

**THERAPISTS BEHAVING BADLY:
WHY THE *TARASOFF* DUTY IS NOT ALWAYS
ECONOMICALLY EFFICIENT**

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Abstract.....	31
I. Introduction.....	32
II. <i>Tarasoff</i> and Its Progeny.....	35
A. The Decisions.....	35
B. The Duty: Its Scope and Its Triggers.....	37
III. A Primer on the Economics of Tort Law.....	41
A. General Characteristics of Tort Law Models.....	41
B. The Basic Model of Simultaneous Torts.....	44
C. The Basic Model of Sequential Torts.....	49
IV. Modeling the Dangerous Patient Scenario.....	51
A. Assessing the Basic Models.....	51
B. Deriving the Total Social Cost.....	52
C. Describing the Liability Regime and Achieving the Social Optimum.....	54
1. Warn-Only Duty.....	56
2. Protect-Only Duty.....	58
3. Warn-and-Protect Duty.....	59
V. Implications.....	63
A. Contemporary Controversies in Law and Economics.....	63
B. Current Mental Health and Civil Liberties Debates.....	65
C. Questions for Further Study.....	67

ABSTRACT

In 1976, the California Supreme Court revolutionized medical

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privacy law when it held, in Tarasoff v. Regents of the University of California, that a psychotherapist counseling a dangerous patient has an affirmative duty to protect a third party against whom the patient makes serious, credible threats. Discharging this duty necessarily requires breaching the confidentiality inherent in the therapist-patient relationship. The consequences of this ruling have been studied using traditional legal analysis, medical disclosure principles, and ethical and moral philosophy. However, a search of the relevant literature reveals that the behavioral incentives produced by the decision have never been critically examined from the perspective of economic efficiency. This article attempts to fill that void.

After introducing the basic principles of the economic analysis of tort law, this article constructs a framework for investigating the “dangerous patient” scenario. It surveys several current versions of the Tarasoff duty and demonstrates that no version induces both the therapist and the potential victim to behave in a socially desirable way in all cases. Further, some versions fail to induce socially desirable behavior in any case. The article then relates these observations to contemporary theoretical controversies in law and economics and practical debates regarding mental health and civil liberties. It concludes with questions for further study.

I. INTRODUCTION

A young, single woman is being stalked by a spurned lover. She knows that the former flame in question has aggressive tendencies, but she is unaware of his pursuit. The ex-boyfriend, meanwhile, has been seeing a psychologist to deal with his grief from the break-up, and during a therapy session he hinted that he wants to teach his former lover a lesson—a violent lesson. Torn between preserving his patient’s confidentiality and attempting to protect an innocent potential victim, the therapist opts for the former. He does not warn the woman to watch out for an unwelcome visitor she thought was out of her life. Days later, the jilted man breaks into the woman’s house and kills her in cold-blooded revenge.

This is the paradigmatic fact pattern of the dangerous patient scenario made famous by the 1976 case of *Tarasoff v. Regents of the University of California*.¹ In *Tarasoff*, the California Supreme Court

1. *Tarasoff v. Regents of the Univ. of Cal.*, 551 P.2d 334 (Cal. 1976) [hereinafter *Tarasoff II*].

held that, in such a situation, the psychotherapist has a “duty to protect the threatened victim.”² How this duty is discharged depends on the facts of the case at hand.³ The court explained that in some cases, merely warning the intended victim may suffice, whereas, in other cases, committing the would-be attacker to a secure mental facility might be required.⁴

The *Tarasoff* case sparked a firestorm of controversy among psychotherapists, lawyers, academics, and judges regarding the status of the therapist-patient privilege. Since the ruling was handed down, the literature has burgeoned with medical and psychological commentary,⁵ case law analysis,⁶ extensions to other disclosure scenarios,⁷ analogies to the lawyer-client privilege,⁸ and even

2. *Id.* at 346.

3. *Id.* at 340.

4. *Id.* at 346 (mentioning “warning” and “incarcerat[ion]” as “some of the alternatives open to the therapist”).

5. See, e.g., Ebrahim J. Kermani & Sanford L. Drob, *Tarasoff Decision: A Decade Later Dilemma Still Faces Psychotherapists*, 41 AM. J. PSYCHOTHERAPY 271 (1987) (approving the *Tarasoff* ruling itself, but criticizing expansions of the duty as troubling to psychotherapists); Anton O. Tolman, *Clinical Training and the Duty to Protect*, 19 BEHAV. SCI. & L. 387 (2001) (presenting new clinical strategies for use in the psychotherapist’s prediction of violence); Damon Muir Walcott et al., *Current Analysis of the Tarasoff Duty: An Evolution Towards the Limitation of the Duty to Protect*, 19 BEHAV. SCI. & L. 325 (2001) (advocating therapists’ comprehensive documentation of patient dangerousness in order to avoid *Tarasoff* liability); Paul Browde, *Discretion Often the Better Part of Valor*, AM. MED. NEWS, Aug. 2, 2004, at 10 (outlining a six-item inventory for physicians confronted with disclosure issues).

6. See, e.g., James C. Beck, *Legal and Ethical Duties of the Clinician Treating a Patient Who is Liable to be Impulsively Violent*, 16 BEHAV. SCI. & L. 375 (1998) (synthesizing dangerous patient cases and concluding that courts rarely impose liability on a psychotherapist for a patient’s impulsive acts of violence); Brian Ginsberg, *Tarasoff at Thirty: Victim’s Knowledge Shrinks the Psychotherapist’s Duty to Warn and Protect*, 21 J. CONTEMP. HEALTH L. & POL’Y 1 (2004) (examining a current common law trend of courts to limit a therapist’s *Tarasoff* liability when the victim has some threshold level of previous knowledge of her attacker’s violent tendencies).

7. See, e.g., Harold Edgar & Hazel Sandomire, *Medical Privacy Issues in the Age of AIDS: Legislative Options*, 16 AM. J. L. & MED. 155 (1990) (providing an overview of states’ legislative responses to *Tarasoff* in the realm of physician disclosure of a patient’s HIV-positive status to the patient’s past sexual partners); Lawrence O. Gostin & James G. Hodge, *Piercing the Veil of Secrecy in HIV/AIDS and Other Sexually Transmitted Diseases: Theories of Privacy and Disclosure in Partner Notification*, 5 DUKE J. GENDER L. & POL’Y 9 (1998) (examining liability of HIV-positive individuals to their sexual partners for failure to warn); Michelle R. King, *Physician Duty to Warn a Patient’s Offspring of Hereditary Genetic Defects: Balancing the Patient’s Right to Confidentiality Against the Family Member’s Right to Know—Can or Should Tarasoff Apply?*, 4 QUINNIPIAC HEALTH L.J. 1 (2001) (discussing whether a physician has a duty to warn a child of a patient the physician knows to have a genetically heritable disease).

8. See, e.g., Nancy J. Moore, *Limits to Attorney-Client Confidentiality: A*

application to the privacy of the mental health of the President of the United States.⁹ However, it appears that there have been no law and economics¹⁰ analyses of the *Tarasoff* doctrine—no investigations of the therapist’s and potential victim’s behavioral incentives, with assumptions made explicit and models made robust.¹¹ This article attempts to fill that void.

Part I of this article introduces the dangerous patient scenario. Part II presents the facts of *Tarasoff* and describes different versions of the duty. Part III introduces two standard economic models of tort law: the basic model of an accident where victim and injurer simultaneously choose their levels of care (a “simultaneous” tort), and the basic model of an accident where the victim selects a care level after observing the injurer select a care level (a “sequential” tort). Part IV demonstrates that neither of the aforementioned models standing alone accurately captures the *Tarasoff* dangerous patient

“Philosophically Informed” and *Comparative Approach to Legal and Medical Ethics*, 36 CASE WES. RES. L. REV. 177, 193 (1985) (citing the rationale for the *Tarasoff* duty as informing a utilitarian analysis of ethical disclosure rules for lawyers).

9. See, e.g., Kirath Raj, *The Presidents’ Mental Health*, 31 AM. J. L. & MED. 509, 520 (2005) (posing the question “whether the White House physician has a duty to [protect] the general public” in the event the President suffers from a disease that would impair his ability to properly command the executive branch of the government).

10. Here, the adjective “law and economics” is used very specifically, meaning predictive, forward looking, and involving an abstract mathematical model. In particular, it does not mean “statistical” or “empirical.” Several empirical studies of certain of *Tarasoff*’s effects on the practice of psychotherapy have appeared in the literature. See, e.g., Toni Pryor Wise, Note, *Where the Public Peril Begins: A Survey of Psychotherapists to Determine the Effects of Tarasoff*, 31 STAN. L. REV. 165, 183 (1978) (establishing, *inter alia*, that, between 1974 and 1977, almost half of responding therapists had issued a *Tarasoff* warning); Daniel W. Shuman & Myron S. Weiner, *The Privilege Study: An Empirical Examination of the Psychotherapist-Patient Privilege*, 60 N.C. L. REV. 893 (1982) (investigating the question whether *Tarasoff*’s diminution of therapist-patient confidentiality will inhibit effective therapy and finding that critics on either side have overestimated the actual frequency of dangerous patient scenarios); Daniel J. Givelber et al., *Tarasoff, Myth and Reality: An Empirical Study of Private Law in Action*, 1984 WIS. L. REV. 443 (1984) (survey from 1980 reporting that most therapists think the *Tarasoff* duty is consistent with, rather than hostile to, the professional ethical standards of psychotherapy); D.L. Rosenhan et al., *Warning Third Parties: The Ripple Effects of Tarasoff*, 24 PAC. L.J. 1165, 1220 (1993) (concluding that *Tarasoff* has caused therapists to probe patient violence more thoroughly to provide an accurate risk assessment rather than eschew patient violence for fear of triggering a duty to protect).

11. This is noteworthy in light of the growing proliferation of economic analyses of law generally. See, e.g., Erin A. O’Hara & Larry E. Ribstein, *From Politics to Efficiency in Choice of Law*, 67 U. CHI. L. REV. 1151 (2000) (describing the law and economics literature of the past several decades as “burgeoning”); Emily M.S. Houh, *Critical Interventions: Toward an Expansive Quality Approach to the Doctrine of Good Faith in Contract Law*, 88 CORNELL L. REV. 1025, 1064 (2003) (mentioning the current “proliferation of law and economics programs, centers, and concentrations” at various law schools).

scenario. It then develops an economic model of this scenario and draws theoretical conclusions from the model. This section reveals that the *Tarasoff* duty—regardless of the exact formulation—does not provide incentives for therapists and victims to act in a socially optimal manner in all cases. Further, it shows that some formulations of the *Tarasoff* duty *never* provide such incentives in *any* case. This represents a potential counterexample to the modern thesis that the common law generally evolves in the direction of maximal efficiency. Finally, Part V explains the role that this lack of across-the-board efficiency may play in contemporary theoretical controversies in law and economics and practical debates regarding mental health and civil liberties. This section also proposes avenues for further research.

II. *TARASOFF* AND ITS PROGENY¹²

A. *The Decisions*

Prosenjit Poddar, a University of California at Berkeley graduate student, first met Tatianna Tarasoff in 1968 in a folk dancing class at the university's International House.¹³ They became good friends, and on New Year's Eve of 1968 Tarasoff kissed Poddar.¹⁴ Poddar interpreted the kiss as an indication of a serious relationship, yet Tarasoff rebuffed all of Poddar's subsequent romantic attempts.¹⁵ These rebukes saddened Poddar, causing him to become antisocial, "neglect[ing] his appearance, his studies, and his health."¹⁶

When Tarasoff took a vacation to Brazil during the summer of 1969, Poddar's condition started to improve.¹⁷ On a friend's advice he sought emotional counseling,¹⁸ eventually ending up in the care of

12. The factual summary of *Tarasoff* and related cases provided in this Part is adapted substantially from Ginsberg, *supra* note 6. For a very thorough overview of the factual circumstances surrounding the case, see Peter H. Schuck & Daniel J. Givelber, *Tarasoff v. Regents of the University of California: The Therapist's Dilemma*, in ROBERT L. RABIN & STEPHEN D. SUGARMAN, *TORTS STORIES* 99-128 (2003).

13. *People v. Poddar*, 518 P.2d 342, 344 (Cal. 1974) (appeal involving the criminal prosecution stemming from the facts of *Tarasoff*).

14. *Id.*

15. *Id.*

16. *Id.*

17. *Id.*; *Tarasoff v. Regents of Univ. of Cal.*, 108 Cal. Rptr. 878, 880 (Cal. Ct. App. 1973), *vacated*, 529 P.2d 553 (Cal. 1974), *vacated*, 551 P.2d 334 (Cal. 1976).

18. *Id.*

Dr. Lawrence Moore, a psychologist affiliated with the university.¹⁹ After several sessions, he confided in Dr. Moore that he was going to kill an unnamed female, readily identifiable as Tarasoff, when she returned from a vacation in Brazil.²⁰ Dr. Moore notified the campus police, explaining that Poddar suffered from “paranoid schizophrenia, acute and severe,” and made a recommendation for civil commitment.²¹ The police took Poddar into custody but released him shortly after judging him to be rational and not harmful.²² They also made Poddar promise to stay away from Tarasoff.²³ In the meantime, Dr. Moore’s request for civil commitment was denied.²⁴ Poddar was never restrained further, and he never returned to therapy.²⁵

On October 27, 1969, after Tarasoff had returned to the university, Poddar entered Tarasoff’s home and chased her into the backyard, where he shot her with a pellet gun and fatally stabbed her with a kitchen knife.²⁶ Poddar then re-entered the house and called the police.²⁷

Vitaly and Lydia Tarasoff, Tatianna’s parents, brought suit against the University of California, the therapists who treated Poddar at the student health center, and the police.²⁸ The Tarasoffs argued that the therapists and police acted negligently in failing to secure Poddar’s commitment.²⁹ The Tarasoffs said that these failed attempts to commit Poddar deterred him from returning to therapy and indirectly made his attack on Tatiana possible.³⁰ Tatiana’s parents also claimed that Dr. Moore and the campus police negligently failed to warn them “that their daughter was in grave danger. . . .”³¹ In a five to two decision (known as *Tarasoff I*), the California Supreme Court found that both the police and psychotherapists had an affirmative duty to warn Tarasoff, “or those who reasonably could

19. *Tarasoff*, 108 Cal. Rptr. at 880.

20. *Id.*

21. *Poddar*, 518 P.2d at 345.

22. *Tarasoff*, 108 Cal. Rptr. at 880.

23. *Tarasoff II*, 551 P.2d at 341.

24. *Id.*

25. *Tarasoff*, 108 Cal. Rptr. at 880.

26. *Poddar*, 518 P.2d at 345.

27. *Id.*

28. *Tarasoff II*, 551 P.2d at 340-41.

29. *Id.* at 341.

30. *Id.*

31. *Id.*

have been expected to notify her,” of the threat Poddar posed.³² However, a dissenting opinion urged that the court not encourage violations of the psychotherapist-patient privilege by requiring disclosure of facts learned in the course of therapy.³³

Surprisingly, the court agreed to rehear the case.³⁴ This time the court released the police from all liability but extended the scope of the psychotherapists’ liability.³⁵ According to the second decision (known as *Tarasoff II*), therapists must exercise “that reasonable degree of skill, knowledge, and care ordinarily possessed and exercised by members of that professional specialty under similar circumstances” to predict violence in patients.³⁶ Moreover, once a therapist predicts danger, he “incurs an obligation to use reasonable care to protect the intended victim against such danger.”³⁷ Justice Tobriner, who wrote the majority opinion in both cases, concluded with a far-reaching and ominous declaration of when a psychotherapist must breach confidentiality: “The protective privilege ends where the public peril begins.”³⁸

B. *The Duty: Its Scope and Its Triggers*

Though *Tarasoff* is only binding in California, a majority of jurisdictions have adopted some form of the *Tarasoff* duty by common law development or by statute.³⁹ But, not all of those states

32. *Tarasoff v. Regents of the Univ. of Cal.*, 529 P.2d 553, 555 (Cal. 1974) *vacated*, 551 P.2d 334 (Cal. 1976) [hereinafter *Tarasoff I*].

33. *Id.* at 566 (Clark, J., dissenting) (arguing that the majority “fails to realistically evaluate the devastating impact their new duty will have on the field of mental health”). In the rehearing, Justice Mosk switched from the majority to the dissent and wrote a separate opinion, dissenting in part and concurring in part. *Tarasoff II*, 551 P.2d at 353-62 (Mosk, J., concurring in part and dissenting in part).

34. Although the reasons for rehearing do not appear in any of the opinions issued, one commentator has speculated that the rehearing was granted because of “the psychiatric profession’s outraged reaction to *Tarasoff I*,” made visible via public statements by esteemed mental health professionals. Vanessa Merton, *Confidentiality and the “Dangerous” Patient: Implications of Tarasoff for Psychiatrists and Lawyers*, 31 EMORY L.J. 263, 294 & n.69 (1982).

35. *Tarasoff II*, 551 P.2d at 346, 349, 352-53.

36. *Id.* at 345 (quoting *Bardessono v. Michels*, 478 P.2d 480, 484 (Cal. 1970) (internal quotation marks omitted)).

37. *Id.* at 340.

38. *Id.* at 347.

39. George C. Harris, *The Dangerous Patient Exception to the Psychotherapist-Patient Privilege: The Tarasoff Duty and the Jaffee Footnote*, 74 WASH. L. REV. 33, 47 (1999). New York is typical of the legislative approach:

apply the California Supreme Court's ruling wholesale. The states have generally taken one of three approaches. First, some states retain a duty only to warn, stopping short of full protection.⁴⁰ In a warn-only jurisdiction, a therapist is not obligated to initiate involuntary commitment proceedings or take other protective measures which do not involve actually warning the potential victim. The second approach involves imposing a duty to take measures that are purely protective, but not to warn the potential victim.⁴¹ Therefore, involuntary commitment—but not a verbal warning—would count towards satisfying the duty. Finally, many states embrace the *Tarasoff* court's approach which, though styled a "duty to protect," actually includes a duty to warn.⁴² This approach, therefore, represents a duty to warn and protect. A therapist must meet a due care standard of warning and a due care standard of protection to satisfy the duty in any particular case. Part IV examines the economic ramifications of a jurisdiction's choice to establish a duty only to warn, a duty only to protect, or the unified duty of *Tarasoff*.

[I]nformation about patients or clients reported to the offices, including the identification of patients or clients, and clinical records or clinical information tending to identify patients or clients, at office facilities shall not be a public record and shall not be released by the offices or its facilities to any person or agency outside of the offices except as follows: to an endangered individual and a law enforcement agency when a treating psychiatrist or psychologist has determined that a patient or client presents a serious and imminent danger to that individual. The reasons for any such disclosures shall be fully documented in the clinical record. Nothing in this paragraph shall be construed to impose an obligation upon a treating psychiatrist or psychologist to release information pursuant to this paragraph.

N.Y. MENTAL HYG. LAW § 33.13(c) (McKinney Supp. 2006).

40. See, e.g., *Emerich v. Philadelphia Ctr. for Human Dev., Inc.*, 720 A.2d 1032, 1040 & n.8 (Pa. 1998) (interpreting *Tarasoff* to require "reasonable care to protect by warning" but "not address[ing] the similar issue of whether a broader duty to protect exists"). For an interesting distinction between warning and protection, labeling the former as "lay" protection (since no psychological expertise is needed to tell a potential victim that she is in danger) and the latter as "clinical" protection (since psychological expertise is required for, e.g., seeking a patient's involuntary commitment), see Michael R. Quattrocchi & Robert F. Schopp, *Tarasaurus Rex: A Standard of Care that Could Not Adapt*, 11 PSYCHOL. PUB. POL'Y & L. 109 (2005).

41. North Carolina exemplifies this approach. See, e.g., *Gregory v. Kilbride*, 565 S.E.2d 685, 691-92 (N.C. Ct. App. 2002) (recognizing a duty requiring "protection of others against unreasonable risks" but stating that "North Carolina does not recognize a psychiatrist's duty to warn third persons" (emphasis and internal quotation marks omitted)).

42. See, e.g., *Lipari v. Sears, Roebuck & Co.*, 497 F. Supp. 185, 193 (D. Neb. 1980) (therapist has duty to "initiate whatever precautions are reasonably necessary to protect potential victims of his patient").

Once a court or legislature decides how to allow a therapist to discharge the duty, it must address which conditions trigger the duty in the first place. On this point, the California Supreme Court, just four years after *Tarasoff*, held (with Justice Tobriner dissenting) that the duty is triggered only when the patient threatens a “specific” or “readily identifiable” victim.⁴³ Under this approach, the identity of the victim must be determinable at the time of the threat. Significantly this approach does not support a blanket duty to protect the public at large. Rather, the duty follows the identifiable victim. This approach will be referred to as the “victim-centered” approach. Many jurisdictions follow this holding.⁴⁴

However, some jurisdictions impose a stricter standard on the therapist by providing an easier to activate trigger. Different opinions have produced textual variants, but the general approach tracks a recent draft of the Restatement (Third) of Torts: “[W]hen reasonable care requires confining a patient who poses a real risk of harm to the community, the duty of the mental health professional ordinarily extends to those members of the community who are foreseeably put at risk by the patient.”⁴⁵ The Wisconsin Court of Appeals emphasized that this approach “flatly reject[s] any distinction between a psychotherapist’s duty to warn on the basis of whether the patient particularizes potential victims of his or her violent tendencies or makes generalized statements of dangerous intent.”⁴⁶ This approach triggers a duty in a larger set of circumstances than does the victim-centered approach.

To see this, suppose that a therapist is treating a patient who exhibits violent tendencies to the degree that he is clearly a danger to anyone with whom he might come into contact. However, suppose

43. *Thompson v. County of Alameda*, 614 P.2d 728, 738 (Cal. 1980).

44. RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL HARM (BASIC PRINCIPLES) § 42 cmt. g (Tentative Draft No. 4, 2004). California codified the victim-centered approach in a statute requiring protection “where the patient has communicated to the psychotherapist a serious threat of physical violence against a reasonably identifiable victim or victims.” CAL. CIV. CODE § 43.92(a) (West Supp. 2006).

45. RESTATEMENT (THIRD) OF TORTS § 42 cmt. g. For examples of judicial formulations of this approach, see *Schuster v. Altenburg*, 424 N.W.2d 159, 165 (Wis. 1988) (therapist under duty to protect “when it is established that it was foreseeable that [the dangerous patient] may cause harm to someone”); *Naidu v. Laird*, 539 A.2d 1064, 1073 (Del. 1988) (therapist has “broad-based obligation to protect the public from potentially violent patients who present an unreasonable danger”).

46. *State v. Agacki*, 595 N.W.2d 31, 38 (Wis. Ct. App. 1999) (quoting *Schuster v. Altenburg*, 424 N.W.2d 159, 172 (internal quotation marks omitted)).

also that this patient has not specified a particular person whose path he plans on crossing. It is eminently foreseeable that this patient will harm someone—his lover, his child, patrons at his regular bar, customers at a store he frequents—but the identity of the potential victim is not determinable at the time of the threat. The therapist's duty is triggered under the Restatement approach quoted above, but not under the victim-centered approach. The duty, under the Restatement approach, can be thought of as following the attacker, since the therapist has a duty to protect those in the attacker's vicinity. That is to say, it is foreseeable that anyone in the vicinity of a generally violent person will be harmed. This approach will be referred to as the "attacker-centered" approach. The shorthand phrase "foreseeable victim" will be used to indicate someone owed a duty under the attacker-centered approach but not under the victim-centered approach. Conversely, observe that a credible threat to an identifiable individual certainly makes that individual a foreseeable target of the attacker's harm. Thus, danger to an identifiable person triggers a duty under either approach. Part IV examines the economic significance of choosing one of the above triggers over the other.⁴⁷

Despite *Tarasoff's* celebrity status, recent decisions confirm that the scope and triggers articulated by the California Supreme Court are not universally accepted.⁴⁸ Further, it is possible that, in jurisdictions with a common law *Tarasoff* duty rather than a statutory one, the duty might be susceptible to judicial erosion. That is, in no uncertain terms, the status of the *Tarasoff* duty—the form of the solution to the dangerous patient problem—is very much a live controversy. Many supporting and detracting arguments have been made using theories

47. For a particularly insightful doctrinal separation of the victim-centered approach from the attacker-centered approach, see Alan R. Felthous & Claudia Kachigian, *To Warn and to Control: Two Distinct Legal Obligations or Variations of a Single Duty to Protect?*, 19 BEHAV. SCI. & L. 355 (2001).

There are other components of the triggering conditions that are not dealt with in this article. One of these is the requisite seriousness of the confidential therapist-patient relationship. Many dangerous patient cases—including *Tarasoff* itself—have arisen under facts demonstrating an intense, one-on-one relationship between therapist and patient lasting more than a few counseling sessions. See, e.g., *Kolt v. United States*, No. 94-CV-0293E(H), 1996 U.S. Dist. LEXIS 15786, at *2-*3 (W.D.N.Y. Oct. 1, 1996) (regular psychotherapy sessions at Veterans Administration facility for nearly four years). But, courts have found the requisite relationship after only two cursory outpatient encounters, *Jablonski v. United States*, 712 F.2d 391, 393-94 (9th Cir. 1983), or a week's worth of periodic observation, *Leonard v. Latrobe Area Hosp.*, 625 A.2d 1228, 1229 (Pa. Super. Ct. 1993).

48. BARRY R. FURROW ET AL., HEALTH LAW: CASES, MATERIALS AND PROBLEMS 355 (5th ed. 2004) (citing Texas and Virginia as explicitly rejecting *Tarasoff*).

of public protection, individual rights, the sanctity of the therapist-patient privilege, hardship on therapists, and limited healthcare resources.⁴⁹ This article examines the costs and benefits of adopting a version of the *Tarasoff* duty from a law and economics standpoint.

III. A PRIMER ON THE ECONOMICS OF TORT LAW⁵⁰

A. General Characteristics of Tort Law Models

Any economic model of tort law must contain two elements: (1) an expression describing the total precautionary expenditure of each party plus the expected amount of damages (usually termed “total social cost”), and (2) a set of rules—mathematical functions—dictating which party bears what portion of the total social cost.⁵¹ The analysis proceeds by examining whether the liability regime described by a given set of rules efficiently⁵² minimizes the “cost of the accident.”⁵³ This is accomplished by first obtaining the particular values of the precautionary variables that minimize the total social cost expression, and second by observing whether the rules describing the given liability regime induce each party to select those optimal values calculated in the first step.⁵⁴

49. See Peter F. Lake, *Revisiting Tarasoff*, 58 ALB. L. REV. 97, 101 n.14 (1994) (collecting examples of the “vast library of literature” generated in response to *Tarasoff*).

50. The overview that follows is adapted substantially from THOMAS J. MICELI, *ECONOMICS OF THE LAW: TORTS, CONTRACTS, PROPERTY, LITIGATION* 16-20, 58-70 (1997). For a less technical treatment, see STEVEN SHAVELL, *FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW* 199-206 (2004).

Some economic and mathematical notions used in this section come from the field of game theory. For an eminently readable (and sufficient) introduction for the purposes of this article, see DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* (1994). For more sophisticated tracts, see ROGER B. MYERSON, *GAME THEORY: ANALYSIS OF CONFLICT* (1991) and DREW FUDENBERG & JEAN TIROLE, *GAME THEORY* (1991).

51. See, e.g., MICELI, *supra* note 50, at 16-17; SHAVELL, *supra* note 50, at 182-93 (analytical development of a tort law chapter in a basic law and economics text).

52. A precise definition of “efficiency” is given later in this section.

53. Judge (then Professor) Guido Calabresi is usually credited with coining this phrase in GUIDO CALABRESI, *THE COST OF ACCIDENTS: A LEGAL AND ECONOMICS ANALYSIS* (1970), but the process of examining tort rules to see how well they minimize total social losses certainly predates Calabresi’s path-breaking work. Calabresi’s treatment was, however, the first thorough, systematic analysis using this process.

54. It should be said that simply because a liability regime is economically efficient does not mean it is in every sense “better” than other, perhaps inefficient, regimes. Law and economics analysis is one of many tools available for analyzing the desirability of a given legal regime. See, e.g., F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 530 (1945) (“[I]t is high time that we remember that [economic analysis of law] does not

Any economic model of tort law must also contain certain background assumptions in order to make analytical inference possible.⁵⁵ This article assumes the following (unless expressly noted otherwise) about any given liability regime and the parties affected thereby. The court knows the relevant due levels of care and the actual levels of care exercised by injurer and victim.⁵⁶ Furthermore, each party knows his own optimal level of care, due level of care, and the level of care he actually exercises.⁵⁷ For the purposes of this article, the due care level of each precautionary variable is set equal to the optimal care level.⁵⁸

Each party knows the liability system in operation and therefore knows the total payoff associated with any course of action he or the other party might pursue (though he is not necessarily privy to the strategy the other party actually ends up implementing).⁵⁹ Each party's level of care is equal to his cost of care; that is, it is assumed that one dollar buys one "care unit."⁶⁰ Also, injurer and victim are rational actors in that each will take the course of action that will maximize his personal payoff.⁶¹ Lastly, all of the above information is "common knowledge" in the sense that the information contained in each of the above assumptions is known to each party, and each

deal with the social process at all and that it is no more than a useful preliminary to the study of the main problem."); Matthew Adler & Eric Posner, *Rethinking Cost-Benefit Analysis*, 109 YALE L.J. 165, 167 (1999) ("[A] common criticism of [cost-benefit analysis]—that it sometimes produces morally unjustified outcomes—overlooks the fact that [cost-benefit analysis] is a decision procedure, not a moral standard.").

Similarly, one should realize that the cornerstone of law and economics analysis presumes the ability to monetize pain and suffering. Though courts do this every day, this practice is not without objection, perhaps especially since law and economics analysis requires an *ex ante*, rather than *ex post*, monetization. For a fascinating historical, doctrinal, and philosophical treatment of what it means for a particular type of injury not to be adequately monetizable, see Douglas Laycock, *The Death of the Irreparable Injury Rule*, 103 HARV. L. REV. 687 (1990).

55. AVINASH DIXIT & SUSAN SKEATH, *GAMES OF STRATEGY* 27 (2d ed. 2004).

56. Samuel A. Rea, Jr., *The Economics of Comparative Negligence*, 7 INT'L REV. L. & ECON. 149, 151 (1987).

57. *Id.*

58. This assumption is commonly made. MICELI, *supra* note 50, at 18.

59. DIXIT & SKEATH, *supra* note 55, at 32.

60. This allows one to equate "cost of care" and "amount of care." However, as will become apparent when modeling the dangerous patient scenario, this assumption cannot always be performed. This assumption is expressly disclaimed in the model introduced in Part IV.B, *infra*.

61. DIXIT & SKEATH, *supra* note 55, at 32.

party knows that the other party knows the information, and so on.⁶²

Next, a measure of economic efficiency must be selected. For the purposes of this article, a liability regime is “efficient” if the simultaneous exercise of optimal care by both injurer and victim is a Nash equilibrium.⁶³ This is perhaps the most widely used measure of efficiency in game theory literature.⁶⁴

A particular strategy combination⁶⁵ is a Nash equilibrium if it is not possible for either player, acting unilaterally, to vary his strategy from the putative equilibrium strategy and achieve a higher personal payoff.⁶⁶ That is, an injurer’s strategy and a victim’s strategy form a Nash equilibrium if the victim’s strategy is her “best response” to the injurer’s strategy, and vice versa.⁶⁷ The use of the word “response” is traditional, but perhaps misleading in the sense that, often, both parties act simultaneously.⁶⁸ To rectify the situation, recall those assumptions that were said to be common knowledge for all parties.⁶⁹ It is then possible (and mathematically equivalent) to define a Nash equilibrium as a strategy combination in which the victim’s strategy is her best response to *her own belief* that the injurer will play his strategy, and vice versa.⁷⁰

62. *Id.*

63. The use of the article “a” is important in this definition, since a liability regime could possess multiple Nash equilibria. Additionally, this article will later encounter the situation where multiple combinations of injurer’s and victim’s strategies can result in optimal care. It will be observed that even when one strategy combination leading to optimal care is a Nash equilibrium, another strategy combination leading to optimal care might not be. *See infra* Part IV.

64. E. Solan & R. V. Vohra, *Correlated Equilibrium in Quitting Games*, 26 MATHEMATICS OF OPERATIONS RES. 601, 601 (2001) (“Nash equilibrium is the most popular solution concept for [games]. . .”).

65. In the simplest case, a “strategy” is simply a level of care. However, in more complex situations, a strategy must incorporate more than simply a numerical value.

66. CHRISTIAN MONTET & DANIEL SERRA, *GAME THEORY AND ECONOMICS* 64 (2003).

67. *Id.*

68. DIXIT & SKEATH, *supra* note 55, at 89.

69. *See supra* Part III.

70. DIXIT & SKEATH, *supra* note 55, at 90. There are a handful of justifications for why, in practice, each party would elect to play a Nash strategy. For example, since neither party can improve his lot by unilaterally varying from his Nash value, the Nash equilibrium would be the values agreed to in a non-binding pre-interaction negotiation between both parties. Neither party would have an incentive to break the agreement. *See* MONTET & SERRA, *supra* note 66, at 73-77 (discussing the “pre-play negotiation” and other rationales). It is sufficient, however, for the purposes of this article, to announce this measure of efficiency and proceed with the actual analysis.

B. *The Basic Model of Simultaneous Torts*

Consider an accident involving two risk-neutral parties, each of whom selects his care level independently, without the other's knowledge.⁷¹ That is, victim and injurer take care simultaneously.⁷² An ordinary traffic accident involving two cars approaching each other on a highway is an illustrative example. Let x and y represent the injurer's and victim's care level, respectively. In context of a traffic accident, these care levels might include attention devoted to properly inflating the tires, checking the brakes, and looking in the rear-view mirror.⁷³

Let D represent the damages expected to result from the accident—the dollar value of total damages discounted by the probability of the accident actually occurring. Since the accident involves both injurer and victim, D is a function of injurer's and victim's care, and can therefore be written $D(x, y)$.⁷⁴ Expected damages decrease as either party takes more care.⁷⁵ But the magnitude of this drop in damages does not continue indefinitely. In fact, the magnitude of this drop decreases as either party exerts more care.⁷⁶ Also, this drop is subject to the law of diminishing marginal returns in the following sense: there exists a level of each party's care beyond which one additional "unit of care" taken by that party or the other party will only cut damages by less than one dollar.⁷⁷ It is profitable to take care up to this level since, below this level, one

71. MICELI, *supra* note 50, at 16.

72. This is mathematically significant because it means victim's care and injurer's care are independent quantities.

73. SHAVELL, *supra* note 50, at 189 (emphasizing that care can consist of more than one dimension).

74. This is the basic algebraic notation for conveying that a particular quantity depends upon other (in this case, two) factors. Such notation will be used extensively throughout this article. For a review of this and other conventions of mathematical writing, see, e.g., ARNOLD OSTEBEE & PAUL ZORN, *MULTIVARIABLE CALCULUS: FROM NUMERICAL, GRAPHICAL, AND SYMBOLIC POINTS OF VIEW* (2002). For an alternative (but equivalent) representation of expected damages, see SHAVELL, *supra* note 50, at 183 n.10.

75. Mathematically, this means that the partial derivatives of D with respect to x and y are negative. In symbols, $D_x < 0$ and $D_y < 0$.

76. This means $D_{xx} > 0$ and $D_{yy} > 0$, and $D_{xy} > 0$ and $D_{yx} > 0$. It is also usually assumed (and will be assumed here) that $D_{xy} = D_{yx}$ and $D_{xx}D_{yy} > D_{xy}D_{yx}$. See, e.g., MICELI, *supra* note 50, at 19-20.

77. That is, $D_x(x, y) > -1$ and $D_y(x, y) > -1$ as long as $x > x^*$ and $y > y^*$. The magnitude of the rate of change of the drop in damages is therefore $|D_x(x, y)| < 1$ and $|D_y(x, y)| < 1$. This follows from the fact that $D_x(x^*, y^*) = D_y(x^*, y^*) = 1$. See *supra* note 76.

additional care unit will cut damages by more than one dollar.⁷⁸ But beyond this level, the cost of additional care exceeds the additional savings in damages.

Let τ represent the total social cost of the accident. Since total social cost is the sum of the parties' care and the expected damages, it follows that $\tau = \tau(x, y) = x + D(x, y) + y$.⁷⁹ The properties of D noted above ensure that there actually exist values of injurer's and victim's care that minimize total social cost.⁸⁰ Call the optimal levels of injurer's and victim's care x^* and y^* , respectively. These values are precisely the care levels, identified above, beyond which it is no longer profitable for the injurer and victim, respectively, to take additional care. Economically speaking, then, the goal of any liability regime is to induce the injurer to take exactly x^* worth of care and the victim to take exactly y^* worth of care.

Since it is by far the most pervasive negligence scheme in place in this country, comparative negligence will be used here.⁸¹ There are two forms of comparative negligence in use today: (1) the "pure" form, and (2) the "threshold" form.⁸² "Pure" comparative negligence operates identically to simple negligence, except that whenever both injurer and victim are negligent, they each bear a portion of the

78. Specifically, $D_x(x, y) < -1$ and $D_y(x, y) < -1$ whenever $x < x^*$ and $y < y^*$. The magnitude of the rate of change of the drop in damages is therefore $|D_x(x, y)| > 1$ and $|D_y(x, y)| > 1$.

79. MICELI, *supra* note 50, at 18.

80. The assumptions made in notes 75-78 ensure that D is strictly convex with respect to both care variables. See EDWIN K.P. CHONG & STANISLAW H. ZAK, AN INTRODUCTION TO OPTIMIZATION 371 (1996) (definition of convexity). This fact, in turn, implies that the total social cost function τ is also strictly convex in both care variables. This ensures that optimal values of each care variable—values that minimize the total social cost expression—actually exist. See Giuseppe Dari-Mattiacci, *On the Optimal Scope of Negligence*, 1 REV. L. & ECON. 338 (2005), available at <http://www.bepress.com/rle/vol1/iss3/art2> (follow "Download the Paper" hyperlink) (importance of convexity); MICELI, *supra* note 50, at 18 (short mathematical proof of the existence of optimal care values given the convexity assumptions).

81. Comparative negligence, in one form or another, is the law in 44 states. ARTHUR BEST ET AL., COMPARATIVE NEGLIGENCE: LAW AND PRACTICE § 1.00[4] (2004). However, contributory negligence still operates strongly in important areas of tort law. For example, products liability law recognizes defenses such as assumption of risk, consumer misuse, and consumer modification as complete bars to producer liability. See, e.g., David G. Owen, *Products Liability: User Misconduct Defenses*, 52 S.C. L. REV. 1 (2000). The operation of contributory negligence principles in situations with multiple tortfeasors presents another example. See, e.g., Frank J. Vandall, *A Critique of the Restatement (Third), Apportionment as It Affects Joint and Several Liability*, 49 EMORY L.J. 565 (2000).

82. There reportedly existed a third type of comparative negligence particular to admiralty law, but it "applies nowhere today." David Haddock & Christopher Curran, *An Economic Theory of Comparative Negligence*, 14 J. LEGAL STUD. 49, 51 (1985).

damages.⁸³ “Threshold” comparative negligence differs from pure comparative negligence in that when both injurer and victim are negligent, liability is only borne jointly if the victim takes at least as much care as the injurer.⁸⁴ This article will follow the tradition of law and economics literature by adopting a generalized form of comparative negligence, the features of which can be adjusted to mimic either a pure or a threshold scheme.⁸⁵

To describe this system, let β represent the fraction of damages borne by the injurer when both parties are negligent. This fraction increases as the injurer exercises less care or the victim exercises more care.⁸⁶ Let u_I denote the function describing the injurer’s total liability.⁸⁷ Further, suppose that the court (or the legislature) has set all the relevant due care standards equal to the optimal care values derived above. Then, the injurer’s liability is described by

$$u_I(x, y) = \begin{cases} x & \text{if } x \geq x^* \\ x + D(x, y) & \text{if } x < x^* \text{ and } y \geq y^* \\ x + \beta(x, y)D(x, y) & \text{if } x < x^* \text{ and } y < y^* \end{cases}$$

Similarly, let u_V represent the victim’s total liability under this system. Since the sum of injurer’s liability and victim’s liability always equals the total social costs, it follows that

$$u_V(x, y) = \begin{cases} D(x, y) + y & \text{if } x \geq x^* \\ y & \text{if } x < x^* \text{ and } y \geq y^* \\ [1 - \beta(x, y)]D(x, y) + y & \text{if } x < x^* \text{ and } y < y^* \end{cases}$$

83. *Id.* at 50.

84. “Threshold” comparative negligence is so named because the apportionment of damages—the *sine qua non* of a comparative negligence system—is only triggered when the injurer meets or exceeds a 50% threshold of fault. That is, if the injurer was at least as negligent as the victim, then—and only then—are damages apportioned. *Id.* at 50-51.

85. See, e.g., Rea, *supra* note 56, at 150.

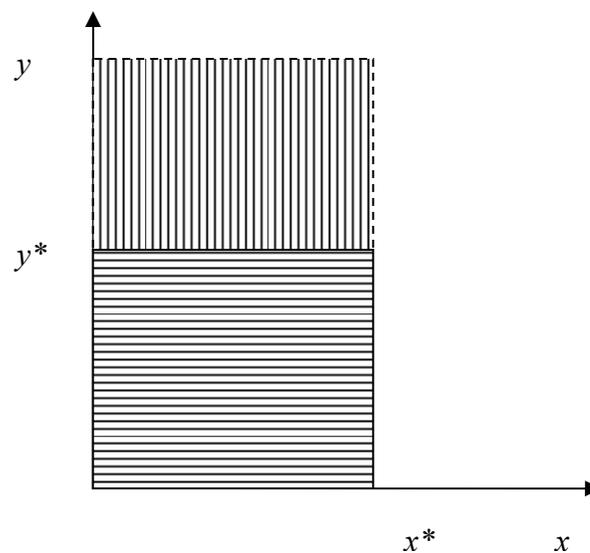
86. That is $\beta_x < 0$ and $\beta_y > 0$.

87. In game theoretical terms, this is the injurer’s “payoff.” This is why the traditional notation for payoff functions—the letter “u” with a subscript—is used here.

The graph below shows the different regions of liability.⁸⁸ The lined regions represent zones where the injurer is liable for more than just his own care expenditure. The vertically-lined region represents the zone where the injurer is liable for full damages, while the horizontally-lined region represents the zone where the injurer is liable for partial damages.

Figure 1

Comparative Negligence: Regions of Injurer Liability



Comparative negligence has a unique Nash equilibrium of optimal care in the case of a simultaneous tort.⁸⁹ To see this, suppose that the victim believes the injurer will select optimal care. According to the rules articulated above, the victim will then be fully liable for any damages that ensue, plus her own cost of care.⁹⁰ Her task, then, is to minimize the sum of damages and care.⁹¹ Until the victim reaches her optimal level of care, every dollar spent on care will cut damages by more than one dollar, but, after she reaches this

88. This graph is adapted from Haddock & Curran, *supra* note 82, at 52.

89. MICELI, *supra* note 50, at 19-20.

90. Her liability is described by $u_V(x^*, y) = D(x^*, y) + y$.

91. That is, she must minimize $u_V(x^*, y) = D(x^*, y) + y$.

level, each additional care dollar will only cut damages by some amount less than one dollar.⁹² It follows that the victim should spend until she reaches optimal care. Thus, optimal care is the victim's best response.

Conversely, suppose that the injurer believes that the victim will select optimal care. If the injurer exercises optimal care, he will have to pay only for the cost of that care.⁹³ However, if the injurer selects a negligent level of care, he will also be fully liable for damages.⁹⁴ The question then becomes whether taking optimal care is cheaper than taking some lesser level of care but also incurring damages.⁹⁵ The answer is "yes." To see this, note first that optimal care alone is cheaper than optimal care plus damages resulting from optimal care.⁹⁶ It is also true that optimal care plus damages resulting from optimal care is cheaper than negligent care plus damages resulting from negligent care.⁹⁷ This is the case because the money saved by spending less on care is outweighed by the additional damages resulting from this care choice.⁹⁸ Thus, optimal care is the injurer's best response.

This establishes that optimal care is a Nash equilibrium of a simultaneous tort. It remains to be shown, however, that it is *the* Nash equilibrium. The above analysis rules out the possibility of a Nash equilibrium involving one party's optimal care and the other party's negligent care, since the best response to optimal care is optimal care.⁹⁹ Thus, the only other possibility would be when injurer and victim are both negligent. This, however, cannot be a Nash equilibrium.¹⁰⁰ If it were, it would imply that the care combination previously defined as "optimal" is, in fact, not so, resulting in a contradiction.¹⁰¹

It is interesting to note that, in the above equilibrium analysis,

92. See *supra* notes 77-78 and accompanying text.

93. The injurer's liability function in this case is $u_i(x^*, y) = x^*$.

94. The injurer's liability function will be $u_i(x, y^*) = x + D(x, y^*)$, with $x < x^*$.

95. Suppose that the amount of negligent care that minimizes the sum of care and damages is x_0 . The question, then, is whether $x^* < x_0 + D(x_0, y^*)$.

96. This means $x^* < x^* + D(x^*, y^*)$.

97. That is, $x^* + D(x^*, y^*) < x_0 + D(x_0, y^*)$.

98. See *supra* notes 77-78 and accompanying text.

99. Numerically, x^* is a best response to y^* and vice versa.

100. MICELI, *supra* note 50, at 19-20.

101. The mathematical justification for this result is somewhat sophisticated. A clear proof is presented in Rea, *supra* note 56, at 153.

the defining feature of comparative negligence—fractional damages apportionment—never came into play.¹⁰² In equilibrium, the comparative negligence regime ends up not performing the cost-spreading function its supporters often cite for its superiority over “all or nothing” negligence regimes.¹⁰³ This irony has served as the centerpiece of arguments against comparative negligence.¹⁰⁴

*C. The Basic Model of Sequential Torts*¹⁰⁵

Consider an accident involving two risk-neutral parties but, unlike a simultaneous tort, one party selects his level of care before the other.¹⁰⁶ Moreover, the second party observes the first party’s care selection.¹⁰⁷ The venerable English case of *Butterfield v. Forrester* is illustrative: the defendant, while repairing his house, negligently left a large pole on the street, obstructing the roadway. Later that evening, the plaintiff’s horse, while galloping down that street, tripped and fell on the pole, leaving the plaintiff injured.¹⁰⁸ The total social cost is not altered by the sequential nature of the

102. Indeed, the solution steps in the proof are actually identical to those in the proof of efficiency of simple and contributory negligence—systems without fractional damage apportionment. MICELI, *supra* note 50, at 19.

103. *Id.* at 65. However, some authors still laud comparative negligence on fairness grounds. Christopher J. Robinette & Paul G. Sherland, *Contributory or Comparative: Which is the Optimal Negligence Rule?*, 24 N. ILL. U. L. REV. 41, 59-60 (2003). Fairness, however, has not been the only source of support for comparative negligence. Some academics have determined that comparative negligence offers an economically beneficial method of dealing with “evidentiary uncertainty”—judicial errors in determining whether a party has exercised due care. See ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS 303-306 (2d ed. 1997) (introduction to the concept of evidentiary uncertainty). For treatment in greater depth, see Robert D. Cooter & Thomas S. Ulen, *An Economic Case for Comparative Negligence*, 61 N.Y.U. L. REV. 1067 (1986). See also Daniel L. Rubinfeld, *The Efficiency of Comparative Negligence*, 16 J. LEGAL STUD. 375 (1987).

104. See, e.g., Oren Bar-Gill & Omri Ben-Shahar, *The Uneasy Case for Comparative Negligence*, 5 AM. L. & ECON. REV. 433 (2003). Another oft-cited criticism of comparative negligence is the administrative burden it, compared to simpler rules like contributory negligence, places upon factfinders. Richard A. Epstein, *The Temporal Dimension in Tort Law*, 53 U. CHI. L. REV. 1175, 1192 (1986). Professor Epstein is well-known for (among other things) advocating logistical and administrative simplicity in legal systems. See, e.g., RICHARD A. EPSTEIN, SIMPLE RULES FOR A COMPLEX WORLD (1997).

105. For a slightly different approach to sequential torts, see Steven Shavell, *Torts in which Victim and Injurer Act Sequentially*, 26 J.L. & ECON. 589 (1983).

106. MICELI, *supra* note 50, at 58.

107. *Id.*

108. 103 Eng. Rep. 926 (1809). See also *Topping v. Oshawa Street Railway*, 66 O.L.R. 618 (App. Div. 1931) (example of sequential tort with injurer as first mover).

accident.¹⁰⁹ That is: $\tau = \tau(x, y) = x + D(x, y) + y$. Therefore, the optimal care values are again given by x^* and y^* . The expressions for victim's and injurer's liability are also the same as those derived above for a simultaneous tort.

The sequential nature of the accident does, however, require a slight reformulation of the concept of Nash equilibrium. This can be done easily (and without disturbing the earlier results). Instead of defining the Nash equilibrium in terms of care values selected by each party, it must be defined in terms of courses of action which incorporate the fact that the parties act sequentially. The strategies available to the party moving first are, simply, levels of care, as in the simultaneous case. However, the strategies available to the party moving second are care levels contingent upon the first party's action. For example, assuming the victim moves last, one strategy available to her is "*exercise optimal care in response to injurer's optimal care, but exercise negligent care in response to injurer's negligent care.*" A Nash equilibrium is a pair of courses of action that are best responses to one another.

Comparative negligence has a Nash equilibrium consisting of the injurer selecting optimal care, and the victim committing to select optimal care in all cases, regardless of what the injurer's selection turns out to be. To see this, suppose the victim believes the injurer will select optimal care. From the above discussion of simultaneous torts, it follows that the victim's strategy of "*exercise optimal care regardless of the injurer's care choice*" is a best response.¹¹⁰ Conversely, suppose the injurer believes the victim will select the strategy "*exercise optimal care regardless of the injurer's care choice.*" The simultaneous-tort reasoning, applicable here since the liability functions are the same as in the simultaneous-tort case, implies that injurer's optimal care is a best response.¹¹¹ This Nash equilibrium is not unique, but the one other Nash equilibrium that exists also results in optimal care.¹¹²

109. MICELI, *supra* note 50, at 59.

110. See *supra* Part III.B. The article "a" is crucial. The definition of Nash equilibrium used in this article requires that neither party be able to unilaterally *improve* his lot by picking a different choice. Just because one party is able to unilaterally act in another way to achieve the same payoff does not disqualify the original action from being part of a Nash equilibrium.

111. See *supra* Part III.B.

112. The complete proof of this is presented in MICELI, *supra* note 50, at 66.

IV. MODELING THE DANGEROUS PATIENT SCENARIO

A. *Assessing the Basic Models*

The dangerous patient scenario, from start to finish, encompasses an extensive sequence of events: (1) a prospective patient—either dangerous or non-dangerous—begins therapy; (2) the therapist treats the patient and attempts to diagnose dangerousness; if the therapist finds the patient to be dangerous; (3) the therapist takes affirmative steps, such as seeking involuntary commitment, to protect potential victims; (4) the therapist warns the victim that she might be in danger; (5) the victim tries to avoid a violent encounter; but nevertheless (6) an attack occurs.¹¹³ Independently, and in parallel with this sequence, the victim gathers knowledge of her attacker's violent tendencies, perhaps in anticipation of a confrontation or simply as part of her daily routine.¹¹⁴ The bulk of the academic controversy and judicial and legislative disagreement regarding the dangerous patient problem focuses on how to frame the therapist's duty once he diagnoses dangerousness. Therefore, this article takes the diagnosis of dangerousness as a starting point and analyzes the subsequent events, including the victim's knowledge-gathering.

Which of the above tort models is best suited to this analysis? It seems right to say that, at least in most cases, the victim will make her care selection without observing the therapist's expenditure on protective measures such as the initiation of commitment proceedings. In this sense, each party exercises care simultaneously, and the simultaneous-tort model is appealing. However, if the therapist decides to warn the victim, he exercises care before the victim does. Since the warning is necessarily conveyed directly to the victim, the victim observes the therapist's care level. Thus, therapist's warning care and victim's care are taken sequentially, suggesting the use of the sequential-tort model. It is apparent, then, that restricting the analysis to one or the other of the above two models does not accurately capture the dangerous patient scenario.

The deficiency of either model used alone becomes more apparent when the relationship between each party's precautionary expenditures and the expected damages is scrutinized. In both of the

113. See generally Ginsberg, *supra* note 6 (discussing cases involving dangerous patients).

114. *Id.*

basic models, the entirety of a party's precautionary expenditures directly affects expected damages.¹¹⁵ That is, expected damages always vary as injurer's or victim's care changes. However, in the dangerous patient scenario, some of the parties' precautionary expenditures affect expected damages only indirectly. For example, the victim's knowledge (which is gathered at a cost) of her attacker's dangerousness does not force the victim to take more care and thereby reduce damages. Rather, it makes care less costly to take (on the theory that knowledge of her attacker's dangerousness lets the victim streamline and precisely tailor her precautions). Thus, the idea of taking more care is made more attractive to the victim, but it is not determinatively imposed on her. Therefore, unlike either of the above models, the dangerous patient model must incorporate precautionary costs that do not directly affect expected damages. A hybrid model must be created, and a new expression for total social cost must be developed.

B. *Deriving the Total Social Cost*

First, consider the therapist's costs. Although the *Tarasoff* opinion speaks in terms of a unified "duty to protect,"¹¹⁶ it will be useful, as mentioned in the earlier typology of versions of the *Tarasoff* duty, to separate care spent on warning the potential victim from care spent on protecting the potential victim.¹¹⁷ A phone call to the victim or her parents would be included in the former, whereas steps to initiate civil commitment proceedings would be included in the latter.¹¹⁸ Denote warning care by w and protective care by p . The therapist's total precautionary cost is therefore $w + p$.

Next, consider the victim's costs. As mentioned above, the victim obtains knowledge about her potential attacker's dangerousness.¹¹⁹ Call this level of knowledge k . The victim also takes care in the traditional sense of engaging in physical action to prevent harm to her person. However, as discussed above, various other factors may reduce this cost of care such that one "care unit"

115. See *supra* Parts III.B, C. The entirety of the injurer's care, x , and victim's care, y , directly influence expected damages, $D(x, y)$.

116. *Tarasoff II*, 551 P.2d at 346.

117. See *supra* Part II.B.

118. *Id.*

119. See Ginsberg, *supra* note 6 (recent and extensive examination of victim's knowledge gathering).

can be purchased for less than one dollar.¹²⁰ Thus, at least regarding victim's care, the blanket assumption made in the basic models equating care units and dollars spent on care fails to hold.¹²¹

To analytically distinguish between level of care and cost of care, let v represent the level of care taken by the victim. In general, it costs more to take more care. However, the cost of this care is discounted by the victim's knowledge of her attacker's propensity for violence.¹²² That is, all else equal, more knowledge of her attacker's violent tendencies allows the victim to exercise a given level of care for a lower cost. This includes the knowledge the victim gathers on her own, described above and represented by k , as well as knowledge transmitted by the therapist in the form of a warning. It will be assumed that the knowledge gained from a warning is equal to the warning care, w , exercised by the therapist.¹²³ It will also be assumed that the victim's receipt of the warning is costless. Let $C(v; k, w)$ represent the cost to the victim of taking care at a level of v if the victim has gathered knowledge at a level of k and has obtained knowledge from her therapist through a warning at level of w .¹²⁴

This discounting does not continue indefinitely at the same rate. There exists a level of victim-gathered knowledge beyond which one additional "unit of knowledge" only cuts the cost of care by less than one dollar.¹²⁵ Similarly, there exists a level of therapist's warning care beyond which one additional "unit of warning" only cuts the cost of care by less than one dollar.¹²⁶

120. See *supra* Part IV.A.

121. See *supra* Part III.A.

122. The concept of one party's care serving to discount the price of another party's care is explained very clearly and in a more general context in Dhammika Dharmapala & Sandra A. Hoffman, *Bilateral Accidents with Intrinsically Interdependent Costs of Precaution*, 34 J. LEGAL STUD. 239 (2005).

123. In reality, it might be the case that, when a therapist warns, he does not warn perfectly, so some amount less than w would factor into the victim's cost-of-care discount. To keep the mathematics manageable and maximally expressive, this article, unless otherwise indicated, assumes perfect warning.

124. It might be instructive (though it is certainly not mandatory) to think of C as the product $v\lambda(k, w)$ where λ is a multiplier, taking values between 0 and 1, that decreases as the total amount of knowledge increases. This conceptualization of the cost of care makes the discounting explicit. The description in the text accompanying this note indicates that cost of care has the following properties: $C_v(v; k, w) > 0$, $C_k(v; k, w) < 0$, and $C_w(v; k, w) < 0$.

125. That is, $C_k(v^*; k^*, w^*) = -1$ and $C_{kk}(v; k, w) \geq 0$. Compare this property with the property described in *supra* notes 77-78.

126. That is, $C_w(v^*; k^*, w^*) = -1$ and $C_{ww}(v; k, w) \geq 0$. As for the mixed second-

Lastly, consider the expression for expected damages. As in the basic models, damages depend on the level of care exercised by the parties that actually and directly result in their protection. Therefore, expected damages can be written as $D(p, v)$.¹²⁷ Victim's knowledge and therapist's warning care do not figure into damages since, although they make the prospect of taking care more attractive to the victim, they do not conclusively determine that the victim will indeed take more care.

The total social cost of the dangerous patient problem is the sum of therapist's costs, victim's costs, and damages, and can therefore be written

$$\tau = \tau(w, p, v, k) = \underbrace{w + p}_{\text{therapist's costs}} + \underbrace{D(p, v)}_{\text{expected damages}} + \underbrace{C(v; k, w) + k}_{\text{victim's costs}}.$$

The above observations and assumptions guarantee that there exists a unique optimal minimizing value of each precautionary variable.¹²⁸ Call these optimal values w^* , p^* , v^* , and k^* .

C. Describing the Liability Regime and Achieving the Social Optimum

The comparative negligence system analyzed above can be used in the dangerous patient problem, but the ultimate form of the negligence rules in any given jurisdiction will necessarily depend upon (1) whether that jurisdiction allows the duty to be satisfied by warning only, protection only, or requires both warning and protection, and (2) whether the jurisdiction adopts the victim-centered trigger or the attacker-centered trigger.¹²⁹ The following analysis examines the various implementations of the *Tarasoff* rule and concludes that in no case is a strategy combination involving therapist's optimal care in warning and protection and victim's optimal care in knowledge and traditional precaution necessarily a Nash equilibrium.

Four separate quantities—warning care, protective care, victim's

order properties, it will be assumed, as in much of the law and economics literature, that the relationships among the mixed partial derivatives are sufficient to make C a convex function.

127. See *supra* Part III.B.

128. This is the case because τ is strictly convex. See *supra* note 80 and accompanying text (discussion of convexity with respect to the basic models).

129. See *supra* Part II.B.

care, and victim's knowledge—contribute to the total social cost of a *Tarasoff* dangerous patient attack. Moreover, these quantities interact in ways more complex than injurer's and victim's care in the basic tort scenarios studied earlier. For this reason, the foregoing analysis will focus chiefly on the conditions under which the social optimum is a Nash equilibrium point, and less so, if at all, on ancillary questions—such as the possible existence of non-optimal Nash equilibria—that were able to receive more attention in the context of the basic models.¹³⁰

It is useful to review the strategies open to each party that result in optimal care. The therapist chooses his level of care without being privy to the victim's level of knowledge of her attacker's dangerousness and before the victim selects her level of care. Thus, the only therapist strategy corresponding to optimal care is “*warn optimally and protect optimally.*” In particular, the therapist's strategy does not incorporate any notion of sequence; he is the “first mover.”¹³¹ The victim, on the other hand, moves in part before (or simultaneously with) and in part after the therapist. To wit, she gathers knowledge independently of any interaction with the therapist, but she selects her level of precautionary care after observing the therapist's warning. Strategies for the victim that result in optimal care are therefore: “*gather optimal knowledge; take optimal care in all cases*” and “*gather optimal knowledge; take optimal care in response to optimal warning care, but take negligent care in response to negligent warning care.*”¹³² Thus, there are two possible strategy combinations that ultimately result in the social optimum: (1) the therapist takes optimal care in warning and protection, and the victim gathers optimal knowledge and takes optimal care in all cases; or (2) the therapist takes optimal care in warning and protection, and the victim gathers optimal knowledge and takes optimal care whenever she observes the therapist's optimal warning, but takes negligent care otherwise.

130. See, e.g., Parts III.B-C.

131. To this extent, the therapist is in the same position as the sequential-tort injurer. See *supra* Part III.C.

132. Observe that, for the purposes of establishing that the optimal values form a Nash equilibrium, the victim's strategy “*Gather optimal knowledge; take optimal care in response to negligent care, but take negligent care in response to optimal care*” need not be considered. This is so because, if it were selected, either the victim or the therapist would have to select a non-optimal care value. This would defeat the aim of constructing a Nash equilibrium consisting only of optimal values of the precautionary variables.

There are six duty-trigger permutations in which to test the above strategy pairings, depending upon whether the duty involves warning, protection, or both, and whether the trigger is victim-centered or attacker-centered. Also, for each duty-trigger combination, the analysis can be carried out with respect to an identifiable victim or a victim of harm which is merely foreseeable. This doubles the total number of possibilities to 12. This might seem daunting, but several preliminary observations considerably simplify the situation.

First, observe that, for a victim of harm which is merely foreseeable, neither of the two optimal strategy pairings can actually be achieved. This victim is not identifiable at the time of the threat. Such a victim likely has never had any previous contact with her attacker, and thus cannot gather optimal knowledge. Further, such a victim likely cannot be readily identified before the encounter, thus preventing the therapist from delivering an optimal warning. The chance customer at a store visited by the dangerous patient is an illustrative example of such a victim. Therefore, under any duty, a dangerous patient scenario involving a merely foreseeable victim never possesses a realizable Nash equilibrium consisting of optimal values of all precautionary variables. This cuts the total number of possibilities left to analyze in half to six: namely, all of the scenarios which involve identifiable victims. Thus, from this point forward, the victim will be assumed to be identifiable unless noted otherwise.

Next, note that, under a given duty, therapist's and victim's liability functions under a victim-centered trigger are the same as those under an attacker-centered trigger. The trigger determines *when* the duty is activated, not the particular liabilities imposed after activation occurs. Thus, given a particular duty—warn-only, protect-only, or warn-and-protect—the analysis under a victim-centered trigger is the same as the analysis under an attacker-centered trigger (and a duty attaches under either approach, since an identifiable victim is *a fortiori* foreseeable). Therefore, the remaining six possibilities collapse into three: warn-only duty, protect-only duty, and warn-and-protect duty—regardless of the trigger—each involving an identifiable victim.

1. *Warn-Only Duty*

A warn-only regime largely resembles the standard two-party comparative negligence scheme described in the context of the two

basic tort models in that a court assesses the care of each party on one dimension only, as opposed to a unified duty regime where both warning and protection are analyzed. If the therapist warns optimally, he pays only for his warning and protection costs. If the therapist warns negligently and the victim takes optimal care, the therapist incurs his warning and protection costs, plus damages. If the therapist warns negligently and the victim takes negligent care, the therapist incurs his warning and protection costs, plus only a portion of the damages. In this regime, the precise fraction of damages borne by the therapist is a function of his warning care and the victim's protective care. Thus, the therapist's liability, denoted here by u_T , is described by

$$u_T = \begin{cases} w + p & \text{if } w \geq w^* \\ w + p + D(p, v) & \text{if } w < w^* \text{ and } v \geq v^* \\ w + p + \beta(w, v)D(p, v) & \text{if } w < w^* \text{ and } v < v^* \end{cases}$$

and victim's liability is described by

$$u_V = \begin{cases} D(p, v) + C(v; k, w) + k & \text{if } w \geq w^* \\ C(v; k, w) + k & \text{if } w < w^* \text{ and } v \geq v^* \\ [1 - \beta(w, v)]D(p, v) + C(v; k, w) + k & \text{if } w < w^* \text{ and } v < v^* \end{cases}$$

Neither of the two possible optimal care combinations is a Nash equilibrium. This is because the therapist's strategy of optimal care in both warning and protection will never in practice be selected.¹³³ Suppose, for the sake of contradiction, that the therapist did select this strategy. According to the liability functions given above, this strategy results in the therapist bearing the cost only of his own care.¹³⁴ But, regardless of the victim's strategy choice, the therapist can unilaterally improve his lot by warning optimally but exercising zero protective care.¹³⁵ Since the definition of a Nash equilibrium requires that neither party be able to unilaterally improve his lot by

133. Game theoretically, the therapist's strategy of dual optimal care is strictly dominated by the strategy of optimal care in warning only.

134. His liability function is $u_T = w^* + p^*$.

135. This would reduce his liability to $u_T = w^* < w^* + p^*$.

varying from the putative Nash strategy,¹³⁶ the therapist's optimal warning and protective care cannot be part of a Nash equilibrium. The therapist's liability is reduced from optimal warning care plus optimal protective care to optimal warning care alone. Since both optimal care combinations require this strategy on the part of the therapist, it follows that the warn-only regime has no Nash equilibrium.

2. *Protect-Only Duty*

In a protect-only jurisdiction, the therapist avoids all damages if he exercises optimal protective care. If he protects negligently, however, he will incur full damages plus his own cost of care if the victim takes optimal care, and he will incur a portion of the damages plus his own cost of care if the victim takes negligent care. The damages apportionment parameter will depend only on the therapist's protection and the victim's care. Therefore, the therapist's liability is given by

$$u_T = \begin{cases} w + p & \text{if } p \geq p^* \\ w + p + D(p, v) & \text{if } p < p^* \text{ and } v \geq v^*, \\ w + p + \beta(p, v)D(p, v) & \text{if } p < p^* \text{ and } v < v^* \end{cases}$$

and the victim's is given by

$$u_V = \begin{cases} D(p, v) + C(v; k, w) + k & \text{if } p \geq p^* \\ C(v; k, w) + k & \text{if } p < p^* \text{ and } v \geq v^*. \\ [1 - \beta(p, v)]D(p, v) + C(v; k, w) + k & \text{if } p < p^* \text{ and } v < v^* \end{cases}$$

Here, as in the warn-only case, the therapist's optimal care in both warning and protection cannot form part of a Nash strategy, since the therapist can unilaterally improve his lot—this time, by moving from dually optimal care to optimal protection but zero warning.¹³⁷ And again, since both of the optimal care strategy combinations require the therapist to exercise this strategy, the

136. See *supra* Part III.A.

137. That is, the therapist can unilaterally reduce his liability from $u_T = w^* + p^*$ to $u_T = p^*$.

protect-only regime does not support a socially optimal Nash equilibrium strategy combination.

3. *Warn-and-Protect Duty*

In this formulation, the therapist avoids damage liability only if he both warns and protects optimally. If he falls short on either dimension of care, he will pay full damages plus his cost of care if the victim takes optimal care and will pay partial damages plus his cost of care if the victim takes negligent care.¹³⁸ The court will take both protective care and warning care (in addition to victim's care) into account when computing the value of the damages apportionment parameter. Thus, the therapist's liability is described by

$$u_T = \begin{cases} w + p & \text{if } w \geq w^* \text{ and } p \geq p^* \\ w + p + D(p, v) & \text{if } w < w^* \text{ or } p < p^*; \text{ and } v \geq v^*, \\ w + p + \beta(w, p, v)D(p, v) & \text{if } w < w^* \text{ or } p < p^*; \text{ and } v < v^* \end{cases}$$

and the victim's by

$$u_V = \begin{cases} D(p, v) + C(v; k, w) + k & \text{if } w \geq w^*; p \geq p^* \\ C(v; k, w) + k & \text{if } w < w^* \text{ or } p < p^*; \text{ and } v \geq v^* \\ [1 - \beta(w, p, v)]D(p, v) + C(v; k, w) + k & \text{if } w < w^* \text{ or } p < p^*; \text{ and } v < v^* \end{cases}$$

It is interesting to note that the warn-and-protect version of the *Tarasoff* duty presents a wrinkle: it is easier for the therapist to act negligently than it is for the victim. This is because the therapist will be judged negligent if he falls short in care spent on warning or protection, even if he does not fall short on both.¹³⁹ However, the victim is still evaluated using a traditional singular measure of care. Thus, in some sense, the therapist has twice as many opportunities as the victim does to be negligent. It will now be shown that this regime may—but need not necessarily—possess a Nash equilibrium strategy combination consisting of optimal values of all precautionary

138. This is not the only possible way to define what it means for the therapist to be negligent with respect to the unified duty. Theoretically, negligence could be defined as: (1) total warning and protective care less than the sum $w^* + p^*$; or (2) warning care less than w^* and protective care less than p^* . The cases, however, are most plausibly read as endorsing the approach used in this article.

139. That is, the therapist is negligent if $w < w^*$ or $p < p^*$.

variables. Both candidate strategy combinations will be evaluated in turn.

The first combination to be tested is the therapist's strategy of optimal warning and protection, coupled with the victim's strategy of optimal knowledge and optimal care in all cases. Suppose the therapist believes that the victim will choose the strategy "*gather optimal knowledge; take optimal care in all cases.*" The therapist is then liable for his own cost of care if he warns and protects optimally, and he is liable for his own cost of care plus full damages if he warns or protects negligently. The therapist, then, will choose dually optimal care if, and only if, the cost of such care is less than the minimum cost of negligent care plus full damages.¹⁴⁰

In the simple models considered earlier, optimal care always satisfied this relationship.¹⁴¹ In essence, this is because, at care levels below optimal care, marginal increases in care are more than offset by marginal savings in expected damages.¹⁴² When this occurs, it is in one's best interest to exercise care until the optimal level is reached.¹⁴³ However, this property is not necessarily true in the *Tarasoff* paradigm, since only *part* of the therapist's total care—namely, the therapist's protective care—affects expected damages.¹⁴⁴ Care spent on warning does not directly affect damages, so marginal increases in warning care do not produce offsetting marginal savings in expected damages.

Therefore, it is in the therapist's best interest to take an optimal amount of protective care only. He can exert no warning care whatsoever, and, all else equal, the amount of damages will be the same as if he warned optimally. Therefore, the sum of negligent care and full damages is minimized when the therapist protects optimally and does not warn at all.¹⁴⁵ Thus, the therapist will exercise dually optimal care only when the cost of such care is less than the cost of

140. Dually optimal care is a best response only if

$$w^* + p^* < \min_{w < w^* \text{ or } p < p^*} w + p + D(p, v^*) .$$

This expression will be simplified below.

141. *See supra* Part III. It is always the case that $x^* < \min_{x < x^*} x + D(x, y^*)$.

142. *See supra* Part III.

143. *See supra* notes 77-78 and accompanying text.

144. The expected damages function varies with p , not w .

145. This is because $\min_{w < w^* \text{ or } p < p^*} w + p + D(p, v^*) = p^* + D(p^*, v^*)$.

optimal protection plus full damages.¹⁴⁶ This relationship may be true, but it need not be. If it is true, the therapist's strategy "*warn optimally and protect optimally*" is indeed a best response.

Conversely, suppose the victim believes that the therapist will exercise dually optimal care. From the definition of optimality, it follows that, until the victim's optimal care level is reached, she will more than offset the marginal cost of taking additional care with marginal savings in expected damages. This establishes that it is in the victim's best interest to take optimal care; optimal care is her best response. As for the victim's best response regarding her level of knowledge, the definition of optimality implies that savings in the cost of care will more than offset additional knowledge gathered until the optimal level of knowledge is reached, but will cease to do so beyond that level.¹⁴⁷ Thus, the victim's strategy "*gather optimal knowledge; take optimal care in all cases*" is a best response to the therapist's strategy "*warn optimally and protect optimally*."¹⁴⁸

It follows that the strategy combination of "*warn optimally and protect optimally*" on the part of the therapist and "*gather optimal knowledge; take optimal care in all cases*" on the part of the victim may be a Nash equilibrium, but need not necessarily be a Nash equilibrium.

To test the second optimal strategy combination, suppose first that the therapist believes the victim will select the strategy "*gather optimal knowledge; take optimal care in response to optimal warning care, but take negligent care in response to negligent warning care*." Whether dually optimal care is the therapist's best response depends upon how precipitously the victim's cost of care decreases as she

146. The therapist will exercise dually optimal care only when $w^* + p^* < p^* + D(p^*, v^*)$, or, equivalently, when $w^* < D(p^*, v^*)$. This inequality need not necessarily hold.

147. This result is arrived at mathematically by comparing the partial derivatives of total social cost with respect to warning and victim's care, τ_w and τ_v , with the partial derivatives of victim's liability with respect to those same variables, u_{v_w} and u_{v_c} , and evaluating both sets of derivatives at the optimal values of warning and victim's care.

148. But this strategy is not the only best response. It will be shown that the victim's strategy "*Gather optimal knowledge; take optimal care in response to optimal warning care, but take negligent care in response to negligent warning care*" is also a best response to dually optimal care.

gains more knowledge from a therapist's warning.¹⁴⁹ This property is not dictated by the terms of the dangerous patient scenario; it may or may not hold in a given case. That is, the therapist's strategy "*warn optimally and protect optimally*" may or may not be the therapist's best response.

Conversely, suppose the victim believes that the therapist will exercise dually optimal care. It is clear, from the above analysis of the first optimal care strategy combination, that the victim's strategy "*gather optimal knowledge; take optimal care in response to optimal warning care, but take negligent care in response to negligent warning care*" is a best response for the victim.

149. If the therapist believes the victim will actually select this strategy, then it must be the case that, for any $w < w^*$ and for any p , the following relationship holds:

$$\min_{v < v^*} [1 - \beta(w, p, v)]D(p, v) + C(v, k^*, w) + k^* < C(v^*, k^*, w) + k^*.$$

The next question is whether dually optimal care is the therapist's best response. Suppose it is not. Then it must be true that there exists some $w_0 < w^*$ and some p_0 such that

$$w_0 + p_0 + B(w_0, p_0, v)D(p_0, v) < w^* + p^*$$

for whatever value of v the victim decides to select. In this scenario, the victim will select the value of v that minimizes the first inequality subject to the constraints $w = w_0$ and $p = p_0$. Call this value v_0 .

Then the two inequalities, when added, imply

$$w_0 + p_0 + D(p_0, v_0) + C(v_0, k^*, w_0) + k^* < w^* + p^* + C(v^*, k^*, w_0) + k^*.$$

The strategy combination considered here will only be a Nash equilibrium if this inequality yields a contradiction. However, the only case in which this inequality will necessarily yield a contradiction is when $C(v^*, k^*, w_0) < C(v^*, k^*, v^*) + D(p^*, v^*)$. The contradiction would be that the values of the precautionary variables previously identified as "optimal" are not in fact so; there exist "better" choices than those identified above. Whether a contradiction is produced—and therefore whether this strategy combination is a Nash equilibrium—depends upon the precise way in which C varies with w . It is interesting to note that it does not depend on the particular properties of the damages-apportionment parameter β .

This analysis shows that, while both strategy combinations which minimize the total social cost of the dangerous patient problem *may* be Nash equilibria, neither *need* be. The following table presents a summary of the results proven in this section. The entries in the table describe the number of socially optimal Nash equilibria in a given duty-trigger combination.

Figure 2

Number of Nash Equilibria in Certain *Tarasoff* Duty Versions

<u>Trigger</u> <u>Duty</u>	Victim-centered	Attacker-centered
Warn-only	Identifiable victim: None Foreseeable victim: N/A	Identifiable victim: None Foreseeable victim: None
Protect-only	Identifiable victim: None Foreseeable victim: N/A	Identifiable victim: None Foreseeable victim: None
Warn-and-Protect	Identifiable victim: None by necessity, but potentially as many as 2 Foreseeable victim: N/A	Identifiable victim: None by necessity, but potentially as many as 2 Foreseeable victim: None

V. IMPLICATIONS

A. Contemporary Controversies in Law and Economics

The above analysis shows that the *Tarasoff* duty does not necessarily produce socially optimal incentives in all cases, and *necessarily does not produce* socially optimal incentives in some cases—those involving a warn-only or protect-only duty.¹⁵⁰ Thus, this result stands as a potential counterexample to the thesis famously expounded by several “Chicago school” economists that the common

150. See *supra* Part IV.C.

law generally achieves efficient results.¹⁵¹

But more conclusions can be drawn. In fact, this result can serve as somewhat of an ideological Rorschach: different normative views about law and economics yield different interpretations. For example, those who believe in the efficiency hypothesis might contend that the lack of across-the-board efficiency of the *Tarasoff* regime has no bearing on the common law efficiency thesis, since *Tarasoff* has been implemented by statute in a vast majority of states. Inefficiency is no surprise then, because statutes are often regarded as less efficient than the common law.¹⁵² This argument seems weak, however, since many states have codified the unified victim-centered approach—the only version with a chance at efficiency—rather than one of the necessarily inefficient versions. Also, judges have had the opportunity to refine this statutory approach by applying interpretive glosses where justified.¹⁵³

Still other commentators might view the lack of necessary efficiency as support for a theory favoring the use of treble damages to supplement inefficient negligence schemes.¹⁵⁴ Recall that the strategy combination of therapist's optimal care and victim's optimal knowledge and optimal care in all cases is a Nash equilibrium if optimal warning is cheaper than damages resulting from optimal therapist's protection and optimal victim's care. Artificially multiplying the magnitude of the damages function can satisfy this relationship and make the strategy combination efficient.¹⁵⁵

151. See George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J. LEGAL STUD. 65, 65-66 (1977) (arguing that efficient results are resistant to judges' personal biases); Paul H. Rubin, *Why is the Common Law Efficient?*, 6 J. LEGAL STUD. 51, 51-52 (1977) (arguing that the common law tends toward efficiency because inefficient rules are more likely than efficient rules to generate litigation and therefore come under judicial scrutiny). See generally RICHARD A. POSNER, *ECONOMIC ANALYSIS OF THE LAW* (1st ed. 1972).

152. See, e.g., Fred P. Bosselman, *Limitations Inherent in the Title to Wetlands at Common Law*, 15 STAN. ENVTL. L.J. 247, 317 (1996).

153. Jeffrey Evans Stake, *Status and Incentive Aspects of Judicial Decisions*, 79 GEO. L.J. 1447, 1496 (1991) ("Where prior cases and relevant statutes leave decision-makers discretion, judges have an opportunity to follow their natural or learned inclinations to avoid inefficiency.").

154. See generally Keith N. Hylton & Thomas J. Miceli, *Should Tort Damages be Multiplied?*, 21 J. L., ECON. & ORG. 388 (2005). Treble damages have been heavily studied in the area of antitrust law. See, e.g., David McGowan, *Free Contracting, Fair Competition, and Article 2B: Some Reflections on Federal Competition Policy, Information Transactions, and "Aggressive Neutrality"*, 13 BERKELEY TECH. L.J. 1173 (1998); Thomas C. Arthur, *Farewell to the Sea of Doubt: Jettisoning the Constitutional Sherman Act*, 74 CAL. L. REV. 263 (1986).

155. See *supra* Part IV.C and accompanying notes.

Finally, those who believe that the American tort system as a whole is too administratively costly to deal with professional discipline can take the lack of across-the-board efficiency as evidence that therapist liability should be imposed exclusively by professional tribunals of, for example, the American Medical Association or the American Psychological Association.¹⁵⁶ It could be suggested that tort reform methods like no-fault compensation and insurance-driven solutions used in other areas of professional liability should be applied to therapist liability in the dangerous patient context, since the current tort rules do not necessarily yield socially optimal results.¹⁵⁷ It is an open question, however, whether these methods of tort reform would in theory produce efficient incentives in the dangerous patient scenario. As seen by comparing the basic models to the dangerous patient scenario, just because the common law is efficient in a standard two-party accident does not mean it will be efficient when applied to more complex problems. Tort reform methods might suffer from this same problem.

B. Current Mental Health and Civil Liberties Debates

The results proven in this article are particularly germane to the argument over whether the U.S. legal and healthcare systems often mistreat those persons who, for no fault of their own, cannot conform their actions to the law or cannot comprehend the difference between right and wrong.¹⁵⁸ Arguably, at least a subset of disturbed psychiatric patients falls into this group by virtue of being unable to consistently make their own informed decisions. Those who urge

156. See Dari-Mattiacci, *supra* note 80, at 344-49 (discussing the effect of administrative costs on the efficiency of the American tort system). See also Richard J. Bonnie, *Professional Liability and the Quality of Mental Health Care*, 16 L. MED. & HEALTH CARE 229 (1988); Stanley Brodsky, *Fear of Litigation in Mental Health Professionals*, 15 CRIM. JUSTICE & BEHAV. 492 (1988).

157. Tort reform and alternatives have been discussed extensively in the context of liability for the acts of medical professionals. See, e.g., FURROW ET AL., *supra* note 48, at 479-93; Randall R. Bovbjerg et al., *Valuing Life and Limb in Tort: Scheduling "Pain and Suffering"*, 83 NW. U. L. REV. 908 (1989); Kenneth S. Abraham, *Medical Liability Reform: A Conceptual Framework*, 260 JAMA 68 (1988).

158. A central issue in this discussion (and one especially related to the dangerous patient scenario) is due process protection in the civil commitment process. The Supreme Court has addressed this issue several times. See *Addington v. Texas*, 441 U.S. 418 (1979) (addressing the standard of proof necessary to satisfy due process in a civil commitment proceeding). For a therapeutic perspective on civil commitment, see Paul S. Appelbaum, *The New Preventive Detention: Psychiatry's Problematic Responsibility for the Control of Violence*, 145 AM. J. PSYCHIATRY 779 (1988).

greater patient autonomy might note that a protect-only duty disincentivizes warning—since a court does not take warning into account in assigning liability—and encourages confining the patient and restricting his movement.¹⁵⁹ However, a protect-only duty never produces socially optimal results.¹⁶⁰ On the other hand, a warn-and-protect duty is efficient under certain conditions.¹⁶¹ Therefore, the argument might conclude, states should impose a unified duty, which accommodates and incentivizes warning—a precaution less physically restrictive of the patient than confinement—and eschew a protect-only approach, which does not.

Victims' rights advocacy groups can also make positive use of the results proven here to advance their cause in the political arena. In particular, they can observe that the only version of the duty which accommodates (even though it does not demand) an efficient *Tarasoff* regime is that which places the most comprehensive restrictions on the therapist: the warn-and-protect version.¹⁶² Socially optimal results cannot be achieved in the warn-only and protect-only versions; they can only be achieved, if at all, where the therapist is induced to take both types of precautions simultaneously.¹⁶³ Therefore, a victims' rights group can lobby in a principled way for the adoption of the warn-and-protect duty. Such lobbying would advance the group's private motivations by emphasizing the dual measures geared toward victim safety and garnering popular support by justifying the position on broad-based efficiency grounds.

Additionally, mental healthcare providers who support a stronger confidentiality norm can point to the results proven above as a source of support for the very general proposition that current efforts to balance therapist-patient confidentiality with public protection do not always yield optimal results. Thus, they might argue, it is time for legislatures and common law judges alike to reconsider how to best protect potential victims of dangerous psychotherapy patients, opening up the general discussion even if specific alternatives are not suggested. On the other hand, those arguing against such reconsideration can point to the behavior of the warn-and-protect duty in a victim-centered jurisdiction. They can argue that a potentially

159. *See supra* Part IV.C.

160. *See id.*

161. *See id.*

162. *See id.*

163. *See id.*

efficient duty has already been found, and subsequent discussion should focus on how to judicially or legislatively adjust the behavior of the expected damages function to actually achieve this efficiency (as outlined earlier in this article).¹⁶⁴

C. *Questions for Further Study*

First, it should be noted that the efficiency analysis in this article is primarily of the “micro” variety in the sense that duties were evaluated, but the question precedent of when the duties are triggered in the first place was not treated in great depth. This highlights the nature of the distinction between the victim-centered and attacker-centered triggers: the operation of the rule, once triggered, is formally the same under each one, but the triggering conditions themselves are different. Therefore, this article invites a “macro” efficiency analysis, evaluating not only the efficiency of rules once triggered, but the efficiency of the triggering conditions. For example, it might be efficient to establish a demanding victim-centered trigger when the harm threatened is minor and a less demanding attacker-centered trigger when the harm threatened is more serious. This is just one of many hypotheses that a macro efficiency analysis might address.

This article considered those *a priori* incentives which might induce the therapist and victim to take socially optimal precautions. It did not consider how well the *Tarasoff* rules induce behavior on the part of one party that is optimal *given that the other party acted non-optimally in the first place*. That is, it did not consider the rules’ effect on a party responding to the irrational actions of the other party. In economic terms, this article leaves unexplored the application of second-best theory to the dangerous patient rubric.¹⁶⁵

164. *See id.*

165. The theory of the second-best has been explained thusly:

Assume a system with multiple variables. Take the most desirable state the whole system could assume and the associated values that all of the variables must assume to produce this state: call this condition, the first-best state of the system and call the associated values of the variables, the first-best values. Now assume that one variable will not assume the value necessary for the first-best state of the whole system: call this the constrained variable. Next take the next to the most desirable state the whole system could assume and the associated values that all the variables must assume to produce this state: call this the second-best state of the system. There are systems in which achieving the second-best state will require that at least one variable other than the constrained variable assume a value other than the first-best value: call the value the second-best value.

Lawrence B. Solum, *The Aretaic Turn in Constitutional Theory*, 70 BROOK. L. REV. 475, 486-

Also, this article leaves open the possibility that therapist-victim interactions might change as the therapist becomes involved in successive dangerous patient scenarios involving: (1) the same patient or a different patient, and (2) the same victim or a different victim. Broadly, both therapist and victim might exhibit “learning behavior” over time and become better able to anticipate the other’s actions.¹⁶⁶ This notion, central to the theory of repeated and evolutionary games, could lend insight into the longitudinal study of the therapist-victim dynamic.

Lastly, various inefficient *Tarasoff* regimes could be studied for their non-economic value. Consider, for instance, the warn-and-protect duty under the attacker-centered approach. It was established earlier that the therapist cannot readily issue an optimal warning to a victim who is merely foreseeable. Thus, one might question why attacker-centered jurisdictions do not always switch to a protect-only duty, given the obvious inefficiency of the unified version. One explanation could be that the unified duty, though its warning component is a nullity with respect to a merely foreseeable victim, actually possesses a sort of signal value. Even though therapists in such a situation cannot warn the victim, the fact that a heightened duty (above and beyond protect-only) is on the books in the first place might signal to judges applying the law and therapists following it that there is a strong normative undercurrent to apply *Tarasoff* to therapists in a very unforgiving fashion. This might cause a judge to interpret the protective component of the unified duty more strictly than if that jurisdiction recognized *only* a protective duty and *not* a duty to warn. Similarly, a jurisdiction’s use of a warn-only duty might signal to a judge that the jurisdiction is not very serious about holding therapists liable under that duty since it does not adopt the maximally protective warn-and-protect duty. The failure to adopt the maximally restrictive approach can signal that the warn-only duty that is on the books is not to be applied in a particularly rigorous way.

87 (2004) (emphasis omitted). For a description of second-best theory arising in a pure economics context, see, e.g., R. G. Lipsey & Kelvin Lancaster, *The General Theory of Second Best*, 24 REV. ECON. STUD. 11 (1956).

166. See BAIRD ET AL., *supra* note 50, at 159-85; MONTET & SERRA, *supra* note 66, at 188-91, 329-62; FUDENBERG & TIROLE, *supra* note 50, at 145-99; MYERSON, *supra* note 50, at 308-69; DIXIT & SKEATH, *supra* note 55, at 425-61.