation as "the process of identifying and measuring the loss

54. *Evers*, 471 A.2d at 409. Not surprisingly, Evers testified at trial that she carried "anger and hostility towards defendant after her tumor was finally diagnosed." 471 A.2d at 411.

55. *See Evers*, 471 A.2d at 408.

56. *Evers*, 471 A.2d at 408.

57. *See* James v. United States, 483 F. Supp. 581, 588 (N.D. Cal. 1980). The court did not articulate the basis for this finding.

that was caused by the tortious conduct."[58] Nonpecuniary losses such as those involved in a loss of chance injury are notoriously difficult to measure.[59] Furthermore, because the loss suffered in a lost chance case is conceptually more complex than the standard tort injury, "[t]he acceptance of the loss of a chance theory raises unique issues in the area of damage recovery."[60] To state what may — or should — be obvious, the key criterion in choosing a method of valuing the tort injury must be the degree to which the result obtained by applying the valuation method corresponds with the actual loss caused by the injury to be compensated.[61]

Courts have followed three distinct approaches to valuing damages in lost chance cases.[62] The *discretionary valuation* method gives the factfinder discretion to assess damages based on its evaluation of all the relevant evidence.[63] Courts applying discretionary

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58. King, *supra* note 9, at 1354.

59. *See* Mark Geistfeld, *Placing a Price on Pain and Suffering: A Method for Helping Juries Determine Tort Damages for Nonmonetary Injuries,* 83 CAL. L. REV. 773, 778-79 (1995) ("The problem is that there is no obvious relationship between money and a nonmonetary injury. Consequently, different ways of conceptualizing how these damages should be determined could yield significantly different damages awards.").

60. Reisig, *supra* note 10, at 1182.

The persistence of the fundamentally flawed causation approach to the doctrine, *see supra* notes 18-27 and accompanying text, further increases the difficulty of correctly valuing the tort injury in lost chance cases. *Kallenberg v. Beth Israel Hospital,* 357 N.Y.S.2d 508, 510-11 (App. Div. 1974), *affd.,* 374 N.Y.S.2d 615 (1975), aptly illustrates how a court's conceptualization of the tort injury can affect how it decides to value the plaintiff's loss. In *Kallenberg,* the defendant hospital's staff negligently failed to administer a drug needed to reduce the plaintiff's blood pressure that would have allowed her to be operated upon for a cerebral aneurysm. *See* 357 N.Y.S.2d at 509. According to the plaintiff's expert, had the defendants administered the medication to Kallenberg and subsequently operated upon her, she would have had a 20-40% chance of survival. *See* 357 N.Y.S.2d at 510. Adopting the causation approach, the court held that the lost chance of survival was sufficient to allow the jury to find that the hospital's negligence had caused Kallenberg's death. *See* 357 N.Y.S.2d at 511. The *Kallenberg* court conceptualized Kallenberg's lost chance of survival as an issue of proof of proximate causation in a wrongful death action, rather than as an injury distinct from her death. Because Kallenberg had only a 20-40% chance of survival even in the absence of the defendant hospital's negligence, the hospital's negligence was not a but-for cause of Kallenberg's death, and the hospital therefore should not have been held liable for a full wrongful death award. In awarding damages to compensate for Kallenberg's ultimate harm, the court violated the fundamental principle of causation in tort law by extending the defendant's liability beyond the injury resulting from its negligence. *See supra* note 19 and accompanying text. As a result, the court upheld the jury's damages award for the full value of Kallenberg's ultimate harm — in this case, her death.

61. Judge McAuliffe of the Maryland Court of Appeals, concurring in *Fennell v. Southern Maryland Hospital Center, Inc.,* 580 A.2d 206, 216 (Md. 1990) (McAuliffe, J., concurring), cogently identified the objective of the process of evaluating damages in lost chance cases: "[R]ecovery should be based on recognition that deprivation of a substantial chance of survival is, in itself, a loss that can be valued and compensated. The damages that should be allowed ought to, as closely as possible, match the value of what has been lost."

62. *See* Borgren v. United States, 723 F. Supp. 581, 582 (D. Kan. 1989); Boody v. United States, 706 F. Supp. 1458, 1465 (D. Kan. 1989); DeBurkarte v. Louvar, 393 N.W.2d 131, 137 (Iowa 1986); King, *supra* note 9, at 1381-82.

63. *See, e.g., Borgren,* 723 F. Supp. at 582; James v. United States, 483 F. Supp. 581, 586 (N.D. Cal. 1980); *DeBurkarte,* 393 N.W.2d at 137. In a recent opinion in which it adopted the

valuation guide the factfinder's inquiry with instructions that identify the nature of the tort injury in a lost chance case and that emphasize the proof of causation required for each loss for which the plaintiff is to be compensated.[64] *Proportional valuation,* the method that the majority of courts have adopted, values lost chance damages by multiplying the percentage reduction in the chance of recovery by the total value of the loss the plaintiff suffered — the tort injury and the underlying injury combined.[65] Proportional valuation thus limits the factfinder's role in valuing damages to determining the percentage reduction in the plaintiff's chance of recovery and the value of the plaintiff's total loss. The *full damages* approach awards damages to lost chance plaintiffs for all of their losses, whether caused by the preexisting condition or by the lost chance, and without regard to the magnitude of the reduction in probability of recovery that the defendant's negligence caused.[66]

This Part argues that the discretionary valuation method is the most accurate and precise of these three approaches in assessing the

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discretionary method, the Louisiana Supreme Court described the nature of the inquiry to be undertaken by a factfinder applying discretionary valuation:

> Evidence of loss of support, loss of love and affection and other wrongful death damages is relevant, but not mathematically determinative, in loss of a chance of survival cases, as is evidence of the percentage chance of survival at the time of the malpractice. The plaintiff may also present evidence of, and argue, other factors to the jury, such as that a ten percent chance of survival may be more significant when reduced from ten percent to zero than when reduced from forty to thirty percent. The jury may also consider such factors as that the victim, although not likely to survive, would have lived longer but for the malpractice.

Smith v. State Dept. of Health & Hosps., 676 So. 2d 543, 549 n.10 (La. 1996).

64. Effective jury instructions implementing the discretionary valuation approach therefore should instruct the jury to award damages only for those physical, emotional, and consequential losses that the plaintiff has shown to have proximately resulted from the defendant's negligently delayed diagnosis. The instructions should remind the jury carefully to segregate the underlying and tort injuries and to deny compensation for any losses that the plaintiff's preexisting condition, rather than the defendant's negligence, caused.

65. *See, e.g.,* Delaney v. Cade, 873 P.2d 175, 187 (Kan. 1994); Falcon v. Memorial Hosp., 462 N.W.2d 44, 52-57 (Mich. 1990); McKellips v. Saint Francis Hosp., Inc., 741 P.2d 467, 476-77 (Okla. 1987); *see also* Reisig, *supra* note 10, at 1184. The proportional valuation method is also known as the "pure chance" or "percentage apportionment" method. *See Boody,* 706 F. Supp. at 1465.

In a passage that courts have quoted widely, *see, e.g.,* Borkowski v. Sacheti, 682 A.2d 1095, 1101 (Conn. App. Ct. 1996); *Smith,* 676 So. 2d at 551; Kramer v. Lewisville Meml. Hosp., 858 S.W.2d 397, 402 (Tex. 1993), Professor King described the application of his proportional valuation approach in a hypothetical case:

> [C]onsider a patient who suffers a heart attack and dies as a result. Assume that the defendant-physician negligently misdiagnosed the patient's condition, but that the patient would have had only a 40% chance of survival even with a timely diagnosis and proper care. . . . Under the [proportional valuation method], the plaintiff's compensation for the loss of the victim's chance of surviving the heart attack would be 40% of the compensable value of the victim's life had he survived . . . .

King, *supra* note 9, at 1382.

66. *See* Thompson v. Sun City Community Hosp., 688 P.2d 605, 615-16 (Ariz. 1984) (en banc); Kallenberg v. Beth Israel Hosp., 357 N.Y.S.2d 508, 510-11 (App. Div. 1974), *affd.,* 374 N.Y.S.2d 615 (1975).

lost chance tort injury. Section II.A contends that discretionary valuation allows factfinders to tailor the damages award to the actual losses arising out of the tort injury and that the proportional valuation and full damages methods do not. Section II.B highlights other strengths of the discretionary method and shows how it avoids the problems that arise under other methods.

A. *Conceptual Nexus to the Tort Injury*

As the purpose of valuation is to "measur[e] the loss that was caused by the tortious conduct,"[67] the most important attribute of a method of valuing damages is the degree to which it correctly reflects the value of the plaintiff's compensable harm. Because courts and commentators have failed to analyze carefully the nature of the compensable harm in a lost chance case,[68] they also have not assessed the degree to which each of the three valuation methods reflects the value of the lost chance plaintiff's compensable harm. This section applies the framework developed in Part I to analyze the degree to which the damages calculations of the discretionary valuation, full damages, and proportional valuation methods reflect a lost chance plaintiff's compensable harms.

The discretionary valuation method, if implemented with carefully worded jury instructions, carries the best chance for accurately valuing the plaintiff's tort injury. The inherent flexibility of discretionary valuation, coupled with its focus on causation, allows the jury to consider all relevant evidence and make specific findings with respect to each element of damages for which the plaintiff claims a right to compensation. Guided by instructions that highlight the distinction between the lost chance tort injury and the underlying injury,[69] the factfinder can isolate those losses that the defendant's negligence caused and compensate the plaintiff for

67. King, *supra* note 9, at 1354.

68. *See supra* notes 12-15 and accompanying text.

69. Although many observers have questioned the effectiveness of pattern jury instructions in guiding juries, *see, e.g.*, AMIRAM ELWORK ET AL., MAKING JURY INSTRUCTIONS UNDERSTANDABLE 1-24 (1982) (reviewing "empirical evidence which demonstrates that many of the jury instructions that are presently used around the country are incomprehensible to the average juror"), research suggests that carefully worded instructions can increase significantly juries' comprehension of instructions, *see, e.g., id.* at 71 (asserting that "in most instances [instructions developed using the authors' method] should ensure that jurors have a sufficient comprehension of the laws they are supposed to apply"); Jamison Wilcox, *The Craft of Drafting Plain-Language Jury Instructions: A Study of a Sample Pattern Instruction on Obscenity*, 59 TEMP. L.Q. 1159, 1162 (1986) (contending that "recent advances can aid the average lawyer or judge to draft and evaluate jury instructions with successful attention to jurors' ability to understand them"). More important for the purposes of this Note, recent empirical evidence "offer[s] a significant challenge to the argument that legal professionals are more capable and consistent than juries in awarding noneconomic damages." Neil Vidmar & Jeffrey J. Rice, *Assessments of Noneconomic Damage Awards in Medical Negligence: A Comparison of Jurors with Legal Professionals*, 78 IOWA L. REV. 883, 901 (1993).

them. Although the factfinder's discretionary valuation only estimates the value of the tort injury rather than establishing or guaranteeing a particular "correct" result, this is true of any damages calculation in any tort case.[70] Thus, because the discretionary method mandates a case-specific inquiry, the resulting valuation likely will more closely approximate the plaintiff's actual losses than either the full damages or proportional valuation methods.

By contrast, the compensation awarded under the full damages approach does not correspond to the value of the lost chance plaintiff's tort injury — and the absence of any nexus is fatal to the approach's viability as a legitimate measure of damages in a lost chance case. Courts that award the prevailing plaintiff in a lost chance case the full value of all of the plaintiff's losses blatantly disregard the distinction between the tort injury and the ultimate harm.[71] Awarding plaintiffs the full value of all of their losses is "too onerous for defendants . . . [who] should not have to compensate a plaintiff for the percentage of the harm they did not cause or that would have occurred naturally."[72] Furthermore, "[t]o allow full recovery would ignore the claimants' inability to prove by a preponderance of the evidence that the malpractice victim would have survived but for the malpractice, which is a requirement for full recovery."[73] Courts that have allowed full recovery thus have failed to distinguish the tort injury from the underlying injury and have failed to apply the traditional test for causation[74] to the requested relief.

The failure of proportional valuation to value accurately the lost chance tort injury is less obvious. Indeed, courts advocating proportional valuation have claimed that proportional valuation "apportions damages in direct relation to the harm caused . . . [by] neither over compensat[ing] plaintiffs or unfairly burden[ing] defendants with unattributable fault."[75] Proponents of proportional valuation are certainly correct in asserting the superiority of the approach over alternatives that would compensate for the full value of

70. *See* Vidmar & Rice, *supra* note 69, at 900-01.

71. *See* Kevin Joseph Willging, Case Note, Falcon v. Memorial Hospital: *A Rational Approach to Loss-of-Chance Tort Actions,* 9 J. CONTEMP. HEALTH L. & POLY. 545, 553 (1993) (noting that courts presented with lost chance cases sometimes "fail[ ] to properly identify the injury sustained and have resorted to the practice of lowering the standard of proof required to prevail").

72. Boody v. United States, 706 F. Supp. 1458, 1465 (D. Kan. 1989).

73. Smith v. State Dept. of Health & Hosps., 676 So. 2d 543, 547 (La. 1996).

74. Under the traditional test, "[a]n act or an omission is not regarded as a cause of an event if the particular event would have occurred without it." KEETON ET AL., *supra* note 1, § 41, at 265. The loss of chance doctrine applies only to cases in which the preexisting condition, more likely than the defendant's negligence, caused the ultimate harm.

75. *Boody,* 706 F. Supp. at 1466. *But see infra* section II.B.3 (arguing that the proportional valuation method loses much of its precision through problems of misapplication).

the underlying injury or that would deny recovery altogether. But arguments in favor of proportional valuation woefully lack an adequate justification for the position that it accurately compensates the losses arising from a tort injury. Courts adopting proportional valuation have failed to demonstrate why the value of the plaintiff's lost chance of recovery is necessarily equal to some specific percentage of the value of the decedent's life.

One would expect that the value of the lost chance to the defendant would depend at least somewhat on case-specific factors for which the proportional valuation calculation does not account. Proportional valuation looks only to the reduced probability of avoiding injury and the value of the plaintiff's total injury.[76] For example, the proportional valuation method values a loss of a ten-percent chance of recovery equally, regardless of whether the loss of chance reduces the plaintiff's overall chance of recovery from forty percent to thirty percent or from ten percent to zero. The point is not that the plaintiff *must* value the reduction from forty percent to thirty percent differently from the reduction from ten percent to zero, but that the proportional valuation method simply *assumes* the victim attaches equal value to any ten-percent reduction in her chance of recovery — and therefore denies the possibility that the plaintiff does not equate the two reductions.

Furthermore, distinct elements of the tort injury differ fundamentally from the traditional wrongful-death injury upon which the proportional valuation method is based.[77] Consider, for example, emotional distress damages. Both a plaintiff's knowledge that she likely will die from her cancer and her knowledge that her doctor's negligent failure to diagnose the cancer has deprived her of a chance to survive almost certainly cause the plaintiff considerable emotional distress. If the plaintiff cannot show that the doctor's misdiagnosis, rather than the preexisting cancer, caused her failure to recover, then the doctor's liability should be limited to the emotional distress that arose out of the misdiagnosis. But instead of focusing on that emotional distress, proportional valuation values the plaintiff's emotional distress by multiplying the lost chance of survival by the value of the plaintiff's overall emotional distress

76. These factors might fit well within a system that proportionally allocates damages to the multiple potential causes of the plaintiff's underlying injury. Such a system, however, has never been recognized as the basis for allowing a loss of chance claim. Rather, damages awarded under the loss of chance doctrine should reflect the value of the physical, emotional, and consequential losses that the defendant's delayed diagnosis caused. *See supra* section I.B.

77. *Cf. Smith*, 676 So. 2d at 548 ("The lost chance of survival in professional malpractice cases has a value in and of itself that is different from the value of a wrongful death or survival claim.").

arising out of her preexisting condition and her lost chance of survival.

Similarly, medical expenses in a lost chance case should not be awarded based on a percentage of the medical expenses incurred in treating the plaintiff's preexisting condition. Instead, the principle of proximate causation requires that courts should award prevailing lost chance plaintiffs the value of any additional medical expenses incurred as a result of the defendant's negligence. If the defendant's negligence necessitated additional medical treatment,[78] then the defendant should be liable for the expenses associated with that treatment. But these expenses do not automatically equal the value calculated by multiplying the lost chance of recovering by the plaintiff's total medical expenses.[79]

In sum, the discretionary valuation approach exhibits a closer conceptual nexus to the compensable tort injury in a lost chance case than do either the full damages approach or the proportional valuation approach.

B. *Implementation Issues*

The methods of calculating damages in lost chance cases differ markedly in how they are implemented, both in terms of their allocation of responsibility between judge and factfinder and in their amenability to application in a manner consistent with their conceptual framework. This section argues that, in addition to the conceptual advantages of discretionary valuation discussed in section II.A, discretionary valuation reflects a more appropriate balance of responsibilities between the judge and factfinder than does proportional valuation and is less susceptible to problems of misapplication. Section II.B.1 asserts that discretionary valuation appropriately treats the lost chance damages calculation as an issue of fact and that proportional valuation infringes on the traditional domain of the factfinder by imposing a fixed damages calculation. Section II.B.2 examines the amount of guidance provided to the factfinder under discretionary valuation and concludes that, despite the claims of its critics, discretionary valuation provides adequate constraints on the factfinder's discretion. Section II.B.3 contends

78. For example, delayed diagnosis of a patient's cancer may require doctors to attempt surgical removal of a tumor rather than chemotherapy treatment.

79. The additional medical expenses caused by the defendant's negligence may be greater or less than the value calculated from the percentage chance lost and the total medical expenses. As is the case with any of the potential components of tort injury, *see supra* section I.B (describing such components), the defendant's liability should extend only to cover those medical expenses that the plaintiff can prove resulted from the defendant's negligence; if the plaintiff cannot convince the factfinder that the defendant's negligence more likely than not caused an element of damages, then the plaintiff should not recover for those damages.

that courts are unable to implement proportional valuation without sacrificing its conceptual precepts.

1. *Consistency with Traditional Damages Valuation*

Of the methods of calculating damages in lost chance cases, the discretionary method best comports with traditional methods of determining damages. The discretionary method properly recognizes that the assessment of damages in a tort case is, at its core, a factual issue properly left to the jury. Damages in lost chance cases are incapable of — and inappropriate for — resolution by a fixed legal principle other than the traditional requirement of causation.

Determining compensation involves four types of decisions: (a) "factfinding about the plaintiff's loss"; (b) "inferences or predictions based on the established facts"; (c) "translat[ion of] the plaintiff's injury into a dollar amount when that injury is not readily measured in monetary terms"; and (d) "application of a legal rule."[80] The first three categories of decisions primarily involve determining issues of fact and thus fall within the province of the jury.[81] Case law firmly establishes this conclusion,[82] which finds additional support in historical, constitutional, and functional considerations.[83] In particular, "[t]he jury brings the common sense and varied backgrounds of a group of individuals to thorny questions like the value of a plaintiff's pain and suffering."[84] By contrast, with respect to the fourth type of decision — application of a legal rule — neither constitutional[85] nor functional considerations[86] support jury involvement.

Applying this analytical framework to lost chance cases yields the conclusion that courts should give juries the discretion to value

80. Colleen P. Murphy, *Determining Compensation: The Tension Between Legislative Power and Jury Authority*, 74 TEXAS L. REV. 345, 357-58 (1995).

81. *See id.* at 359.

82. *See, e.g.*, Dimick v. Schiedt, 293 U.S. 474, 486 (1935) (holding that the Seventh Amendment requires that "a jury properly determine . . . the extent of the injury by an assessment of damages" because the assessment involves "questions of fact"); Kansas Malpractice Victims Coalition v. Bell, 757 P.2d 251, 258 (Kan. 1988) ("The determination of damages is an issue of fact. Therefore, it is the jury's responsibility to determine damages.... It would be illogical for this court to find that a jury, empaneled because monetary damages are sought, could not then fully determine the amount of damages suffered."); Etheridge v. Med. Ctr. Hosps., 376 S.E.2d 525, 529 (Va. 1989) ("Without question, the jury's fact-finding function extends to the assessment of damages.").

83. *See* Murphy, *supra* note 80, at 360-61 (reviewing the "historical pedigree" of, and reasons for, juries determining questions of fact).

84. *Id.* at 361-62.

85. *See* Colleen P. Murphy, *Integrating the Constitutional Authority of Civil and Criminal Juries*, 61 GEO. WASH. L. REV. 723, 759-66 (1993) (asserting that Supreme Court doctrine does not require that legal rules be applied by juries).

86. *See id.* at 736-39 (asserting that judges may be better able than juries to achieve consistency and impartiality in applying legal rules).

the tort injury, as that calculation properly involves only the first three types of decisions and does not admit of resolution by a strict legal rule. Application of a legal rule in damages assessment is not appropriate "where no precise rule of law fixes the recoverable damages."[87] The highly case-specific nature of the tort injury,[88] however, prevents any rigidly defined principle, established ex ante and prescribed in all cases, from accurately "fixing" a lost chance plaintiff's losses. The discretionary method avoids the imposition of a legal rule on what is a purely factual determination and thus allows for individualized damage determinations that accurately reflect the loss that a particular lost chance plaintiff suffers. By contrast, the proportional valuation method applies a fixed mathematical formula to all assessments of lost chance injuries, inappropriately imposing a legal principle on a factual issue, and thus encroaches upon the rightful domain of the jury.[89]

The recent Louisiana Supreme Court case of *Smith v. State Department of Health and Hospitals,*[90] in which Louisiana adopted the discretionary method of damages valuation, provides a persuasive discussion of the merits of the discretionary method in this respect:

> The starting point of our analysis is to recognize that the loss of a less-than-even chance of survival is a distinct injury compensable as general damages which cannot be calculated with mathematical certainty.... Rather, the jury in a loss of a chance of survival case merely considers the same evidence considered by a jury in a survival and wrongful death action, and the loss-of-chance jury then reaches its general damages award for that loss on that evidence as well as other relevant evidence in the record.[91]

As the Louisiana court noted, discretionary valuation ensures that evaluations of loss of chance damages use the same analysis, "based on all the evidence in the record, as is done for any other item of general damages."[92] The discretionary method's flexibility thus allows the factfinder to focus on the task of assessing the loss suffered by the plaintiff.

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87. Barry v. Edmunds, 116 U.S. 550, 565 (1886).

88. *See supra* section I.B.

89. *See supra* note 82. Nothing in the discretionary method *prevents* a factfinder from finding that the plaintiff's damages are equal to the product of the percentage lost chance and the value of the underlying injury, but the discretionary method, unlike proportional valuation, does not *mandate* as a matter of law that the factfinder so find.

90. 676 So. 2d 543 (La. 1996).

91. 676 So. 2d at 548-49.

92. 676 So. 2d at 547; *see also* 676 So. 2d at 549 ("This is a valuation of the *only* damages at issue — the lost chance — which is based on all of the relevant evidence in the record, as is done for any other measurement of general damages.").

2. *Guidance to Factfinder*

Critics of the discretionary method of damage valuation claim that the method fails to provide "meaningful guidance" to the factfinder,[93] and most courts that have examined this approach have rejected it on the grounds that its lack of specific guidance impedes proper valuation of the plaintiff's injury.[94] This argument undervalues the method's ability to constrain the factfinder's discretion. Several factors limit the jury's discretion in assessing lost chance damages under the discretionary method. The discretionary method allows the jury "to consider an abundance of evidence and factors, including evidence of percentages of chance of survival along with evidence such as loss of support and loss of love and affection, and any other evidence bearing on the value of the lost chance,"[95] but traditional safeguards protect against the possibility that the jury will make a serious mistake in weighing this evidence. Appellate courts can police for "speculative verdicts" by ensuring that the record contains evidence that supports the jury's verdict.[96] The discretionary method can offer proper guidance and avoid unfettered discretion through careful consideration of the evidence put before the jury, precisely worded instructions to the jury instructing it to tailor recovery to the losses that the defendant's negligence caused, and reevaluation of the evidentiary support for the jury's verdict on appeal.[97]

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93. *See* King, *supra* note 9, at 1381-82; *see also* Delaney v. Cade, 873 P.2d 175, 187 (Kan. 1994) (criticizing the discretionary valuation approach as lacking precision); Reisig, *supra* note 10, at 1184 (same).

94. *See, e.g.*, Boody v. United States, 706 F. Supp. 1458, 1465 (D. Kan. 1989); *Delaney*, 873 P.2d at 187. In *Boody*, the court criticized the discretionary valuation method: "While simple in formulation and fully allowing a decision maker to render justice, this rule is flawed. The decision maker needs some circumscription to properly evaluate the compensation necessary for the loss of a fractional right. The damages inquiry, when possible, should be more precise." *Boody*, 706 F. Supp. at 1465. In *Delaney*, the Kansas Supreme Court criticized the discretionary valuation method in similar terms:

> Under this method, the court or jury is left without instruction or guidance in ascertaining the appropriate damage figure. Instead, the trier of fact is permitted to use its experience, judgment, and common sense in determining the appropriate value for the lost chance. Although this method is the simplest because the introduction of statistical evidence is unnecessary, the goal of reaching some degree of precision in determining the loss allocation is lacking.

Delaney, 873 P.2d at 187.

95. *Smith*, 676 So. 2d at 549.

96. *See* 676 So. 2d at 549.

97. The case of *James v. United States*, 483 F. Supp. 581 (N.D. Cal. 1980), provides an excellent example of how the discretionary method can appropriately constrain the factfinder's judgment by focusing on determining the losses caused by the defendant's negligence. After identifying the physical and emotional losses that constituted James's tort injury, the *James* court examined each type of damages claimed by James to determine if they had been caused by the hospital's negligence. The court held that James was not entitled to recover lost earnings arising from the period of treatment for and recovery from his lung cancer, because "the proof is not sufficient to find that the government's negligence was a proximate cause (i.e., a substantial factor) in bringing about the condition which . . . required

Moreover, despite the contrary claims of Professor King and others, the discretionary method is no less precise than proportional valuation; both methods substantially rely on subjective assessments of the plaintiff's losses.[98] The proportional valuation method as practiced by courts differs greatly from the precise analytical tool portrayed by the method's proponents.[99] Proportional valuation does not avoid subjective assessments by the factfinder but merely hides its subjectivity behind the veil of its "precise" mathematical formula.[100] Because proportional valuation depends entirely on the factfinder's subjective assessment of the value of the plaintiff's underlying injury, the discretionary method is no less subjective or less precise than proportional valuation. Use of an objectively constructed formula comprised of subjectively determined variables and coefficients "does not magically make [proportional valuation] more precise or more accurate than simply allowing the factfinder to value directly the loss of a chance of survival that is the sole item of damages at issue in the case."[101]

The discretionary method, far from relying on unconstrained subjective assessments, guides the factfinder toward a more accurate analysis by focusing the inquiry on the ultimate objective of

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[James] to stop work." 483 F. Supp. at 588. The court found that James's wife was not entitled to compensation for loss of support, as "[p]laintiffs have failed to prove that defendant's negligence was the proximate cause of a measurable reduction in James's working life expectancy." 483 F. Supp. at 588. Finally, the court found that James's wife was not entitled to compensation for loss of consortium, because the plaintiffs had not proven a "complete loss of consortium for a definite period of time." 483 F. Supp. at 588. The court went on to note that "[i]n this case, moreover, the existence of the terminal illness appears to be the dominant cause of the impairment of the marital relationship, the impact of the government's negligence being relatively insignificant." 483 F. Supp. at 588.

98. The two approaches differ, of course, in that proportional valuation hides the factfinder's subjective valuation of the plaintiff's losses behind the veil of a fixed — and, this Note argues, overly rigid — formula for translating the factfinder's subjective assessments into the plaintiff's damages award.

99. *See infra* section II.B.3.

100. As one federal district court deciding between the discretionary method and proportional valuation observed:

> [w]hichever method is used, the decisionmaker must make a highly subjective decision. In the [discretionary valuation] method . . . the decisionmaker must make the subjective decision of what amount of money would fully compensate the plaintiff for her injuries. The [proportional valuation] approach requires the decisionmaker to make the subjective decision of allotting a monetary amount for the value of plaintiff's life. . . . [The proportional valuation] approach basically involves a subjective judgment being mathematically discounted. We are unconvinced that the mathematical discounting of the subjective value of human life somehow makes that approach any more precise and more accurate than the approach we have chosen.

Borgren v. United States, 723 F. Supp. 581, 583 (D. Kan. 1989); *see also* KEETON ET AL., *supra* note 1, § 127, at 953 (observing that the process of damages determination in a wrongful death case "necessarily involves a large element of speculation, turning on such matters as life expectancy, income, habits and health of the deceased, past contributions to his family, the probability of increased earnings and contributions in the future, and, in some jurisdictions, the probability of future inflation").

101. *Smith*, 676 So. 2d at 548.

damages assessment — compensating the losses caused by the defendant's negligence — rather than offering a rigid mathematical formula.

3. *Mathematical Formalism, Oversimplification, and Other Problems of Misapplication*

This section argues that proportional valuation is inherently prone to misapplication in ways that discretionary valuation is not. Although commentators and courts sing its praises over discretionary valuation,[102] the proportional valuation method is alternatively a crude measure of the loss suffered in a lost chance case or too complex for practical application.

Perhaps the most compelling argument against the proportional valuation method comes from the cases that have attempted to apply the method. Courts applying proportional valuation routinely apply it to all of the losses suffered by the plaintiff; no damages are calculated outside of that method.[103] Yet clearly some of the consequences of the tort injury — for example, increased pain and suffering — are entirely the result of the defendant's negligence and should not be discounted by the proportional valuation calculation. Put simply, the proportional valuation method errs fundamentally in "its rigid use of a precise mathematical formula, based on imprecise percentage chance estimates applied to estimates of general damages that never occurred, to arrive at a figure for an item of general damages that this court has long recognized cannot be calculated with mathematical precision."[104]

Furthermore, courts applying proportional valuation virtually exclusively have used what Professor King refers to as "the single-outcome method," whereby the court values the tort injury based on the lost chance of complete recovery.[105] Any medical malpractice case involves multiple possible outcomes, however, ranging

102. *See, e.g.*, cases cited *supra* note 94; King *supra* note 9, at 1381-82; Reisig, *supra* note 10, at 1183.

103. *See, e.g.*, Falcon v. Memorial Hosp., 462 N.W.2d 44, 57 (Mich. 1990); Perez v. Las Vegas Med. Ctr., 805 P.2d 589, 592 (Nev. 1991).

104. *Smith*, 676 So. 2d at 548. The Louisiana court's statement calls to mind the criticism that commentators have leveled at another damages calculation method that similarly relies heavily on mathematical calculation — the "per diem" method of calculating pain-and-suffering damages. *See* Geistfeld, *supra* note 59, at 782. Juries in jurisdictions that use the per diem method are asked to determine the value of one day of pain and suffering by the plaintiff, and then multiply that value by the length of time that the plaintiff has experienced or will experience such pain and suffering. *See id.* A number of courts and commentators have criticized the method, noting that "by lending a quantitative component to the damages calculation, it 'lend[s] a false air of certainty to an area where none exists.' " *Id.* (quoting James O. Pearson, Jr., Annotation, *Per Diem or Similar Mathematical Basis for Fixing Damages for Pain and Suffering*, 3 A.L.R.4TH 940, 945 (1981)).

105. *See* King, *supra* note 9, at 1384.

from complete recovery to death.[106] Thus, to reflect these multiple potential outcomes effectively in a proportional valuation calculation, the factfinder must identify each possible outcome and the probability of occurrence associated with each, a process that Professor King labels an "expected value" or "weighted mean" calculation.[107] Single-outcome proportional valuation obscures this factual complexity and thus significantly undercuts the precision so lauded by proportional valuation's proponents.

On the other hand, as King admits, the complexity of the expected-value calculation is potentially staggering, as it "could involve a virtually unlimited number of permutations that would have to be weighted before they could be aggregated to arrive at the value of the chance."[108] The fact that courts adopting proportional valuation overwhelmingly have utilized the single-outcome approach would appear to indicate either that they perceive the complexity of the expected-outcome approach as overwhelming or that they fail to understand the full complexity of the tort injury.

One might argue that courts' frequent misapplication of proportional valuation does not limit its theoretical advantages over other methods.[109] The costs of abusing a technique, however, must be reckoned among the costs of using it at all to the extent that the latter creates risks of the former. As noted by Professor Tribe,

> in at least some contexts, permitting *any* use of certain mathematical methods entails a sufficiently high risk of misuse, or a risk of misuse sufficiently costly to avoid, that it would be irrational not to take such misuse into account when deciding whether to permit the methods to be employed at all.[110]

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106. The timing of the onset of these outcomes may also be uncertain. For example, King offers the example of a situation in which "as a result of [an] accident there is a 25% chance of the onset of injury-induced blindness occurring at fifty years of age, a 4% chance at forty, a 1% chance at thirty, and a 70% chance that such blindness would never result." *Id.* Thus, a truly accurate proportional valuation calculation must take into account not only the possibility of outcomes other than death or full recovery but also the temporal dispersion of each of these outcomes. *See id.*

107. *See id.* Professor King actually understates the complexity of a truly sophisticated weighted-mean calculation, in that his discussion notes only the multiple possible outcomes and their corresponding probabilities of occurrence *after* the defendant's negligence has taken place. King fails to recognize that in order to isolate the effects of the defendant's negligence, a weighted-mean calculation also must consider the multiple outcomes and corresponding probabilities that the preexisting condition would have caused in the absence of the defendant's negligence. A sophisticated proportional valuation calculation would require the factfinder to determine the change in the probability caused by the defendant's negligence for each outcome, multiply this number by the value of the total loss associated with each outcome, and then sum these values over all the potential outcomes.

108. *Id.*

109. *But see supra* sections II.A & II.B (arguing that these theoretical advantages do not exist).

110. Laurence H. Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process,* 84 HARV. L. REV. 1329, 1331 (1971).

Aside from the fact that mathematical formulae do not enable courts to calculate accurately the value of a tort injury, the proportional valuation method also is plagued by its reduction of the traditionally subjective valuation process to a rigid mathematical calculation. The use of mathematical formulae or schedules for computing damages in tort cases has long been rejected by courts.[111] As Professor Tribe has noted,

> although the mathematical or pseudo-mathematical devices which a society embraces to rationalize its systems for adjudication may be quite comprehensible to a student of that society's customs and culture, those devices may nonetheless operate to distort — and, in some instances, to destroy — important values which that society means to express or to pursue through the conduct of legal trials.[112]

By imposing a one-size-fits-all formula on every lost chance case to which it is applied, proportional valuation deprives the factfinder of the flexibility to weigh the impact of the tort injury on the individual plaintiff. Thus, application of proportional valuation inevitably results in a quagmire of practical problems.

The discretionary valuation method is superior — both in theory and in practice — to the proportional valuation and full damages methods. The discretionary method is not without its limitations; the method depends on careful guidance by courts and thoughtful implementation by factfinders. But its advantages over the proportional valuation and full damages method are clear. The lack of nexus between the damages calculation of the full damages method and the value of the lost chance tort injury exposes that method's gross inadequacy. The proportional valuation method suffers from two fundamental flaws. First, the method lacks accuracy; damages assessed by the method lack a clear nexus to the plaintiff's losses. Second, the method lacks precision; in practice, courts purporting to adopt proportional valuation apply a crude approximation of Professor King's theory. Moreover, increasing the method's precision to a suitable level would cause it to become so administratively cumbersome as to be unworkable. The shortcomings of proportional valuation — both as conceived and as applied — render the method's result a crude measure of the actual harm suffered, preventing the proportional valuation method from fulfilling the expectations of its advocates and highlighting the need for discretionary valuation's more flexible approach to damages valuation in lost chance cases. Only discretionary valuation allows the factfinder to tailor the plaintiff's recovery to the compensable harm suffered in a particular case.

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111. *See, e.g.*, Geistfeld, *supra* note 59, at 810-11 (noting "[j]udicial resistance to the use of [mathematical] formulas" in valuing pain-and-suffering damages).

112. Tribe, *supra* note 110, at 1330.

Conclusion

Courts and commentators have debated vigorously the advantages and disadvantages of allowing recovery for a lost chance of survival. Ultimately, the worth of the lost chance doctrine should be determined by evaluating its ability to accomplish the tort objectives of deterrence, compensation, and corrective justice in the unique context of the lost chance factual scenario. The chaotic state of the doctrine currently limits the ability of the doctrine to address these needs effectively. Courts faced with lost chance cases reflect this confusion with inconsistent and ill-reasoned applications of the doctrine.

Much of this confusion could be alleviated by a clear and careful analysis of the tort injury, an analysis that focuses on making a case-specific, fact-intensive determination of the losses suffered by the plaintiff as a result of the defendant's negligence. In particular, courts must clearly distinguish the tort injury from the losses associated with the plaintiff's underlying injury. Courts valuing damages in lost chance cases should adopt the discretionary method of valuation, which allows the factfinder the flexibility to evaluate the plaintiff's losses by assessing all of the available evidence.