

A Reformulation of the Right to Recover Compensation for Medically Related Injuries in the Tort of Negligence

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1. Introduction

In 1995 the Quality in Australian Health Care Study reported that 16.6% of a large sample of admissions to hospitals were associated with the occurrence of an "adverse event".¹ An "adverse event" is defined as "an unintended injury or complication which results in disability, death or prolongation of hospital stay and is caused by health care management rather than the patient's disease".² If this figure were extrapolated to include all hospital admissions in Australia in 1992 there would have been 470,000 admissions associated with an adverse event.³ This means that there are 470,000 patients who sustained an unintended injury or complication that was caused by health care management rather than by the patient's disease or condition. Included in this figure are some 50,000 patients who would have suffered permanent disability and 18,000 patients who would have died as a result of their health care.⁴ It has been estimated that the annual cost of the extra bed days associated with adverse events is in the vicinity of \$650 million.⁵

While these findings have been treated with some scepticism by many members of the medical profession, two leading medical professionals have concluded that:

[A]ny reasonable review of the Australian Study would acknowledge its key finding: that among randomly selected series of hospital records examined by experienced medical practitioners a substantial number were judged to display substandard care that resulted in injury to patients.⁶

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1 Wilson, R, Runciman, W, Gibberd, R, Harrison, B, Newby, L, and Hamilton, J, "The Quality in Australian Health Care Study" (1995) 163 *Med J of Aust* 458 at 459 (Box 1).

2 *Id* at 459, 461.

3 *Id* at 465 (Box 3).

4 *Id* at 467.

5 Review of Professional Indemnity in Health Care, *Compensation and Professional Indemnity in Health Care (Final Report)* (1995) Department of Human Services and Health, Canberra at 2.41.

6 McNeil, J and Leeder, S, "How Safe are Australian Hospitals?" (1995) 163 *Med J Aust* 472 at 474.

By contrast only a small proportion of patients sustaining adverse outcomes have brought tort actions to recover damages.⁷ The Final Report of the Review of Professional Indemnity Arrangements for Health Care Professionals has noted:

When the data from the Quality in Australian Health Care Study ... are compared to the frequency of negligence actions taken against health care professionals, it is clear that few people suffering even a highly preventable adverse event with significant resultant disability ever sue their health care professional.⁸

This contrast between the high rate of occurrence of adverse events and the relatively low level of claims for compensation raises some important questions about the effectiveness of tort law as a vehicle for providing compensation for medically related injuries.

The relatively low number of claims for compensation suggests that the tort based system of compensation is not providing a remedy for a large number of people who are, or should be, entitled to claim compensation. This has proved to be a difficult, if not intractable, problem. There have been proposals for no-fault systems of compensation to widen the entitlement to claim compensation.⁹ These proposals, which broaden the right to recover compensation for medically related injuries, have attracted much criticism. In its Final Report the Professional Indemnity Review argued that:

As a matter of principle, it is unclear why on public policy grounds, a causal connection between a health care incident and a disability should give such a person a greater call upon the public purse than any other person with a similar disability from some other cause. Is a person who is quadriplegic from an illness less deserving of community assistance than someone whose quadriplegia develops as a known complication of their health care?¹⁰

A no fault scheme of compensation thus overcomes one problem of limited access to compensation but in the process creates a further difficulty of distinguishing between compensation payments and other forms of support which are generally available to members of the community. The resulting position is that there appears to be no acceptable alternative system of compensation for medically related injuries even though there is evidence to suggest that tort law fails to provide compensation for a substantial number of those who sustain a medically related injury that is caused by the negligence of a health care professional.

7 Above n5 at 6.1. For a general critique of tort law based upon the relatively small number of claims initiated by those sustaining all forms of personal injury, see Abel, R, "A Critique of Torts" (1990) 37 *UCLA Law Rev* 785. See also Dewees, D and Trebilcock, M, "The Efficacy of the Tort System and its Alternatives: A Review of the Empirical Evidence" (1992) 30 *Osgoode Hall LJ* 57.

8 Above n5 at 2.55. See also at 2.86, 2.96-2.98, 2.101, 7.5 and 7.17.

9 Above n5 at 6.3-6.15; see also Review of Professional Indemnity in Health Care, *Compensation and Professional Indemnity in Health Care (Interim Report)* (1994) Department of Human Services and Health at 3.92-3.103. See also Sappideen, C, "Look Before You Leap: Reform of Medical Malpractice Liability" (1991) 13 *Syd LR* 523.

10 Above n5 at 6.12; see also Ison, T, *Accident Compensation: a Commentary on the New Zealand Scheme* (1980) at 21, quoted in Luntz, H and Hamblly, D, *Torts Cases and Commentary* (4th edn, 1995) at 1.3.22.

There is also concern about the effectiveness of tort law in reducing the overall level of injuries in the health care system. The relatively large number of instances in which patients appear to receive substandard levels of care suggests that tort law is *not* playing an effective role in increasing the overall quality of health care services. It is generally accepted that one of the functions of tort law is to deter unsafe levels of conduct by ensuring that defendants are responsible for the full costs of accidents caused by their negligent conduct.¹¹

Uncertainty about the capacity of the law of tort to deter unsafe conduct is occurring at a time when there is a much more broad ranging and fundamental debate about the role of regulation in society.¹² In particular there is a general acceptance of the range of problems associated with direct forms of "command and control" regulation.¹³ At the same time there have been a number of proposals concerning the use of a range of indirect forms of self regulation. In general terms there has been a recognition of the limited capacity of command and control regulation to achieve the goals set by regulators, and of the need to devise indirect methods to encourage those being regulated to internalise the goals of the system of regulation.¹⁴

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- 11 See generally, Calabresi, G, *The Costs of Accidents: A Legal and Economic Analysis* (1970); Landes, W and Posner, R, *The Economic Structure of Tort Law* (1987). For a review of economic analysis of law theories in the broader context of tort theory, see generally Englard, I, *The Philosophy of Tort Law* (1993) at 29-84. The view that tort law has a role deterring unsafe conduct is now discussed in many torts texts, see eg Luntz, H and Hambly, D, above n10 at 1.2.1-1.2.8, 1.4.32, 1.5.1-1.5.15; Fleming, J, *The Law of Torts* (8th edn, 1992) at 6-14; Markesinis, B and Deakin, S, *Tort Law* (3rd edn, 1994) at 22-35, 36-38. For a review of the accident deterrence function of tort law in the context of medically related injuries, see Review of Professional Indemnity in Health Care, above n9 at 3.19-3.41, 313-322 (Appendix D, Tort Law, deterrence and economic theory). For an analysis of effectiveness of tort law in deterring accidents, see Dewees, D and Trebilcock, M, above n7; Schwartz, G, "Reality in Economic Analysis of Tort Law: Does Tort Law Really Deter?" (1994) 42 *UCLA L Rev* 377.
- 12 One of the triggers for this debate has been the adoption of policies involving "deregulation", see eg, Braithwaite, J, and Ayres, I, *Responsive Regulation: Transcending the Deregulation Debate* (1992); Shearing, C, "A Constitutive Conception of Regulation" in Grabosky, P, and Braithwaite, J (eds), *Business Regulation and Australia's Future* (1992) at 67. See also Teubner, G, *Law as an Autopoietic System* (1993); Corbett, A, "A Proposal for a more Responsive Approach to the Regulation of Corporate Governance" (1995) 23 *Fed LR* 293; Gunningham, N, "Beyond Compliance: Management of Environmental Risk" in Boer, B, Fowler, R and Gunningham, N (eds), *Environmental Outlook: Law and Policy* (1994) at 254; Stewart, R, "Environmental Regulation and International Competitiveness" (1993) 102 *Yale LJ* 2039.
- 13 "Command and control" regulation involves the definition of standards of business or professional conduct and the use of sanctions and penalties as enforcement mechanisms to ensure that there is compliance with those standards of conduct, see eg, Shearing, C, above n12 at 69; Braithwaite, J, and Ayres, I, above n12 at 4-7, 35-40; Englard, I, above n11 at 161-170, 219-223. In particular there are concerns about the way in which tort law, in the form of "public policy driven liability" rules, that is, as a form of command and control regulation, can have adverse effects on the provision of services by the professions, see Partlett, D, "Roaming in the Gloaming: The Liability of Professionals" (1992) 14 *Syd LR* 261, at 276-284.
- 14 For example, "responsive regulation": Braithwaite, J, and Ayres, I, above n12 at 4-18; "constitutive regulation": Shearing, C, above n12 at 70; "reflexive law": Teubner, G, above n12 at ch 4 "Reflexive Law". In the health care field one manifestation of this change in the United States is "managed competition", see eg, Iglehart, J, "Health Policy

The tort based system of compensation is a form of command and control regulation. There has been a relatively simple assumption that damages awards for injuries caused by negligence would act as a "command" which would feedback into the health care system. The threat of such damages awards would then lead health care professionals and health care institutions to modify their conduct in ways that would minimise the risk of harm to patients.¹⁵ As with many other forms of command and control regulation these assumptions have proved to be faulty.¹⁶ The "commands" contained in damages awards have been either misunderstood or ignored.¹⁷ The sanction of damages awards has not proved to be effective in encouraging the health care system to adopt safer and more effective procedures.¹⁸ The recognition that tort law has hit the same regulatory barriers as other forms of command and control regulation has led many, including the Professional Indemnity Review, to develop other regulatory measures to improve the quality of health care services.¹⁹

Report: Managed Competition" (1993) 328 *New England J of Med* 1208. For an example of a proposal for the use of "managed competition" as mechanism for the reform of the health care system in the United States, see Beresford, R, "The Health Security Act: Coercion and Distrust for the Market" (1994) 79 *Cornell L Rev* 1405.

- 15 See eg, above n5 at 5.202. "The tort system is theoretically supposed to improve or maintain the quality of care, through deterrence of poor behaviour by health care professionals through publicity of cases educating the public and professionals about what is an appropriate standard of care." See also eg, Abraham, K, and Weiler, P, "Enterprise Liability and the Evolution of the American Health Care System" (1994) 108 *Harv LR* 381 at 407-414.
- 16 Above n12.
- 17 The "signals" sent by the tort system are delayed: above n5 at 7.50; are subject to interference and "noise" as a result of publicity: at 7.6; are not carried to the health care system by any systematic feedback mechanism: at 5.205-5.207; and sometimes are affected by lack of knowledge of what constitutes an appropriate standard of care: at 3.10-3.12, 7.137-7.139 (the need for more widespread use of "evidence-based health care"). For an example of the unclear signals sent by the tort system as a result of litigation involving cerebral palsy, see above n5 at 10.24-10.25, 10.34-10.49. The "signals" are also affected by the lack of information available to patients when they consider whether to undergo specific forms of medical treatment, see above n5 at 4.24-4.46, and Mehlman, M, "The Patient-Physician Relationship in an Era of Scarce Resources: Is there a Duty to Treat?" (1993) 25 *Connecticut LR* 349.
- 18 This relates to the problem of what can be called "defensive medicine". Defensive medicine refers generally to changes made "because of fear of litigation": above n5 at 5.215. These changes can be beneficial for patient care or "serve no useful purpose for the patient": above n5 at 5.216; see also Review of Professional Indemnity in Health Care above n9 at 6.38-6.41 (Defensive Medicine Study dealing with response of doctors to Rogers Whitaker (1992) 175 *CLR* 479); Gerber, P, "Has informed consent become a legal nightmare" (1995) 163 *Med J of Aust* 262; Stanley, F "Litigation Versus Science: What's Driving Decision-Making in Medicine" (1995) 25 *UWA LR* 265; Schwartz, G, above n11 at 397-399, 402, 428. One aspect of this problem is the inadequacy of the damages remedy to act as a mechanism to encourage "system wide learning": above n5 at 3.82-3.83. For example there are some concerns about the impact of tort law on some public health programs: above n5 at 7.115-7.119. There has been an extensive debate about whether and, if so, how tort liability has affected the cost and availability of insurance, see Review of Professional Indemnity in Health Care above n9 at 8.81-8.114, see also at 9.142-9.177 for a discussion of proposals to "increase the sharing and spreading of risks among doctors".
- 19 In general terms the *Compensation Professional Indemnity in Health Care (Final Report)*, above n5, was concerned to develop more effective methods for defining appropriate standards of care and more effective quality assurance mechanisms to ensure that health care services were meeting these standards. The tort system is only incidentally involved

It is this general sense of uncertainty about the effectiveness of a tort based system of compensation for medically related injuries that leads this article to analyse some of the tenets of our understanding of a right to seek "compensation". The overall theme of this article is that this general sense of unease arises in part because of doubt about what is meant by a right to obtain compensation and how this right is different to other entitlements, eg, those provided by the social security system and Medicare. In particular this article argues that the current conception of the right to recover compensation for personal injury provides an inadequate basis for consideration of rights to recover "compensation" for medically related injuries. On this basis it suggests that there is both a need and an opportunity to recognise a more limited conception of the right to recover compensation in the context of medically related injuries.

This article is made up of two parts. The first part sets out to identify some of the reasons for the difficulties experienced in applying tort law to medically related injuries. The second part of the article identifies a relational model of responsibility in which the damage is defined with reference to the nature of the duty of care owed by the defendant to the plaintiff. It is argued that a relational model of responsibility provides the basis for the recognition of a form of proportionate liability and that this would be a way of overcoming some of the problems experienced with the existing tort based system of compensation for medically related injuries.

2. *The recovery of compensation for medically related injuries*

This part sets out to give an explanation as to why the ordinary principles which define the right to recover compensation for personal injury cannot be successfully applied to medically related injuries. The first two sections in this part argue that the right to recover compensation for personal injury is based upon an objective model of responsibility, that is, one in which both the "damage" and the defendant's fault which caused the damage are objectively defined. The third and middle section argues that this model of responsibility cannot be successfully applied to complex decision-making environments. The final sections in this part give an account of some of the specific problems that are created by the application of an objective model of responsibility to the complex system regulating the delivery of health care services.

in these activities. On defining standards of care: above n5 at 3.10 (the need for "evidence-based health care"); at 3.13-3.30 (the need for broader use of the Cochrane Collaboration and the establishment of an Australian Cochrane Centre); at 3.49-3.64 (the development of "clinical practice guidelines"); at 4.24-4.46 (the development of better information about the effectiveness of cervical cancer screening). On the development of quality assurance mechanisms: above n5 at 5.5-5.11 (the need for more effective data collection); 5.86-5.174 (the introduction of systematic "incident monitoring" of adverse events); at 5.175-5.201 (introduction of accreditation and credentialing schemes); at 5.218-5.238 (development of proactive and reactive risk management methods). For a "market" based strategy to overcome these difficulties, see Choharis, P, "A Comprehensive Market Strategy for Tort Reform" (1995) 12 *Yale J on Reg* 435.

A. *Models of responsibility*

The approach in this article is to develop a broad understanding of the underlying rationale which supports the right for a plaintiff to recover damages from a defendant for negligently caused harm. The central feature is the focus on the ways in which each of the elements of the tort of negligence interact so as to create patterns or models of circumstances in which defendants will be found to be legally responsible for harms associated with their activities. The resulting patterns or models do not purport to give detailed accounts or explanations of why liability is imposed in particular circumstances. Rather these models are a way of describing the interaction between the characteristic forms of harm and the kinds of conduct which give rise to a finding that a defendant is legally responsible for a plaintiff's harm.²⁰

Throughout this article the term responsibility is therefore used to indicate the broad outline of the relationship between a plaintiff and defendant that gives rise to a defendant's liability to pay damages to a plaintiff for harm sustained by the plaintiff. It would not be possible to substitute the term liability for responsibility in this context because this would tend to narrow the focus toward an analysis of the specific rules which give rise to a defendant's liability to pay damages to a plaintiff. The following argument relies upon a composite notion of responsibility rather than a more detailed definition of the circumstances in which a defendant will be found to be liable to pay damages to a plaintiff.

For example proposals for the adoption of "no-fault" schemes of compensation assert that the community, or a part of the community, should be "responsible" for the harms or injuries associated with particular forms of conduct.²¹ In *E v Australian Red Cross Society*, in which it was unsuccessfully argued that the Society failed to protect the safety of the blood supply for blood transfusions, Justice Wilcox stated that:

[The plaintiff], and any other people who are in a like position, have a strong moral claim upon the community for some financial assistance in coping

20 For a discussion of "models of responsibility" see Dan-Cohen, M, "Responsibility and the Boundaries of the Self" (1992) 105 *Harv LR* 959; Weston, N, "The Metaphysics of Modern Tort Theory" (1994) 28 *Valparaiso LR* 919 (the conception of "will as ground" for notions of responsibility found in tort). These models are not detailed accounts of why liability is imposed in particular circumstances. For examples of attempts to provide an explanation for the imposition of liability in tort, see eg, economic analysis of law, above n11; theories of "corrective justice", Coleman, J, "Tort Law and the Demands of Corrective Justice" (1992) 67 *Ind LJ* 349; Weinrib, E, "The Special Morality of Tort Law" (1989) 34 *McGill LJ* 403. For examples of attempts to develop a broader understanding about the notions of "responsibility" in tort, see eg, Perry, S, "The Moral Foundations of Tort Law" (1992) 77 *Iowa LR* 449 at 450 ("principles of reparation ... constitute the main moral foundations of tort law"). For an example of a similar use of "models" to describe two broad conceptions of the public corporation which are implicit in American corporate law, see Allen, W, "Our Schizophrenic Conception of the Business Corporation" (1992) 14 *Cardozo LR* 261.

21 See eg, above n5 at 6.3-6.22 (consideration of no fault schemes of liability, "condition specific" schemes of compensation, eg, the occurrence of cerebral palsy and liability based upon individual fault); Review of Professional Indemnity in Health Care above n9 at 3.11-3.19 (needs based models of compensation), 3.120-3.132 (compensation for special groups).

with their illnesses ... [T]o take into account the effect upon the blood supply is to say that a person in the position of the [Red Cross Society] was entitled to give priority to the interests of all blood users — and everyone in the community is a potential blood user — over the interests of the relatively small number of individuals who might receive infected blood. To so say is to make the [plaintiff] bear the burden of protecting the wider public interest.²²

This is a relatively straightforward claim that, because the overall community benefits from a particular course of conduct at the expense of the relatively small number of people who suffer harm because of that course of conduct, the community should be responsible for that injury and provide some form of compensation to those who were injured as a result of the course of the conduct which was in the public interest. This basic proposition underlies most proposals for specific no-fault compensation schemes.²³

This article argues that tort law currently embodies at least two models for assessing whether a defendant is legally responsible for the harm caused to a plaintiff. One is an objective model which is the predominant model used in the apportionment of responsibility in personal injury cases. This model is associated with a cluster of specific rules in tort law which provide that a defendant should bear full responsibility for any harm caused where, from the perspective of the external observer, the defendant's conduct changed the ordinary course of events and thus caused the plaintiff's injury. A second is a relational model which is arguably the predominant model for apportioning responsibility in cases involving recovery of pure economic loss.²⁴ This model assesses the extent of the parties' liability with reference to the parties' own understanding of the responsibilities assumed by each of the parties. Both models are a part of the law of torts and each bears with it a particular understanding of what is meant by the plaintiff's right to claim compensation.

The central theme of this article is that the choice of the model of responsibility has profound effects upon the extent of the right to recover compensation for medically related injuries. On the one hand, the objective model of responsibility relies upon a number of simple assumptions which cannot be successfully applied to the complex system which manages the delivery of health care services. As a result the tort based system of compensation produces outcomes that are unpredictable and, ultimately, unsustainable. On the other hand, a tort system of compensation based upon a relational model of responsibility would produce predictable outcomes but at the cost of failing to provide "full" compensation for the plaintiff. This would involve a diminished role for the system of compensation which would entail a significant shift of

22 *E v Australian Red Cross Society* (1991) 27 FCR 310 at 380-381 (appeal against decision of Wilcox J dismissed (1991) 31 FCR 299).

23 Above n5 at 6.5. See *id* at 6.16-6.22 for rejection of "condition specific" scheme for "brain-damaged babies". For an example of the use this notion of responsibility to justify a condition specific scheme of compensation, see Klein, A, "A Legislative Alternative to 'No Cause' Liability in Blood Products Litigation" (1995) 12 *Yale J on Reg* 107.

24 This notion of "relational responsibility" is developed in more detail in Corbett, A, "The Rationale for the Recovery of Pure Economic Loss in Negligence and the Problem of Auditors' Liability" (1994) 19 *MULR* 814.

resources from the system of compensation to the system of benefits and entitlements which are available to the community at large.

B. An objective model of responsibility

There is an objective model of responsibility underlying a plaintiff's right to recover compensation for negligently caused personal injury. This approach to the problem of deciding upon the issue of responsibility begins with two separate sets of events, that is, the harm or loss sustained by a plaintiff and the relevant acts or omissions of a defendant. The problem, within this framework, is whether or not the connection between the two events is close enough to support a finding that a defendant should be responsible for the losses sustained by the plaintiff. The resulting pattern of circumstances where the connection between the two events is sufficiently close to establish a defendant's responsibility for the harm suffered by a plaintiff is not the outcome of any particular rule or requirement in tort. Rather it is the outcome of the interaction of a cluster of rules.

The following outline of this objective model of responsibility is not a detailed analysis of any particular rule in the tort of negligence. Further, there is no attempt at a comprehensive analysis of many of the difficult problems around which tort law has evolved. Rather the analysis is a broadly based one seeking to identify the broad pattern of circumstances in which a defendant will be found to be responsible for causing personal injury. There are many instances in which particular doctrines have been used to overcome specific problems that have been generated by this model of responsibility.²⁵ The purpose for developing this broad analysis is to support the wider argument that this model of responsibility places too many limitations upon our conception of "responsibility" and as a result cannot be modified to overcome the problems encountered by a system of compensation for medically related injuries.

The objective model of responsibility begins with the two separate sets of events and analyses each event separately. On the one side the personal injury suffered by a plaintiff is characterised as "damage". Where appropriate a defendant is liable to pay "damages" in order to compensate the plaintiff for each "item or aspect of the damage" suffered by the plaintiff.²⁶ On the other

25 For example, the problem of multiple sufficient causes: *Baker v Willoughby* [1970] AC 467; *Jobling v Associated Dairies Ltd* [1982] AC 794.

26 *Mahony v Kruschich (Demolitions) Pty Ltd* (1985) 156 CLR 522 judgment of Gibbs CJ, Mason, Wilson, Brennan and Dawson JJ at 527: "In negligence, 'damage' is what the plaintiff suffers as the foreseeable consequence of the tortfeasor's act or omission. Where a tortfeasor's negligent act or omission causes personal injury, 'damage' includes both the injury itself and the other foreseeable consequences suffered by the plaintiff. The distinction between 'damage' and 'damages' is significant. Damages are awarded as compensation for each item or aspect of the damage suffered by a plaintiff so that a single sum is awarded in respect of all the foreseeable consequences of the defendant's tortious act or omission." This distinction between the "damage" and "damages" is used throughout this article. Any form of personal injury is generally recognised as a form of "damage" and therefore as the basis for an action in negligence, see eg, *Bryan v Maloney* (1994) 182 CLR 609 judgment of Mason CJ, Deane and Gaudron JJ at 617; Brennan J at 633. See also Markesinis, B, and Deakin, S, above n11 at 83 where the specific contexts in which there will be a duty of care are defined with reference to, amongst other things, the kind of damage. Personal injury is one form of damage in which there is a duty of care.

side a defendant will only be liable for this damage where a reasonable person in the position of the defendant could have avoided causing this damage by exercising reasonable care. The significant feature of this model of responsibility is that in order for there to be a rational connection between the extent of the defendant's fault in causing the damages and the extent of the defendant's liability to pay damages there must be a simple, decisive relationship between the defendant's acts and the plaintiff's damage. There will have to be an objectively verifiable relationship between the acts and the damage in which specific acts cause particular forms of damage. It is this relatively simple heuristic which supports this model of responsibility.

Each of the elements of the tort of negligence are designed to ensure that a defendant will only be liable for those acts which consistently produce the kind of damage suffered by the plaintiff. The defendant must have a duty to exercise reasonable care to avoid causing damage to the plaintiff.²⁷ This will mean the relationship between the defendant and the plaintiff falls into one of the recognised categories in which the plaintiff's damage is a foreseeable consequence of the defendant's acts.²⁸ Within this context the defendant's conduct must amount to a failure to exercise reasonable care in the sense that a reasonable person in the position of the defendant would have considered the foreseeable damage to the plaintiff and taken reasonable steps to ensure that the plaintiff did not suffer this damage.²⁹ Finally it will mean that the

27 *Donoghue v Stevenson* [1932] AC 562 judgment of Lord Atkin at 580 for the formulation of the "neighbour principle". The neighbour principle has been held to include two requirements, that is, that the damage is reasonably foreseeable and that the relationship between the parties has the "requisite degree of proximity": *Jaensch v Coffey* (1983-84) 155 CLR 549 judgment of Deane J at 578-581. This formulation has been adopted by the majority of the High Court: *Burnie Port Authority v General Jones Pty Ltd* (1994) 179 CLR 520 judgment of Mason CJ, Deane, Dawson, Toohey and Gaudron JJ at 541-543; *Bryan v Maloney* (1994-95) 182 CLR 609 judgment of Mason CJ, Deane and Gaudron JJ at 619-620; contra Brennan J at 652-656.

28 The element of "proximity" is a factor in establishing the existence of a duty of care. Proximity does not provide a method for determining whether the relationship between a particular act by a defendant will give rise to a duty of care in relation to a harm sustained by a plaintiff. Rather the element of proximity "remains the general conceptual determinant and the unifying theme of the categories of case in which the common law of negligence recognises the existence of a duty to take reasonable care to avoid a reasonably foreseeable risk of injury to another": *Burnie Port Authority v General Jones Pty Ltd* (1994) 179 CLR 520 judgment of Mason CJ, Deane, Dawson, Toohey and Gaudron JJ at 543, quoting judgment of Deane J in *Stevens v Brodribb Sawmilling Co Pty Ltd* (1986) 160 CLR 16 at 53.

29 *Shirt v Wyong Shire Council* (1980) 146 CLR 40 judgment of Mason J at 47-48: "The perception of the reasonable man's response calls for a consideration of the magnitude of the risk and the degree of the probability of the occurrence, along with the expense, difficulty and inconvenience of taking alleviating action and any other conflicting responsibilities which the defendant may have." In some circumstances the standard of care expected of the defendant will be altered by the nature of the duty of care owed by the plaintiff to the defendant, eg, *Cook v Cook* (1986) 162 CLR 376. This has sometimes been described as a "variable standard of care", eg, *Burnie Port Authority v General Jones Pty Ltd* (1994) 179 CLR 520 per Mason CJ, Deane, Dawson, Toohey and Gaudron JJ at 550. The standard of care is responsive to the special characteristics of the relationship between the plaintiff but the process for determining whether there has been a breach of duty remains an objective one, eg, *Cook v Cook* per Mason, Wilson, Deane and Dawson JJ at 382-384.

plaintiff would not have suffered the damage had the defendant exercised reasonable care.³⁰

These liability rules thus ensure that a defendant will only be responsible for those harms or losses where there is a predictable relationship between the defendant's acts and the plaintiff's harms or losses.³¹ A defendant is responsible for the consequences of their acts where a reasonable person in the position of the defendant would foresee that their acts could cause the kind of damage actually suffered by the plaintiff.³² These rules guarantee the basis for ensuring that there is a rational connection between the extent of a defendant's fault and the extent of the defendant's liability to pay damages. The central feature of this approach to the determination of liability is that it is based upon an objective assessment of capacity of the defendant's acts to cause the kind of damage sustained by the plaintiff.

This approach to the determination of the responsibility of the defendant for the plaintiff's damage is a necessary one in the light of the approach taken to the assessment of damages. Once a plaintiff has established that a defendant is responsible for their damage the plaintiff is entitled to receive compensation for each "item or aspect of the damage".³³ In *Todorovic v Waller* Chief Justice Gibbs and Justice Wilson expressed the principle in the following way:

In the first place, a plaintiff who has been injured by the negligence of the defendant should be awarded such a sum of money as will, as nearly as possible, put him in the same position as if he had not sustained the injuries.³⁴

On this basis a defendant is liable to pay the full amount of compensation which is required to overcome, so far as is possible, the effects of the damage suffered by the plaintiff.³⁵ A defendant is liable for this measure of damages

30 *March v E & M H Stramare Pty Ltd* (1991) 171 CLR 506. Despite the apparent loosening of the test for causation a plaintiff must still establish that the defendant's conduct is a cause of the damage which is the basis of the plaintiff's action: judgment of Mason CJ at 515-517, judgment of Deane J at 522-524. *Toohy J* at 524 agreed with Mason CJ, *Gaudron J* at 525 agreed with Mason CJ and Deane J. *Contra McHugh J* at 533-534 where *causa sine qua non* test is formulated as the exclusive test of causation. For example, *X and Y v Pal* (1991) 23 NSWLR 26 judgment of Mahoney JA at 31-33, judgment of Clarke JA at 56-57, where the plaintiff could not establish a causal link between her brain damage and congenital syphilis.

31 For example, the primary reasons for denying the existence of a duty of care in cases involving nervous shock was the unpredictable nature of this form of injury: *Jaensch v Coffey* (1984) 155 CLR 549 judgment of Deane J at 592, 600-602. While there is now a recognition of the existence of a duty of care where the damage is nervous shock a plaintiff must still establish that their injury was closely associated with the "shock" of seeing a close family member or friend who has been seriously injured: *id* judgment of Gibbs CJ at 555, judgment of Murphy J at 556, judgment of Brennan J at 566-69, and judgment of Deane J at 605-609. This is despite the existence of medical evidence that psychiatric illnesses and conditions may result from stress over a period of time, see *id* judgment of Deane J at 601. For recent examples of successful claims for nervous shock, see *McFarlane v EE Caledonia Ltd* [1994] 2 All ER 1; *Quayle & Ors v State of NSW & Anor* (1995) Aust Torts Rep §81-367.

32 "Responsibility" is in this sense based upon an attenuated version of the "free will paradigm", see Dan-Cohen, M, above n20 at 959-962; see also Weston, N, above n20 at 1001-1006.

33 Above n26.

34 *Todorovic v Waller* (1981) 150 CLR 402 at 412; Luntz, H and Hambly, D above n10 at 525.

on the basis that there is a relatively simple and deterministic relationship between their acts and the plaintiff's damage. A complex or uncertain relationship between a defendant's acts and the plaintiff's damage creates a disjunction between the extent of the defendant's fault and the extent of the defendant's liability to pay damages.

The importance of this relationship between the rules for deciding whether a defendant is responsible for the damage and the rules for assessing damages is further enhanced by the doctrine of solidary liability. The doctrine of solidary liability is the rule which provides that a plaintiff can recover the full amount of their damages from any single defendant who was responsible for the damage.³⁶ One definition of this rule is that:

It is a fundamental feature of the existing legal rules governing actions against concurrent wrongdoers that a plaintiff is free to recover the whole of his or her loss from any one of a number of concurrent wrongdoers responsible for that loss.³⁷

The rationale for this rule is that it ensures that a plaintiff can recover damages equivalent to the full extent of their damage without being concerned with the relative fault of wrongdoers.³⁸ This rule enhances the requirement that there be a clear and decisive connection between a defendant's negligence and the plaintiff's damage. This is because each individual defendant will be potentially liable for the whole of any award of damages which are payable to the plaintiff.³⁹

In general terms therefore where there is a clear and predictable relationship between a defendant's acts and a plaintiff's damage there will be a rational connection between the extent of the defendant's fault and the extent of the defendant's liability to pay damages. Where, however, there is no generally accepted connection between acts and the consequences of those acts, or where particular acts merely increase the risk of the likelihood of the occurrence of particular consequences, the objective model of responsibility will produce unpredictable and sometimes irrational outcomes. This is because the lack of a

35 See eg, *Skelton v Collins* (1966) 115 CLR 94. Windeyer J at 131-132, argued that compensation for "loss of amenities" and for "pain and suffering" is given as a form of "solace for the distress that is the consequence of a loss on which no monetary value can be put".

36 Solidary liability is sometimes referred to as "joint and several" liability. The doctrine of solidary liability only applies to concurrent wrongdoers who are liable for the same damage. Where different defendants are liable to a plaintiff for different damage the rule has no application, see Williams, G, *Joint Torts and Contributory Negligence A Study of Concurrent Liability* (1951) at 1-23.

37 New South Wales Law Reform Commission, *Contribution Among Wrongdoers: Interim Report on Solidary Liability* (1990) at 1. The law of contribution ensures that the defendant who is liable to pay damages to the plaintiff has a separate cause of action against other tortfeasors, s 5(1)(c) *Law Reform (Miscellaneous Provisions) Act* (1946) NSW.

38 *Id* at par 11, 16.

39 For an analysis of the application of the doctrine of solidary liability to cases involving pure economic loss, see Attorney-General (Cth), and Attorney-General (NSW), *Report of Stage 2, Inquiry into the Law of Joint and Several Liability* (1995) Attorney-General's Legal Practice, Canberra. This Report recommended the creation of a form of proportionate liability for actions involving pure economic loss, at 4-5. On 15 July 1996 the Commonwealth Parliamentary Secretary to the Treasurer, Senator Brian Gibson, and the NSW Attorney-General, Mr Jeff Shaw, released Draft Model Provisions to implement the recommendations of the Inquiry into the Law of Joint and Several Liability.

clear and decisive connection between a defendant's acts and a plaintiff's damage creates a disjunction between the process for the determining whether a defendant is at fault and the process for determining the extent of that defendant's liability to pay damages once it is determined that they are liable for the damage suffered by the plaintiff.

An example of the paradigmatic case is *Donoghue v Stevenson*.⁴⁰ As Lord Atkin noted the issue in the case was whether the manufacturer was under any "legal duty to the ultimate purchaser or consumer to take reasonable care that the article is free from defect likely to cause injury to health".⁴¹ In characterising the issue in this way Lord Atkin identified the paradigmatic elements of the case. On the one side the plaintiff's personal injury could be characterised as damage because it was a well known and recognised medical condition. On the other side the defendant could have been liable because it was well known that the defect in the ginger beer could be prevented with the exercise of reasonable care.⁴²

An example of such a case involving a medically related injury is *Rogers v Whitaker*.⁴³ In this case the defendant doctor owed to the plaintiff a duty to disclose to the plaintiff "a material risk inherent in the proposed treatment".⁴⁴ The basis of this duty was the understanding that a "person is entitled to make his own decisions about his life".⁴⁵ The plaintiff sustained damage when as a result of the procedure she became blind. On the one side the plaintiff's blindness could be characterised as damage because it was a known, if unlikely, consequence of the particular medical procedure administered to the plaintiff. On the other side the defendant could be found to be responsible for this serious harm because it could have been avoided with the exercise of reasonable care, that is, it could have been avoided by warning the plaintiff of the risk and allowing her to exercise her often expressed view that she did not want to have the operation if there were a risk of blindness.⁴⁶ There is in this instance an objectively verifiable relationship between the doctor's breach of duty and the plaintiff's damage.

An objective model of responsibility is most clearly applicable to those areas of conduct where known risks give rise to known forms of harm. In these cases it is possible to identify the damage as the well recognised harm which is sustained by the plaintiff. Equally there is a duty to exercise reasonable care to avoid this kind of harm because it is well known that this particular form of damage can be avoided with the exercise of reasonable care. There are many social contexts in which the duty to use reasonable care to prevent a plaintiff suffering damage can be characterised in this way. In these cases the objective model provides a simple account of why the defendant should be responsible for the plaintiff's damages.

40 *Donoghue v Stevenson* [1932] AC 562.

41 *Id* judgment of Lord Atkin at 578-579.

42 See eg, *Grant v Australian Knitting Mills Ltd & Ors* [1936] AC 85. See also *Trade Practices Act 1974* (Cth), Pt VA, s75AD (liability of manufacturers for defective products).

43 *Rogers v Whitaker* (1992) 175 CLR 479.

44 *Id* judgment of Mason CJ, Brennan, Dawson, Toohey and McHugh JJ at 490.

45 *Id* at 487.

46 *Id* at 491-492.

C. *Complex environments*

There are some environments in which the cluster of rules associated with an objective model of responsibility will not provide a secure pathway to connect the plaintiff's damage with a particular act of negligence. These environments are ones in which complex forms of knowledge concerning human conduct are used by bureaucratic decision-making processes to produce, or to regulate the production of, goods or services. The combination of each of these elements will usually mean that there will be a complex understanding of the relationship between acts and the consequences of those acts. It is the lack of an immediately verifiable and simple relationship between an act and its consequences which produces a significant challenge to the operation of an objective model of responsibility in the law of tort.

Complex forms of knowledge concerning physical and biological processes have significantly altered our understanding of the world. Increasing levels of knowledge, and wider availability of, and increased capacity to process, this information have clearly affected our capacity to modify our environment. There is a general expectation that scientific research will produce new materials and processes which will alter the way in which we work and live. However, more sophisticated knowledge of our environment has also been associated with a change in our understanding of the status of this knowledge. It is no longer possible to assert that a full or complete understanding of our environment is a possible, or even worthwhile, aim. There is a general understanding that while knowledge is useful, in the sense that it allows us to better understand the environment in which we live, it is also contingent and partial in the sense that it may be surpassed by other, better ways of understanding our environment.⁴⁷

The development of complex forms of knowledge has not by itself constituted a challenge to the operation of tort law based upon an objective model of responsibility. It is possible for courts to assess the connection between acts and the consequences of those acts, and to decide whether there is a sufficiently strong causal connection between them to justify a finding that the defendant should be made responsible for the harm caused to the plaintiff. There are many examples, usually dealt with under the heading of remoteness of damage, where courts and juries make these practical assessments.⁴⁸

Rather, it is the use of complex forms of knowledge by bureaucratic decision-making processes which presents a challenge to the operation of tort law based on an objective model of responsibility. The development of institutions which are capable of processing increasingly sophisticated knowledge about our environment has been an important factor in ensuring the delivery of a range of goods and services in this community.⁴⁹ Decision-makers in these institutions will

47 See eg, Kuhn, T, *The Structure of Scientific Revolutions* (1962), Foucault, M, *The Archaeology of Knowledge* (1972). See also Davies, M, *Asking the Law Question* (1994) at 226: "Appeal to a higher, universal, domain of thought is no longer seen as an effective or necessary way of validating knowledge. There has been a multiplication of methods, of forms of knowledge, and of technologies, as well as a collapsing of the traditionally clear boundaries between areas of scientific investigation, giving us a glimpse of a potentially infinite number of new areas of thought."

48 See eg, *Nader v Urban Transit Authority of NSW* (1985) 2 NSWLR 501.

49 See eg, Williamson, O, *The Economic Institutions of Capitalism: Firms, Markets, Rela-*

often work in environments where decisions have to be made in the context of a lack of knowledge of the full range of consequences which will follow on from the decision. In these circumstances decision-makers have to manage this kind of uncertainty by weighing up the benefits and the known risks which are associated with the decision. This decision-making process will often have to determine which of a number of courses of conduct to adopt in the light of an assessment of the bundle of risks and benefits attaching to each particular course of conduct.⁵⁰

In these environments there will be no objective relationship between any outcomes and any particular acts or omissions. It will not be possible for an external observer to identify whether particular acts of negligence cause the harm in the sense that it is possible to establish an objectively verifiable link between the act of negligence and the harm. A particular act of negligence will be just part of the pattern of risks which combine to produce a particular outcome at a particular time. It is in these circumstances that the cluster of rules associated with an objective model of responsibility will not provide a secure pathway to connect the plaintiff's damage with a particular act of negligence.

D. *The objective model of responsibility in a complex environment*

The health care system is an example of a complex and uncertain environment which is structured around the capacity of decision-makers to identify a profile of quantified risks and benefits that attach to particular courses of conduct. The delivery of health care is based on a complex but partial understanding of human health.⁵¹ The decision to use a particular form of medical treatment will involve conscious exposure to one set of risks in the belief that the benefits associated

tional Contracting (1985). See also eg, Chandler, A, *The Visible Hand: The Managerial Revolution in American Business* (1977); Buxbaum, R, "Corporate Legitimacy, Economic Theory, and Legal Doctrine" (1984) 45 *Ohio St L J* 515 (creation of large institutions necessary requirement for "effective competition").

50 See eg, the role of company directors: *Daniels & Ors (formerly practising as Deloitte Haskins and Sells) v Anderson & Ors* (1995) 37 NSWLR 438 judgment of Clarke and Sheller JA at 494: "While the duty of a trustee is to exercise a degree of restraint and conservatism in investment judgments the duty of the director may be to display entrepreneurial flair and accept commercial risks to produce a sufficient return on the capital invested." For an example of the regulatory and organisational problems associated with the pharmaceutical industry, see Braithwaite, J, and Ayres, I, above n12 at 125-128. For a discussion of some of these issues in the context of environmental regulation, see eg, Fowler, R, "The 'Brown Issues': Recent Trends and Developments in Environment Protection Law and Policy in Australia" in Boer, B, Fowler, R and Gunningham, N, above n12 at 8; Gunningham, N, above n12 at 272-279.

51 *The Compensation and Professional Indemnity in Health Care (Final Report)*, above n5 has recommended the adoption of a number of strategies for the wider use of "evidence-based health care" to evaluate efficacy and cost effectiveness of medical treatment, see eg at 3.10-3.13, 3.64 for the development of Clinical Practice Guidelines. The development of Clinical Practice Guidelines was a response to, amongst other things, "lack of knowledge about effectiveness of interventions in terms of patient health outcomes": id at 3.52. The treatment of cervical cancer is an example where a lack of knowledge, about the efficacy and cost effectiveness of medical treatment, creates the need for full disclosure of the risks attached to particular forms of treatment so that doctors and patients can balance the particular risks and benefits attaching to particular forms of treatment, see id at 4.35-4.46.

with the treatment will alleviate or reduce a patient's exposure to an existing set of risks.⁵² In these circumstances it will often not be possible for an external observer to determine whether any particular act caused the harm in the sense that it changed the expected course of events and produced an outcome which would not otherwise have occurred.⁵³ The most that can be said is that a particular treatment exposes a patient to an identified level of risk and benefits and therefore alters the pattern of risks which constitute that patient's condition at any point in time.⁵⁴

The health care system is a complex system in the sense that it uses complex decision-making processes to make use of increased levels of medical knowledge in order to ensure the effective delivery of health care services.⁵⁵ The careful delineation of the risks to which patients are exposed and the formalisation of the process by which decisions are made about treatment mean

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- 52 McNeil, J, and Leeder, S, above n6 at 472: "*Primum non nocere* is one of the fundamental principles of medical practice. In reality, it is of limited relevance because virtually every medical intervention carries some risk. Despite this, an indisputable requirement of any health system is to minimise these risks and to ensure that the potential benefits of diagnosis and treatment substantially outweigh the risks involved". The *Compensation and Professional Indemnity in Health Care (Final Report)* above n5 at 3.10-3.30 recommended the broader use of Cochrane Collaboration Reviews as a way of more clearly identifying the risks and benefits associated with particular forms of treatment. The treatment of cervical cancer is an example of the need to provide better information about the risks associated with medical treatment, see at 4.35-4.46.
- 53 See eg, Fleming, J, "Probabilistic Causation in Tort Law" (1989) 68 *Can Bar R* 661 at 662: "It is often difficult to provide medical causation by 'particularistic' evidence, that is direct, anecdotal, non-statistical evidence from the mouth of witnesses. Modern scientific epistemology itself rejects the Newtonian concept of physical causation; instead preferring causal concepts to set up hypotheses, and testing these by inductive reasoning and probabilistic evidence". See also Stanley, F, above n18 at 266. See eg, *X and Y v Pal* (1991) 23 NSWLR 26 at 53-57 (interaction between legal and scientific methods of proof in connecting the plaintiff's mental retardation and infection with syphilis); *Wilsher v Essex Area Health Authority* [1988] AC 1074 (a range of factors, including the administration of excess oxygen, "caused" the plaintiff's retrolental fibroplasia).
- 54 Recommendation for the development of Clinical Practice Guidelines, see above n51. The aim of these guidelines is to provide information about achieving the best health outcomes and to identify "known exceptions or risks": above n5 at 3.56. The goal is to provide better analysis of the risks and benefits associated with specific forms of treatment, see above n5 at 4.37, 4.40-4.46. The identification of the risks and benefits of specific treatments is crucial when decisions are made to "ration" health care services on the basis of cost effectiveness, see *id* at 4.39. For a review of a number of actions for medical malpractice brought against health care providers where cost-effectiveness was an element in refusing a particular treatment, see Schwartz, G, "A National Health Care Program: What its Effect Would be on American Tort Law and Malpractice Law" (1994) 79 *Cornell LR* 1339 at 1370-1379.
- 55 For a brief analysis of institutional change in the health care system in the US, see Hubbard, F, "The Physician's Point of View Concerning Medical Malpractice: A Sociological Perspective on the Symbolic Importance of 'Tort Reform'" (1989) 23 *Georgia LR* 295 at 339-347. See generally, "Symposium: National Health Care Reform on Trial" (1994) 79 *Cornell LR* 1291-1572. In Australia the *Compensation Professional Indemnity in Health Care (Final Report)* above n5 identified a wide range of changes taking place in the health care system. These were generally concerned with the use of "evidence-based health care" and the systematic monitoring of the effectiveness of the delivery of health care services, see above n19. For an example of a complex decision-making process involving decisions about the appropriate testing procedure covering donations of blood, see *E v Australian Red Cross Society & Ors* (1991) 31 FCR 299.

that it is no longer possible to assume that any particular negligent act intrudes into the expected course of events and produces harm or damage which would not otherwise have occurred. The strongest claim will be that a particular decision, that is part of a broader decision-making process, has exposed a patient to a new pattern of risks and has, as a result, exposed the patient to a level of risk which is greater than that which is regarded as acceptable.⁵⁶

In this environment the problem of deciding upon the responsibility of identified acts of specific persons for specific harms is not just created by a lack of knowledge about human health. Rather the problem arises because of increases in the level of knowledge which allows decision-makers to identify patterns of risk with particular states of health. This knowledge is the only basis upon which medical decision-makers can be found to be responsible for harms resulting from the delivery of health care services. It must therefore be this knowledge, which often fails to establish objectively verifiable linkages between specific acts and specific harms, which will be used to decide when medical decision-makers will be found to be responsible for specific harms.

There is a disjunction between the understanding of responsibility in the context of a complex environment such as the health care system and the continued reliance in tort law upon an objective model of responsibility. In the health care system responsibility will be measured by the extent to which a particular decision changes the pattern of risks which make up a patient's condition at any point in time by exposing that patient to an unacceptable risk of harm. By contrast in tort law the focus is on the relationship between two events, that is, the act of negligence and the harm sustained by the plaintiff. The determination of whether the defendant is liable for the harm sustained by the plaintiff is dependent upon the existence of an objective and predictable connection between these two events. The existence of a predictable relationship between the two events is the basis for the finding that the defendant should be responsible for the whole of the patient's harm.

The disjunction between the understanding of responsibility within the health care system and that found in tort law has had profound effects for the effectiveness of the tort based system of compensation for medically related injuries. Where tort law has set out to identify the responsibility of a particular act or decision for particular harm the health care system focuses on the contribution which particular acts or decisions make to the overall pattern of risks which constitute the condition of a patient at any point in time. In this way the operation of a tort based system of compensation has tended to create a mis-match between notions of legal responsibility and perceptions of responsibility within the health care system. One result has been that, from the perspective of health care professionals, the tort based system of compensation has tended to produce outcomes which are arbitrary and unpredictable.

56 See eg, Price, D, "Causation: The Lords' Lost Chance?" (1989) 38 *Int and Comp LQ* 735 at 756-760. See also eg, *O'Shea v Sullivan & Anor* [1994] *Aust Torts Rep* §81-273 at 61,301, 61,306 (the failure to ensure early medical intervention reduced the chance of cure from 95% to 80%).

An example of this problem may be found in *O'Shea v Sullivan & Anor*.⁵⁷ In this case the plaintiff ultimately developed cervical cancer. The procedures for diagnosing the early stages of cervical cancer were subject to a small, but known, risk that the cancer would not be detected. The procedures for treating this form of cancer offered patients a high likelihood of recovery but also involved an exposure to a quantifiable risk of harm.⁵⁸ At the time when the plaintiff began to receive effective medical treatment she still retained an 80% chance of obtaining a complete recovery. Against this background the defendant doctor was found to be responsible for the damage sustained by the plaintiff when she developed secondary cancer on the basis that the doctor had been negligent in failing to ensure that the plaintiff received treatment for the early stages of cervical cancer.

The determination that the doctor was responsible for the plaintiff developing secondary cancer was based upon the operation of an objective model of responsibility. It was based on the need to identify one act as being responsible for the whole of the harm sustained by the plaintiff. From the perspective of the health care providers the doctor's responsibility for the ultimate harm could be described in a more complex way. The effect of the doctor's negligence was to alter the pattern of risks making up the patient's condition by reducing the chance that medical treatment would provide a cure from 95% to 80%.⁵⁹ The increase in the risk that the plaintiff would go on to develop secondary cancer had the effect of altering the plaintiff's overall risk profile. This alteration in the patient's risk profile did not however make the doctor responsible for the plaintiff ultimately developing secondary cancer. The plaintiff's ultimate harm was the result of the combination of all the risk factors which made up the plaintiff's condition. In this sense reliance upon an objective model of responsibility to determine whether the doctor is responsible for the whole of the plaintiff's ultimate harm is necessarily an arbitrary and unpredictable one.

A further example is that in *Wilsher v Essex Area Health Authority*.⁶⁰ This case involved the treatment of a baby born prematurely. Babies who are born prematurely receive a high level of health care but are, amongst other things, subject to the risk of becoming blind as a result of range of possible factors.⁶¹ The provision of health offers a high degree of probability of normal development but also necessarily exposes babies to a range of risks. In *Wilsher* a doctor mistakenly inserted a catheter into the umbilical vein of a baby who had been born prematurely. It was agreed that the insertion of the catheter into the umbilical vein resulted in the plaintiff being exposed to unduly high levels of oxygen and that this had the potential to cause the plaintiff to become blind.⁶² There was therefore agreement that the negligence of the doctor increased the risk that the plaintiff would be-

57 *O'Shea v Sullivan & Anor* [1994] Aust Torts Rep §81-273.

58 Above n52.

59 *Id* at 61,306-61,310.

60 *Wilsher v Essex Area Health Authority* [1988] AC 1074 (HL).

61 *Id* judgment of Lord Bridge at 1090-1091.

62 *Id* judgment of Lord Bridge at 1081-1082.

come blind. However there was no agreement about whether it was the high level of oxygen which caused the plaintiff's blindness because there were a number of other factors which could have caused blindness.⁶³

As with the decision in *O'Shea* this case is a good example of the operation of an objective model of responsibility. There is a need to draw a connection between the single act of negligence and the ultimate harm sustained by the plaintiff even though the plaintiff faced a range of risk factors which contributed to him ultimately becoming blind. It is possible to rely upon the health care providers own understanding of the patient's condition to conclude that the doctor's negligence did increase the risk of harm that the plaintiff would become blind. There is however no place for this analysis in tort law because of the need to identify a simple connection between the negligence and the harm. The process of identifying this simple connection was in this case necessarily an arbitrary and unpredictable one.

In each of these cases the reliance upon an objective model of responsibility did produce unpredictable and arbitrary results in that there was a disproportionate relationship between the degree of the defendant's fault and the damages which the defendant was required to pay to the plaintiff. In *O'Shea v Sullivan & Anor* the doctor was liable for all the damages associated with the plaintiff developing secondary cancer even though the defendant doctor's negligence was one of a number of factors which contributed to the overall pattern of risks which were ultimately transformed into actual harm when the plaintiff developed secondary cancer.⁶⁴ By contrast in *Wilsher v Essex Area Health Authority* the plaintiff failed to obtain any damages even though it was generally agreed that the defendant doctor's negligence did increase the risk that the plaintiff would become blind.⁶⁵

This contrast between the marginal effects of many acts of negligence in the delivery of health care and the level of liability of medical professionals is a well recognised problem in tort law.⁶⁶ It is also recognised by medical practitioners.⁶⁷ The problem is one that is created by the application of an objective model of responsibility to a complex environment which is reliant upon decision-making processes which rely upon the exercise of discretion after considering the risks associated with any particular decision to provide, or to withhold, medical treatment.

In summary the argument is that in the tort of negligence there are a cluster of doctrines that interact to produce an objective model of responsibility. This cluster of doctrines defines legal responsibility for harm in objective terms. This model of responsibility will not produce predictable outcomes in environments such as that involving the delivery of health care. The system for the delivery of health care is a bureaucratic decision-making process which makes use of complex forms of knowledge to alter the pattern of risks

63 Above n61.

64 *O'Shea v Sullivan & Anor* [1994] Aust Torts Rep §81-273 at 61,307-61,312.

65 *Wilsher v Essex Area Health Authority* [1988] AC 1074 judgment of Lord Bridge at 1081-1082, 1090-1091.

66 See eg, Luntz, H, and Hambly, D, above n10 at 4.1.10-4.1.12; Markesinis, B, and Deakin, S, above n11 at 171-174; Price, D, above n56 at 737-740.

67 See generally Stanley, F, above n18.

to which people are exposed when they are sick or injured. In these circumstances an act of negligence may alter the pattern of risks to which a person is exposed but cannot be said to have produced an outcome which may have occurred without any act of negligence. Those responsible for the delivery of health care manage a person's exposure to harm and the benefits of any medical treatment will often have only a marginal impact on the underlying disease or injury. In this context an objective model of responsibility will seek to make a defendant responsible for all of the harm sustained by a plaintiff in circumstances where the defendant's negligence marginally increases the risk that the plaintiff will ultimately suffer this form of actual harm.

E. Proportionate liability and the objective model of responsibility

While the potential for the tort based system of compensation to produce arbitrary and unpredictable outcomes is well recognised there is no agreement about a solution for this problem.⁶⁸ Indeed there are some suggestions that it may not be possible for tort law to respond to these problems in a constructive way. In the following section it is argued that the problem with the system of compensation for medically related injuries law is not an intractable one. Rather the problem arises because of the continued reliance on an objective model of responsibility.

There have been a number of proposals to alter one of several elements of the tort of negligence to introduce a system of proportionate liability.⁶⁹ A system of proportionate liability will be one where the liability of each of the parties "is in all the circumstances limited to the extent to which that party is considered to be responsible for the loss".⁷⁰ The debate about the merits of these proposals has proved to be inconclusive partly because of the difficulty of integrating a system of proportionate liability into a system of compensation based upon an objective model of responsibility. It is in this context that the integration of a system of proportionate liability into the tort based system

68 Above n66-67.

69 Adeney, E, "The Challenge of Medical Uncertainty: Factual Causation in Anglo-Australian Toxic Tort Litigation" (1993) 19 *Monash LR* 23; Fleming, J, above n53; Gold, S, "Causation in Toxic Torts: Burdens of Proof, Standards of Persuasion, and Statistical Evidence" (1986) 96 *Yale LJ* 376; Grubb, A, "Causation and Medical Negligence" (1988) 47 *Cambridge LJ* 350; Hill, T, "A Lost Chance for Compensation in the Tort of Negligence by the House of Lords" (1991) 54 *Mod LR* 511; King, J, "Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences" (1981) 90 *Yale LJ* 1353; Luntz, H, "Fear of Disease as Damage in Negligence: The View of the Supreme Court of California" (1995) 3 *Torts LJ* 212; Mandell, M, and Carlin, S, "The Value of a Chance: The Evolution and Direction of Chance in Tort Law" (1986) 20 *Suffolk U LR* 201; Markesinis, B, and Deakin, S, above n11 at 168-174; Perry, S, "Protected interests and undertakings in the law of negligence" (1992) 42 *Univ of Toronto LJ* 247; Price, D, above n56; Reece, H, "Losses of Chances in the Law" (1996) 59 *Mod LR* 188; Rosenberg, D, "The Causal Connection in Mass Exposure Cases: A 'Public Law' Vision of the Tort System" (1984) 97 *Harv LR* 851; Scott, W, "Causation in Medico-Legal Practice: A Doctor's Approach to the 'Lost Opportunity' Cases" (1992) 55 *Mod LR* 521; Stapleton, J, "The Gist of Negligence" (1988) 104 *LQR* 213-238, 389-409; Tilbury, M, *Civil Remedies (Vol 1)* (1990) at 3061-3071; Wikeley, N, "Industrial Disease and the Onset of Damage" (1989) 105 *LQR* 19; Windeatt, P, "Risk, Loss, Negligence and Cause" (1995) 7 *Auckland Univ LR* 273.

70 Attorney-General (NSW) above n39 at 9.

of compensation has been seen to fracture the "skeleton of principle" supporting the common law.⁷¹

Some proposals to introduce a system of proportionate liability have sought to alter the standard of proof so that a plaintiff could recover damages without the need to establish, on the balance of probabilities, that the defendant's act caused the plaintiff's harm.⁷² Some courts have altered the principles for assessing damages so that once it is established that the plaintiff lost "a substantial chance of achieving a better medical result" it is then open to the court to assess the value of the injury by taking into account the chances of the loss occurring.⁷³

These attempts to introduce a system of proportionate liability by changing the principles for assessing damages have languished. The use of probabilistic evidence in this context is dependent upon the plaintiff being able to establish that, on the balance of probabilities, a defendant's negligence caused some damage. However, the use of probabilities in this way can only be used once the plaintiff has established on the balance of probabilities that some particular harm was caused by the defendant's breach.⁷⁴ In many cases where proportionate liability has been proposed the plaintiff has been unable to establish, on the basis of objectively verifiable evidence that there is a sufficiently strong causal connection between his or her damage and the defendant's breach of duty.⁷⁵

The proposal which appears to have attracted the broadest range of support has been to redefine the gist of the tort by redefining damage which a plaintiff must suffer in order to bring an action to recover compensation. These proposals have been based on the proposition that the plaintiff should recover compensation for the "lost chance" of recovery or of better health.⁷⁶ Under this proposal a plaintiff suffers damage when they can establish, on the balance of probabilities, that they lost a chance of recovery or of better health. The redefinition of the damage in this way removes the necessity to alter either of the plaintiff's standard, or burden, of proof.⁷⁷ Under some proposals recovery for lost chance of better health has been broadened to allow for recovery of damages where a plaintiff has not actually sustained any actual harm at the time of the trial. In this scenario recovery of compensation is based upon exposure to a risk of injury to health caused by the defendant's negligence. This broader

71 *Mabo & Ors v The State of Queensland (No 2)* (1992) 175 CLR 1, judgment of Brennan J at 30.

72 Price, D, above n56 at 748.

73 *Hotson v East Berkshire Area Health Authority* sub nom *Hotson v Fitzgerald & Ors* [1985] 3 All ER 167, judgment of Simon Browne J at 178-180, where his Honour distinguished between issues of causation and those of quantification. See also Price, D, above n56 at 745-746.

74 *Malec v J C Hutton* (1990) 169 CLR 638; see also Reece, H, above n69 at 198-204.

75 For example, *Hotson v East Berkshire Area Health Authority* [1987] AC 750 (HL); *Wilsher v Essex Area Health Authority* [1988] AC 1074.

76 For example, Adeney, E, above n69 at 62-67; Gold, S, above n69 at 393-401; King, J, above n69 at 1376-1387; Rosenberg, D, above n69 at 908-910; Stapleton, J, above n69 at 389-390, 394-400, 407-409; Scott, W, above n69. This formulation of the damage was adopted by the Court of Appeal in *Hotson v East Berkshire Area Health Authority* [1987] AC 750 (CA).

77 For example, Gold, S, above n69 at 395; Stapleton, J, above n69 at 400.

right to compensation is usually associated with a "public law" approach to tort law.⁷⁸

The "public law" approach to compensation in tort law is the one which rejects the objective model of responsibility but which does so by actually fracturing the foundations of the tort of negligence. This approach involves the creation of a different set of institutional structures which include a much greater use of class actions, the establishment of a market for tort claims and the use of "insurance fund" judgments to provide compensation for those exposed to a risk of injury before that injury becomes manifest.⁷⁹ The introduction of these changes would fundamentally alter the role of tort law by creating much broader entitlements to compensation and this would have a significant impact on existing regulatory structures. Indeed it is arguable that this would transform the law of tort into a system of regulation covering a broad range of industries and activities.⁸⁰

While proposals for this fundamental change in the role of tort law have not received broad support it is a matter of contention as to whether the simple re-definition of a "lost chance" as the damage for which a plaintiff seeks recovery can be effectively integrated into tort law without fracturing the "skeleton of principle" supporting tort law. While this proposal resolves some of the problems associated with proof of causation it has created other problems.⁸¹ In particular there is a lack of agreement about whether loss of a chance of recovery, or of avoidance of a harm, is recoverable before any actual harm occurs. Some writers have considered the option that a plaintiff should be able to recover the loss of a chance irrespective of whether actual damage occurs.⁸² Others have argued that such an approach involves rejection of the basic principle that before a defendant can be made liable to pay damages the plaintiff must have sustained actual damage.⁸³ While the redefinition of the gist of the damage for the tort of negligence has attracted much support it also appears that such a change, whether adopted by the courts or by parliaments, would have a number of unpredictable consequences.

Each of these proposals have sought to introduce a form of proportionate liability to overcome perceived problems arising out of the application of traditional rules relating to proof of causation and to the all or nothing assessment of damages. None of the proposals have effectively integrated a system of proportionate liability into the tort of negligence without appearing to fracture the "skeleton of principle" supporting the common law. One of the reasons for this failure is that each proposal attempted to graft a system of proportionate liability on to a system of liability which embodied an objective model of responsibility. The following section suggests that there has been a tentative development of a relational model of responsibility and that this model may provide

78 For example, Rosenberg, D, above n69 at 905-908.

79 *Id* at 916-924; see also Choharis, above n19.

80 Rosenberg, D, *id* at 926-929.

81 Adeney, E, above n69; Fleming, J, above n53 at 672-675; King, J, above n69; Stapleton, J, above n69.

82 Luntz, H, above n69; Rosenberg, D, above n69; Stapleton, J, above n69 at 395-396, 408.

83 Fleming, J, above n53 at 679-680; Price, D, above n69 at 746-748; Windeatt, P, above n69 at 285.

the framework for the adoption of a system of proportionate liability without fracturing the skeleton of principle supporting the common law.

3. *A relational model of responsibility*

There is one complex and uncertain environment in which tort law does function in a predictable way without encountering the same difficulties as those experienced with the delivery of health care services. This is in the area of commercial transactions where the damage which plaintiffs seek to recover is pure economic loss. The right to recover pure economic loss is sometimes seen to be on the periphery, and sometimes an unwanted outpost, of the tort of negligence.⁸⁴ Nevertheless it is in this area that the law of tort has accommodated itself to the complexity inherent in the commercial marketplace. It has reached this accommodation by developing, in a faltering and uneven way, an interactive or relational model of responsibility in which the legal standards defining the basis for liability are drawn from the particular relationship between the plaintiff and the defendant. The application of this model of responsibility to adverse patient outcomes provides a way of avoiding the problems created by relying upon objective models of responsibility.

This part is made up of two sections. The first sets out the way in which the rules defining the right to recover pure economic loss in tort are founded on a relational model of responsibility. The second applies a relational model of legal responsibility to personal injuries associated with medically related injuries and assesses the impact of the adoption of this model of responsibility for these kinds of injuries.

A. *The right to recover pure economic loss*

The markets for goods, services or securities exhibit a number of different mechanisms for managing a range of different kinds of risks. These mechanisms involve clearly defining particular risks and then allocating and pricing these risks in the light of the expected benefits flowing from specific transactions. In each of these markets it is crucial that each of the parties understand that they bear a specific level of risk and equally importantly become entitled to identified benefits or profits. For example, the markets for securities allow investors to determine the level of their exposure to risk by allowing them to choose between different securities, eg, debt, shares or derivatives.⁸⁵ In this way the bundle of risks which are part of a complex series of transactions are allocated to those investors who choose to accept them in return for the right to the returns which are associated with those risks.

These markets are complex environments in the sense in which this term has been used in this article. Any outcome is the combination of a number of decisions by a number of participants each seeking to manage their exposure

84 For example, Luntz, H, and Hambly, D, above n10 at Chapter 16 "The Intentional and Negligent Infliction of Economic Loss". The right to recover pure economic loss is treated separately from the principles relating to recovery of personal injury and property damage.

85 See generally, Walker, G and Fisse, B (eds), *Securities Regulation in Australia and New Zealand* (1994).

to risk in relation to the associated returns to which they are entitled. In this environment it is not possible to identify any particular act or omission as the cause of any particular loss. An act of negligence will increase the risk of a particular loss occurring and will redefine the bundle of risks which constitute the state of affairs at any particular time but cannot be said to be responsible for a particular loss. A particular example relevant to the law of torts is that of auditors' liability. A loss sustained by a company's shareholders will often be the result of the combination of the acts of a company's managers and auditors. The negligence of either will have the effect of increasing the risk of a loss occurring but neither can ever be said to be responsible for the total amount of such a loss.⁸⁶

The tort of negligence moulded itself into a shape to fit into this complex environment by adopting a relational model of responsibility. This model of responsibility is one in which all of the elements of the tort are interdependent and all are related to the particular expectations and understandings of the parties to a particular relationship. The common law has slowly moved towards the view that there is no objectively verifiable indicator of when pure economic loss can be characterised as damage, that is, when a harm or loss can be recognised as the kind of harm or loss which is sufficient to initiate a cause of action in negligence.⁸⁷ Rather the damage is defined as the maturation of a specific risk of harm into an actual loss. The particular risk of harm, which matured into actual harm or loss, is that risk the prevention of which is the object of the defendant's duty of care. A plaintiff relies upon the defendant to exercise reasonable care to prevent the transformation of a specific risk of harm into actual loss. A plaintiff is entitled to rely upon a defendant to exercise reasonable care in these circumstances because the plaintiff has relied upon the defendant to exercise reasonable care or because the defendant has assumed responsibility for exercising reasonable care. In this sense the definition of the damage, which is the gist of the action, is dependent upon the nature of the duty of care owed by the defendant to the plaintiff.⁸⁸

86 See generally *Esanda Finance Corporation Limited v Peat Marwick Hungerfords (Reg)* [1997] Aust Torts Rep §81-420. For an analysis of the application of the tort of negligence to auditors, see Corbett, A, above n24; for an analysis of the application of the tort of negligence to company directors, Corbett, A, above n12 at 282-306.

87 *Bryan v Maloney* (1995) 182 CLR 609, judgment of Mason CJ, Deane and Gaudron JJ at 617-619. Their Honours state that the categories of case in which "the requisite relationship of proximity with respect to mere economic loss ... will involve an identified element of known reliance (or dependence) or the assumption of responsibility or a combination of the two" (619). The question of whether there is the necessary relationship of proximity is therefore determined with reference to the specific kind of economic loss sustained by a plaintiff. One of the policy reasons for defining the duty of care in this way is that: "[A] duty to take reasonable care to avoid causing mere economic loss to another, as distinct from physical injury to another's person or property, may be inconsistent with community standards in relation to what is ordinarily legitimate in the pursuit of personal advantage" (618).

88 In *Hill trading as R F Hill & Associates v Van Erp* [1997] Aust Torts Rep §81-418 there was criticism of the use of the notion of proximity as an indicator as to the existence and content of the duty of care: judgments of Dawson, McHugh, and Gummow JJ. There was however a continued recognition of the need for there to be a close connection between the defendant's duty of care and the actual damage sustained by the plaintiff. For a brief analysis of the rules for determining upon the existence of a duty of care, see text accom-

Within this framework the damage is defined as the transformation of a particular risk of harm into actual harm. This means that the actual harm sustained by the plaintiff is the manifestation of the damage but is not the damage itself. The damage is the transformation of the specific risk of harm, the prevention of which is the object of the defendant's duty owed to the plaintiff, into actual harm. There is therefore no cause of action until the specific risk of harm is transformed into actual loss.⁸⁹ Further, this cause of action is not based upon recovery of the total amount of the actual harm suffered by the plaintiff. Rather the cause of action is to recover that portion of the actual loss which represents the increased risk of occurrence of that particular loss for which the defendant is responsible.

A recent example of the recognition of a relational model of responsibility is *Bryan v Maloney*.⁹⁰ In this case the plaintiff sued the builder who had negligently constructed the foundations of the house. The loss was characterised as pure economic loss because it was represented by the "diminution in value of the house when a latent and previously unknown defect in its footings or structure first becomes manifest".⁹¹ The determination of whether there was a duty of care to prevent the plaintiff sustaining damage of this kind was dependent upon whether the plaintiff relied upon the builder to prevent this particular kind of damage and whether the builder assumed responsibility for preventing this kind of damage being sustained by the plaintiff.⁹² The majority of the Court found that the plaintiff relied upon the builder to prevent risk of harm to the fabric of the house caused by inadequately constructed foundations. Equally the majority found that the defendant assumed responsibility for pre-

panying nn28-29. For a more detailed analysis of this approach to the right to recover compensation in the form of pure economic loss in negligence, see Corbett, A, above n24 at 821-841; Corbett, A, above n12 at 294-297; Perry, S, above n69 at 281-302.

- 89 Compare with proposals to allow a plaintiff to recover compensation where they have been exposed to a risk of a specific harm occurring, see text accompanying nn70-71.
- 90 *Bryan v Maloney* (1995) 182 CLR 609. For a further example of the adoption of a relational model of responsibility, see *South Australia Asset Management Corp v York Montague Ltd* [1996] 3 All ER 365; decision of the Court of Appeal in *Banque Bruxelles Lambert SA v Eagle Star Insurance Co Ltd* [1995] 2 All ER 769 reversed. This series of cases concerned the liability of valuers for valuations provided to lenders who used the valuation as one factor in the decision about whether to lend money to particular borrowers. The Court of Appeal had found in *Banque Bruxelles Lambert SA* that the valuer was liable for all the losses which resulted from the valuer's incorrect valuation. In the House of Lords Lord Hoffman stated, at 370 that: "A duty of care such as the valuer owes does not, however, exist in the abstract. A plaintiff who sues for breach of a duty imposed by the law (whether in contract or tort or under statute) must do more than prove that the defendant has failed to comply. He must show that the duty was owed to him and that it was a duty in respect of the kind of loss which was suffered." (Emphasis added). In *MGICA (1992) Ltd (formerly MGICA Ltd) v Kenny & Good Pty Ltd & Kenny* (1996) 140 ALR 313 Lindgren J followed the approach of the Court of Appeal in *Banque Bruxelles Lambert SA*.
- 91 *Id* at 617.
- 92 *Bryan v Maloney* (1995) 182 CLR 609 at 619 judgment of Mason CJ, Deane and Gaudron JJ. Their Honours defined the issue in *Bryan v Maloney* in the following terms: "[W]hether the relationship between Mr Bryan, as builder of the house, and Mrs Maloney, as a subsequent owner of it, possessed the requisite degree of proximity to give rise to a duty, on the part of Mr Bryan, to take reasonable care to avoid the kind of economic loss sustained by Mrs Maloney".

venting the risk of harm to the fabric of the house by the construction of inadequate foundations.⁹³ The model of responsibility is a relational one because the content of the duty of care and the definition of the damage are dependent upon the particular relationship between the plaintiff and the defendant.

The careful recognition of the right to recover pure economic loss in tort has been possible because of the adoption of a relational model of responsibility. The definition of the damage with reference to the risk of harm, the prevention of which is the object of the defendant's duty of care, allows the tort of negligence to operate in a complex commercial environment without disturbing the expectations of participants in the market. It ensures that a plaintiff can only recover damages where it is possible to identify the specific risk of harm the prevention of which is the defendant's responsibility. The corollary is that the tort of negligence does not interfere with the allocation by other bodies of law of other risks of harm. In this way it is possible to draw relatively clear boundaries between the tort of negligence and those other bodies of law which regulate exposure to the broad range of risks of harm which are not dealt with by the law of tort.

B. Proportionate liability for medically related injuries

The application of the relational model of responsibility, which is used to define the right to recover pure economic loss in the tort of negligence, would produce outcomes which are consistent with the underlying principles of tort law. Its application would also reduce the potential for the law of tort to impede the overall effectiveness of the system regulating the delivery of health care. The adoption of this approach to determining liability would more clearly define the health care professional's exposure to liability in negligence by introducing a form of proportionate liability. This section briefly sets out the way in which this relational model of responsibility would apply to personal injuries associated with adverse events in the health care system.

The central principle underlying the definition of the duty of care and of the damage in cases involving pure economic loss is that the damage should be defined with reference to the specific risk of harm the prevention of which is the responsibility of the defendant. In the context of medically related injuries this would mean that the damage would be the transformation of the specific risk of harm, the prevention of which is the object of the defendant's duty owed to the plaintiff, into actual harm. A defendant provider of health care services would therefore only be liable for that amount of the actual harm suffered by the plaintiff that is represented by the increased risk of harm created by their negligence.⁹⁴ The underlying risk of harm associated with the patient's condition

93 *Id.* at 622-628, judgment of Mason CJ, Deane and Gaudron JJ; judgment of Toohey J at 661-665; judgment of Brennan J at 652-655 (dissenting).

94 See Perry, S, above n69 at 308-316 for a similar analysis of the duty of care in cases involving medically related injuries. There is the tentative recognition of this model of responsibility in *Bennett v Minister for Community Welfare* (1992) 176 CLR 408, judgment of Mason CJ, Deane and Toohey JJ at 416, judgment of Gaudron J at 421-422. Both judgments consider the possibility that there may be no distinction between the breach of duty and causation issues, that is, the issue as to whether the damage was caused by the breach of duty may be determined with reference to the nature and extent of the duty of care

would remain the responsibility of the patient.⁹⁵ In this way it is possible to establish a relationship of proportionality between the fault of the defendant and the damages which the defendant would be required to pay to the plaintiff.

The application of this model of responsibility to medically related injuries is consistent with the practice of the delivery of health care services. When delivering health care services one of the aims is to alter the pattern of risks which constitutes a patient's condition at any one time.⁹⁶ The alteration of this pattern of risks will usually involve exposing patients to a further set of risks, that is, those risks associated with the treatment itself. The decision to recommend a particular form of treatment will be made after an assessment of the risks and benefits associated with the particular treatment. In the context of this system of decision-making it is neither artificial nor conceptually difficult to define a patient's right to recover compensation with reference to the particular risk of harm that was created by the negligence of the defendant health care provider.

The recognition of this system of proportionate liability for medically related injuries would arguably overcome some of the problems which are associated with the tort based system of compensation. The adoption of this system of proportionate liability would have the effect of reducing the amounts of compensation claimed by plaintiffs. This is a necessary result of defining the damage underlying the right to claim compensation with reference to the increased risk of harm created by the negligent health care provider. The recognition of a proportionate system of liability would be the catalyst for a more informed discussion about the relationship between the system of compensation for medically related injuries and the system for the regulation of the delivery of health care services.

The introduction of a proportionate system of liability would also be the catalyst for a more informed discussion about the quality of health care services because it would mean that the law of tort would cease to be a significant part of the system of regulation of health care services. There is a broad debate about the effectiveness of the tort based system of compensation as mechanism for improving the overall quality of health care services. While there are some claims that the law of tort has encouraged the development of a relatively more effective system for the delivery of health care services there is no evidence to suggest that tort law is a particularly effective mechanism for regulating this area of human conduct.⁹⁷ There are good reasons for believing that the law of tort, as a form of command and control regulation, is not the most effective of available mechanisms for improving the overall quality of health care services.⁹⁸ In this context a shift of attention from issues relating to compensation

owed by the defendant to the plaintiff. This is one step away from re-defining the damage as the transformation of an increased risk of harm into actual harm.

95 There are a variety of income support mechanisms which are available to people to manage these general risks, eg, first party income insurance and the Social Security System. For an analysis of the relationship between compensation and health and community service programs see above n5 at 6.29-6.42 and Chapter 6 generally.

96 Above text accompanying nn51-56.

97 For example, Dewees, D, and Trebilcock, M, above n7; Schwartz, G, above n11.

98 Above text accompanying nn15-18.

to those concerned with developing a more effective organisational structure to regulate the delivery of health care services would be an important catalyst in improving the overall quality of health care services.⁹⁹

(i) Hotson v East Berkshire Area Health Authority

This approach provides a way to resolve some of the most difficult problems which have arisen in the area of compensation for medically related injuries. Perhaps the best known of the difficult cases is *Hotson v East Berkshire Area Health Authority*¹⁰⁰. In this case the plaintiff was a twelve year old boy who seriously injured his hip when he fell from a tree. When he was examined in St Luke's Hospital at Maidenhead the treating doctors negligently failed to diagnose his condition. His condition was left untreated for a period of five days. At the end of this period the plaintiff was left with a permanent disability. The trial judge found, on the basis of the evidence of expert witnesses, that if the plaintiff had received a correct diagnosis he would have had a 25% chance of full recovery. The trial judge ruled that the plaintiff was entitled to damages equal to 25% of the total amount which the plaintiff would have been entitled to if the negligence had, on the balance of probabilities, caused the permanent disability sustained by the plaintiff.¹⁰¹ The Court of Appeal on somewhat different grounds upheld the findings of the trial judge.¹⁰²

The House of Lords found that the plaintiff was not entitled to any damages because he could not establish that the defendant hospital's negligence had caused his permanent disability. The basis for this decision was that the plaintiff could not establish that he was one of the group of 25% of people who would have benefited from the correct treatment of his condition which would have been provided had there been a correct diagnosis.¹⁰³ On this reasoning the plaintiff failed because he could not establish, on the balance of probabilities, he had any chance of a full recovery if the hospital had exercised reasonable care. As already noted this case has given rise to a broad ranging debate about the definition of the damage, the test for causation and the assessment of damages in medical negligence cases.¹⁰⁴

Applying the proposed relational model of responsibility would yield a result similar to that reached by the trial judge and the Court of Appeal but for different reasons. The plaintiff sustained an injury when the pre-diagnosis risk of permanent disability estimated by the trial judge to be a 75% chance was

99 For example, above n1 at 461, 469. In this study the focus was on the preventability of "adverse events" not on whether the occurrence of the adverse events was associated with the negligence of the health care provider. The assumption underlying this approach is that separation of issues of fault and preventability provided the basis for the development of more effective mechanisms to improve the quality of health care services. The focus for the *Compensation and Professional Indemnity in Health Care (Final Report)* was on mechanisms for improving the overall quality of health care services independently of changes to the tort based system of compensation, see above n19.

100 *Hotson v East Berkshire Area Health Authority* [1987] AC 750 (HL).

101 *Id* at 757.

102 *Hotson v East Berkshire Health Authority* [1987] AC 750 (CA).

103 *Hotson v East Berkshire Area Health Authority* [1987] AC 750 (HL) 750, Lord Bridge at 782; judgment of Lord Mackay at 784-786; judgment of Lord Ackner at 792-793.

104 Above n69.

transformed into an actual disability. The increase in the risk of likelihood of suffering a permanent disability was the responsibility of the defendant hospital because the hospital had a duty to exercise reasonable care to prevent the plaintiff being exposed to precisely this increased risk of permanent disability. On the basis of this analysis the plaintiff should recover the amount of damages that represents the increased risk that the plaintiff would suffer permanent disability, that is, on the analysis of the trial judge the increase of 25% likelihood of permanent disability.

The criticism made of this approach made by the House of Lords in *Hotson* was that at the time of the incorrect diagnosis the plaintiff's injury was either, so serious that there was a high likelihood of permanent disability, or was less serious therefore retained a high chance of making a full recovery. In this sense the negligence of the hospital either significantly increased the risk of permanent disability or had no real effect on the final form of the injury sustained by the plaintiff.¹⁰⁵ This position is a deterministic one in the sense that it is based upon the assumption that the plaintiff's condition was in theory knowable at the time of the incorrect diagnosis by the defendant hospital.¹⁰⁶

The proposed relational model of legal responsibility avoids this criticism by focusing on the knowledge of the risks available to the medical professionals at the time when the negligence occurred. In *Hotson* at the time of the incorrect diagnosis reasonable health care professionals would have been aware that an incorrect diagnosis would have increased the risk of permanent disability by a significant, if non-specific amount. In this context the determination that the defendants increased the risk of permanent disability by 25% may be a reasonable assessment of the increased risk created by the defendant's negligence, given the limited information set created by the defendant's negligence.¹⁰⁷

This approach is not therefore dependent upon objective knowledge about whether or not the plaintiff would have recovered if the hospital had made a correct diagnosis. It is dependent upon a reasonable health care provider's own assessment of the risk at the point in *time* when the decision is made to proffer a particular form of medical treatment. In this sense the duty of care is defined with reference to a reasonable health care provider's state of knowledge at the time of the relevant act or omission. The model of responsibility is a relational model of responsibility because it is characterised with reference to the defendant's and the plaintiff's own perceptions of the risks and harms. The issue of whether or not the plaintiff's injury was objectively caused by the defendant's negligence is not relevant to a finding of liability because the state of medical knowledge is such that it will often not be able to provide this kind of deterministic answer to either patients or health care providers. Liability is thus dependent upon the only available source of knowledge concerning the plaintiff's condition, that is, a reasonable health care provider's assessment of the risks associated with various procedures at the time when those procedures are being considered.

105 Above n103.

106 Reece, H, above n69 at 192-194.

107 This approach is similar to that adopted by Perry, S, above n69 at 308-316.

It is the tying together of the elements of the duty of care and of the definition of the damage which distinguishes this approach from some of the proposals calling for the recognition of a lost chance as a form of damage. These proposals relied upon a test of causation in order to justify the finding that the defendant was liable for the lost chance of recovery.¹⁰⁸ In simple terms the argument supporting the recognition of a "lost chance" as a form of damage was that the defendant's negligence caused the plaintiff to lose the chance of a full recovery. The problem has been that there has been no general agreement that it is possible to argue that a breach of duty causes a lost chance, that is, the test of causation in the context of an objective model of responsibility has not been able to bear the weight of the attempt to redefine damage in tort law.¹⁰⁹ By contrast the argument in this article is that the damage can be defined in a range of different ways provided that it is defined with reference to the nature of the duty of care owed by the defendant to the plaintiff. In this way damage can be defined as a loss of opportunity without fundamentally altering any of the underlying principles of the tort of negligence.

(ii) *O'Shea v Sullivan & Anor*

This approach is equally applicable to those cases where a plaintiff succeeds in their actions against health care providers. A good example of such a case is *O'Shea v Sullivan & Anor*.¹¹⁰ In this case the plaintiff brought an action against a doctor and a pathology laboratory for failure to diagnose cervical cancer. The claim for the plaintiff was that the doctor's delay in diagnosing cervical cancer significantly increased the risk that the cancer would spread which would, in turn, significantly reduce the plaintiff's chances for a full recovery. Justice Smart stated that:

I am satisfied that Ms O'Shea has established that Dr Sullivan was negligent, that on the balance of probabilities her negligence led to Ms O'Shea not receiving timely treatment and that if she had received such treatment she would have been cured. I think that she lost more than just the chance of being cured.¹¹¹

The reference to the plaintiff losing more than a chance of recovery is a reference to the evidence presented by the plaintiff. This evidence was that if the plaintiff had received adequate treatment she would have had a 95% chance of recovery. The negligence of the defendant reduced these chances of recovery to 80%, that is, that at the time when she started to receive effective medical treatment, she still had an 80% chance of cure.¹¹²

108 Above text accompanying nn76-78.

109 Above text accompanying nn103-104.

110 *O'Shea v Sullivan & Anor* (1994) Aust Torts Rep §81-273.

111 *Id* at 61,307. At 61,310 Justice Smart specified the two factual questions which he had to answer to reach this conclusion. The first was that the secondary spreading of the cancer had not established itself at the time of the defendant's negligence. The second step was that earlier treatment would, more likely than not, have resulted in a cure by preventing the cancer developing or spreading.

112 *Ibid*, at 61,301, 61,306. At 61,301 the finding of the judge is in contrast with one of the plaintiff's expert witnesses, Professor Crandon, who stated that "complete cure could never be guaranteed but that the plaintiff lost the chance of a complete cure".

This case is an example of the application of some of the difficulties created by the application of an objective model of responsibility to medically related injuries. Justice Smart's reasoning appears to have been that because Ms O'Shea would have been part of the 95% who would have recovered with early treatment and because she was not part of 80% who would have recovered from the treatment that she did receive she was part of the 15% of women whose cancer was not cured by early diagnosis and treatment. In this sense Justice Smart appears to have followed the approach of the House of Lords in *Hotson* by finding that on the balance of probabilities the plaintiff would have been cured by early treatment. On the basis of this finding of fact by Justice Smart it is correct to say that Ms O'Shea did not lose a chance of making a full recovery.

While this reasoning appears to be intuitively appealing it does give rise to some important anomalies.¹¹³ Amongst these is the evidence that, at the time when Ms O'Shea did receive effective medical treatment, she had an 80% chance of recovery. This means that while the defendants were responsible for paying damages, as if their negligence led to the plaintiff being denied a complete recovery, the best evidence was that after their negligence she still had an 80% chance of making a full recovery. There are two aspects to this disproportionate relationship between the extent of defendant's responsibility for the plaintiff's harm and the extent of the defendant's liability to pay damages to the plaintiff.

The first is that the provision of medical treatment for a woman with the risk of contracting cervical cancer is a process. It is a process of determining the kind of medical treatment a woman will receive at any point in time after assessing that woman's condition at each point in time. From the perspective of the relevant health care provider a woman's condition represents the risks associated with the presence of cervical cancer balanced against the benefits flowing from a particular form of treatment. In this context it is only possible to say, as did one of Ms O'Shea's leading expert witnesses, that the negligent delivery of a particular form of treatment will reduce the chance for a cure.¹¹⁴ The requirement to establish, on the balance of probabilities, an objective cause distorts health care professionals own understanding of the process of providing health care. This is the problem of attributing the "failure" of the process of treatment to one of the elements in that process.¹¹⁵

The second anomaly resulting from the application of an objective model of legal responsibility is the arbitrariness of the result. It is difficult not to reach the conclusion that one of the mainstays of Justice Smart's finding in *O'Shea* is the high rate of success in the treatment of cervical cancer. It was the evidence of the plaintiff's expert witnesses, which was accepted by Justice Smart, that with early diagnosis Ms O'Shea had a 95% chance of recovery.¹¹⁶ With this high level of success for the treatment of this condition it was rela-

113 *Id* at 61,305. Smart J captured this point when he stated that: "Unfortunately, unlike some other diseases and conditions, there is always the risk that there will be no second chance if it is missed through insufficiently rigorous initial investigations."

114 Evidence of Professor Crandon, see above n12.

115 For example, Stanley, F, above n18 at 275-279.

116 Above n12.

tively easier for the plaintiff to establish that the negligence of the defendants caused her to develop secondary cancer. As in *Hotson* it may be much harder for a plaintiff to establish the same causal connection where the chances of recovery are reduced to below 50%. The result is that health care professionals are more likely to be responsible for failures in the delivery of successful medical treatments than for those which have lower rates of success.¹¹⁷

Adopting a relational model of responsibility as proposed in this article would lead to a different result. The defendants increased the risk of harm from a 5% risk that the treatment would not be successful to a 20% risk that treatment would not be successful. At the time when Ms O'Shea had begun to receive effective medical treatment she still had an 80% chance of recovery. The defendant had a duty to exercise reasonable care to avoid exposing the plaintiff to precisely this increase in the risk of suffering invasive secondary cancer. When this risk of harm was transformed into actual harm, that is, when Ms O'Shea developed secondary cancer, she sustained damage. One way of measuring this damage would be to allow the plaintiff to recover from the defendants that percentage of the plaintiff's damages which is equal to the amount by which the defendants negligently increased the plaintiff's exposure to the risk of developing a spreading cancer.¹¹⁸ The plaintiff would therefore recover 15% of the damages she would have received if the defendant had been responsible for all of her damages.

The important feature of the adoption of a relational model of responsibility in these circumstances is that it reflects the role which these particular defendants played in the system which provided health care services to the plaintiff. Both defendants were found to be negligent but the treatment provided by them was not the only treatment received by the plaintiff. Upon diagnosis the plaintiff received treatment which, at first, appeared to be successful. This was followed by subsequent medical treatment when secondary cancers were later discovered.¹¹⁹ At each stage in the process the plaintiff received treatment on the basis of an assessment of the risks associated with the disease balanced against the risks associated with the treatment. A finding that the plaintiff is only responsible for the increased risk of exposure to developing cancer creates a proportionate relationship between the degree of a defendant's negligence and the extent of that defendant's liability to pay damages.

117 For example, above n5 at 7.116-7.119, and generally at 4.24-4.44; see also Stanley, F, above n18 at 266-268.

118 An alternative approach to this problem, in the context of a pure economic loss case, is that adopted by the High Court in *Sellars v Adelaide Petroleum NL* (1994) 179 CLR 332 judgment of Mason CJ, Dawson, Toohey and Gaudron JJ at 355 where the damage was defined as "the loss of a commercial opportunity which had some value" and damages were assessed on a valuation of this opportunity "by reference to the degree of probabilities and possibilities". The analogy in *O'Shea v Sullivan & Anor* (1994) Aust Torts Rep §81-273 would be that the negligence of the doctor caused Ms O'Shea to lose a real chance of being cured. Probabilistic evidence could then be used to assess the extent of that chance. For a similar approach, see *Allied Maples Group Ltd v Simmons & Simmons (a firm)* [1995] 4 All ER 907.

119 *O'Shea v Sullivan & Anor* (1992) Aust Torts Rep §81-273, at 61,294.

(iii) "Full" compensation

The particular relational model of responsibility developed in this article will not always result in a plaintiff recovering a proportion of the losses which they have suffered. When a defendant exposes a plaintiff to a risk of harm which is new and different it will often be the case that the defendant will be responsible for all of the harmful consequences associated with the plaintiff's changed circumstances. In this sense the defendant will be held to be responsible for the consequences associated with the changes in the plaintiff's life that were caused by the breach of duty of care. This is in contrast to the position in *Hotson* or *O'Shea* where the plaintiff's condition at any point in time is the result of the interaction of a number of identifiable risks of harm each of which has a different source. Thus where the defendant's negligence exposes a plaintiff to a risk of harm which results in the plaintiff sustaining a harm which they would not have sustained without exposure to that risk an objective model of responsibility and the relational model of responsibility will produce the same outcomes.

A simple example of such a case in the field of medical negligence is *Rogers v Whitaker*.¹²⁰ In this case the defendant doctor failed to warn the plaintiff of the possibility that an operation could cause the unusual condition of sympathetic ophthalmia. The plaintiff, Mrs Whitaker, had lost the sight in her right eye as a child and agreed to have a surgical procedure to improve the appearance of this eye. Although the surgery was conducted with reasonable care and skill the plaintiff developed sympathetic ophthalmia in her left eye and as a consequence lost the sight in this eye also. The overall outcome of the procedure was that Mrs Whitaker was almost totally blind.¹²¹ The plaintiff succeeded in her action against Dr Rogers because she was able to establish that Dr Roger's failure to warn of the risk of sympathetic ophthalmia was a cause of her blindness.

The central issue in *Rogers v Whitaker* was that of deciding whether the doctor had a duty to warn the plaintiff of the risk of developing sympathetic ophthalmia in the left eye as a result of the operation to her right eye. This in turn depended upon whether the extent of a doctor's duty to warn a patient of the risks associated with a particular treatment could be defined by reference to the practice of a body of reputable practitioners.¹²² In a joint judgment the High Court found that a medical practitioner has a duty to warn a patient of a "material risk inherent in the proposed treatment".¹²³ In *Rogers* the Court found that the doctor did have a duty to warn of the risk of sympathetic ophthalmia on the grounds that it "would be reasonable for a person with one

120 *Rogers v Whitaker* (1992) 175 CLR 479. See also eg, *CES & Anor v Superclinics (Australia) Pty Ltd* (1995) Aust Torts Rep §81-360. The relevant issues in this case relate to the lawfulness or otherwise of a decision of one of the plaintiffs to have an abortion and the assessment of the plaintiff's damages. There would be no proportionate reduction in the plaintiffs' damages because the defendants exposed the plaintiffs to the risk of having a child which they had expressly stated they did not wish to have.

121 *Id* at 482.

122 *Id* at 483-484. The issue was defined as one whether the High Court should apply *Bolam v Friern Hospital Management Committee* [1957] 2 All ER 118.

123 *Rogers v Whitaker* (1992) 175 CLR 479 at 490.

good eye to be concerned about the possibility of injury to it from a procedure which was elective".¹²⁴ On this basis the defendant was held to be responsible for the damages resulting from Mrs Whitaker's blindness.

The application of the relational model of responsibility as discussed in this article would produce a similar result to that reached by the High Court in *Rogers*. As a person with the sight of one eye Mrs Whitaker recognised that she had a slightly higher risk of becoming blind than others with the sight of both eyes but it was a risk which she managed by exercising a higher degree of care. Apart from this there was no evidence to suggest that Mrs Whitaker was exposed to any particular risk that she would lose the sight of her left eye. This was the context in which the defendant doctor exposed the plaintiff to the particular risk of harm, that is blindness, which Mrs Whitaker had identified as the one which she sought to minimise.¹²⁵ In these circumstances it is possible to identify Mrs Whitaker's blindness as the damage because the negligent act of the defendant exposed her to a new risk of harm which she had identified as a particular risk which she sought to minimise. The definition of the damage in this way would result in the defendant being responsible for the losses associated with becoming blind.¹²⁶

This result is to be contrasted with that in *Hotson* or *O'Shea*. In those cases the plaintiffs were, at the time of the treatment, already exposed to a risk of going on to develop the condition or disease. The risk of the onset of the condition or disease was not one that the plaintiffs and defendants could avoid, rather it was one that could only be managed. In the process of management the defendants increased risk of onset but did not expose the plaintiffs to new or additional risks of harm. In this way the damage in these causes of action may be defined with reference to the increased risk of harm while in *Rogers* the damage could be defined with reference to the plaintiff's condition of blindness.¹²⁷

4. Conclusion

There is widespread concern in the community about levels of care provided by health care professionals and about when those who sustain medically related injuries should be able to claim compensation for their injuries. These problems are complex and involve several different parts of the legal system in a number of ways. One of the reasons that these problems are complex is

124 *Id* at 491.

125 *Ibid*.

126 Above n121.

127 A further example of circumstances where plaintiffs could expect full recovery would be the "trial" carried out at the National Women's Hospital in Auckland where women who returned positive pap smear results were monitored but were not offered any treatment unless there was evidence of having developed invasive cancer, see above n5 at 3.36-3.38. The evidence in *O'Shea v Sullivan & Anor* was with that with early treatment of cervical cancer the chance of survival was 95%, see above n99. The failure of the doctors to inform the patients that they were part of the "trial", and the failure to provide treatment unless invasive cancer developed, therefore meant that the potential plaintiffs effectively lost the chance of a complete cure. See generally Tackach, R, "No-(one's) Fault: The New Zealand Cervical Cancer Experiments" (1995) 3 *J of Law and Med* 60.

because of the capacity for systems of regulation and systems of compensation to interact in uncertain and unpredictable ways. The broad proposition in this article is that the identification of a rationale for compensation for medically related injuries is a first step in ensuring there is a continuing role for a system of compensation by more clearly identifying the boundaries between systems of compensation and systems of regulation.

The argument in this article is made up of two steps. The first step was to provide an explanation as to why recovery of compensation for medically related injuries gives rise to such intractable problems in the law of tort. The second step was to make the claim that the law of tort can provide a suitable framework for compensation for medically related injuries through the recognition of a form of proportionate liability. While a system of proportionate liability may appear to be inconsistent with the core principles for recovery of personal injury in tort the central claim in this article is that such a system can be integrated into the law of tort without fracturing the skeleton of principle supporting the common law. Indeed this form of proportionate liability more adequately reflects the underlying principles of tort than does the current system of compensation.

It is also argued that the introduction of a system of proportionate liability would incidentally act as a catalyst in focusing attention on ways of improving the system regulating the delivery of health care services. A proportionate system of liability would diminish the regulatory functions of the tort based system of compensation by diminishing the extent to which tort law could be seen to have an accident deterrence function. This would shift attention about the overall quality of health care services away from concerns about compensation on to a more informed discussion about the *organisation and regulation* of the delivery of health care services. While compensation will always be an important issue in relation to the delivery of health care services there is little to suggest that debates about entitlements to compensation have improved the quality of health care services.

In the first part of this article it was argued that the basic model of responsibility which defines the basis for the recovery of personal injury in tort was an objective model of responsibility. When applied to medically related injuries this model of responsibility produces unpredictable outcomes because the assumptions about the nature of personal injury which are part of this model are *not applicable* to the complex system supporting the delivery of health care services. On the one hand the objective model of responsibility includes the important assumption that compensation for personal injury should be dependent upon identifying a decisive connection between the damage and a defendant's failure to exercise reasonable care. On the other hand the negligent delivery of health care services rarely "cause" damage in this sense. Rather negligence in the delivery of health care services changes the pattern of risks which makes up a plaintiff's condition and, as a consequence, increases the risk that the plaintiff will develop a particular condition or disease. Thus a plaintiff suffers harm in circumstances where the health care provider has negligently increased the risk of exposure to that particular harm which may have occurred even if the health care provider had not been negligent.

The second part developed the central thesis in this article. This thesis is that the fundamental principles of tort law can be used to develop an effective system of compensation for the complex harms that arise out of the delivery

of health care services. The starting point for this argument was that tort law already includes a relational model of responsibility which could be the framework for developing an effective, predictable system of compensation for these complex harms. This model, which defines the basis for the recovery of pure economic loss in negligence, provides the framework for such a system of compensation by recognising that the damage sustained by a plaintiff is dependent upon the nature of the duty of care owed by the defendant to the plaintiff.

This simple proposition means that it is possible to develop a more flexible definition of a plaintiff's damage by defining that damage with reference to the terms of the relationship which gave rise to the harm. In this framework a plaintiff suffers damage when an increased risk of harm, which is the result of the negligence of a health care provider, is transformed into actual harm. When a plaintiff suffers damage in this sense they will be entitled to recover compensation equivalent to the amount by which the negligence of the health care provider increased the risk of that harm occurring. In this way it is possible to use tort law principles to develop a system of proportionate liability to ensure that there is a rational connection between the extent of a defendant's responsibility for the plaintiff's damage and the extent of that defendant's liability to pay damages.

Although the recognition of this form of proportionate liability would be a principled response to the problem of devising a system of compensation for medically related injuries it also faces a number of immediate objections. These objections would be on grounds of principle and on the grounds that such a system of proportionate liability would create practical difficulties that would outweigh any potential advantages that its introduction would create. The primary objection on grounds of principle would be that this system of liability would result in a significant number of plaintiffs receiving damages awards which did not fully compensate them for the harms which they suffered. The practical objections would revolve around the unacceptable impact which this system of liability would have in increasing the degree of complexity of litigation. It would not be useful to analyse each of these objections in detail because that would necessarily involve repetition of the central themes of my argument. It is however important to briefly traverse some of the issues that would be raised by such objections.

The intuitive objection to the adoption of a system of proportionate liability is that it modifies a plaintiff's right to obtain "full" compensation for the harm which they sustained. The right to obtain an amount of damages which fully compensates a plaintiff for any damage caused by negligence is an important principle in the law of tort.¹²⁸ The centrality of the restitutionary principle in guiding the assessment of damages has been emphasised by decisions which have recognised that for a plaintiff to receive damages necessary to compensate them for their damage new heads of damages must be created.¹²⁹ Along

128 Above n34.

129 For example, *Griffiths v Kerkemeyer* (1977) 139 CLR 161; *Van Gervan v Fenton* (1992) 175 CLR 327. For a review of this decision see, Graycar, R, "Love's Labour's Lost: the High Court's Decision in *Van Gervan v Fenton*" (1993) 1 *Torts LJ* 122. See also eg, compensation for the cost of administering an award of damages: Balkin, R, and Davis, J, *Law of Torts* (2nd edn, 1996) at 369.

with the recognition of new heads of damages there has been a more general move to broaden the range of factors considered in assessing damages.¹³⁰ Finally the importance of this notion of the right to obtain "full" compensation has been further emphasised by some legislation, eg, legislation which provides that Medicare will not be responsible for the payment of health care costs where a plaintiff has a right to recover damages in tort.¹³¹ This legislation has added to the view that where a plaintiff is entitled to damages those damages should fully reflect the harm sustained by the plaintiff.

The gist of the argument in this article is that while the notion of the right to obtain full compensation in this sense is appealing it is an ultimately self defeating one. This is because it is based upon a simple definition of the "damage" which is the basis of the plaintiff's cause of action. The damage is defined as the plaintiff's injury or condition. This simple definition of the damage is appropriate in those environments where discrete acts of negligence are known to cause discrete injuries. It is not appropriate in those complex environments where acts of negligence alter a person's circumstances by changing the pattern of risks which defines that person's condition at any point in time. As already argued the application of this simple definition of damage ensures that tort law will, more often than not, produce arbitrary and unpredictable outcomes.

There is however a further problem with this simple definition of the "damage" in personal injury actions. The application of this simple definition to complex environments, such as that involving the delivery of health care services, robs the right to recover compensation of any particular meaning. The application of the simple definition of damage in these circumstances will ensure that the damages a plaintiff receives will, more often than not, include compensation for the risk created by the defendant and "compensation" for those risks which could never be the responsibility of the defendant. These latter risks are general or social risks, and include those which affect a person's health or income earning capacity, which are the responsibility of other systems of law, eg, the social security system.¹³² A requirement that a defendant be liable to "compensate" a plaintiff for these general risks cannot be justified by the application of the ordinary principles of tort law. In this sense the very concept of "compensation" loses its specific meaning and becomes indistinguishable from other forms of entitlements.

130 For example, consideration of whether a seriously injured plaintiff should receive compensation on the basis of being cared for in an institution or on the basis of the provision of independent care while at home, see Balkin, R, and Davis, J, above n129 at 366: "Despite the additional evidence required, it is not uncommon for plaintiffs to be recompensed on the basis of their living at home or (where that is possible) independently."

131 See eg, *Health Insurance Act* (Cth) 1995, s18. This Act seeks to prevent "double dipping" between Medicare benefits and compensation awards. The aim is to ensure that where a person receives both compensation and Medicare payments that Medicare will recover any benefits paid out. For an analysis of this "double dipping" legislation, see above n5 at 6.137-6.145.

132 For example, income support assistance for people with disabilities, for a general discussion of the relationship between support for people with disabilities and compensation, see above n5 at 6.29 -6.123. For a contrary view that the existence of insurance or social security should not affect the reach of tort, see Stapleton, J, "Tort, Insurance and Ideology" (1995) 58 *Mod LR* 820.

In addition to this objection on grounds of principle there will be many practically oriented objections to the adoption of this system of proportionate liability. There are two of these practical concerns which will be briefly analysed. The first of these relates to the problem of applying a relational model of responsibility to only one kind of personal injuries, that is, medically related injuries. The basis of this objection would be a high degree of complexity created by treating different forms of personal injury differently. The second objection relates to the problem of creating the likelihood of more complex litigation which would have the effect of making the proposed system of compensation based on tort law even less useful than the current ineffective system of compensation.

Initially the first of these concerns does appear to be a source of real difficulty for the adoption of this form of proportionate liability. A relational model of responsibility applies in cases involving recovery of pure economic loss. Currently the use of different models of responsibility does not create any insuperable problems because of the clear distinction drawn between claims involving recovery of pure economic loss and those involving personal injury. The adoption of a system of proportionate liability for some kinds of personal injury would seem to generate difficulties because the nature of a plaintiff's right to recover compensation could come to depend on the definition of the kind of personal injury sustained by a plaintiff.

This problem is, however, more apparent than real. Although the adoption of a relational model of responsibility for medically related injuries would produce a form of proportionate liability the application of this model more generally would not necessarily produce different outcomes for other kinds of personal injury. As already argued where a discrete act of negligence causes a plaintiff to suffer a known form of harm or damage an objective model of responsibility and a relational model of responsibility will produce similar outcomes.¹³³ In general there will be no need to adopt a relational model of liability for social contexts in which these kinds of injuries predominate. The recognition of the possibility of applying a relational model of responsibility to medically related injuries ensures that tort law develops the tools to deal with more complex problems as and when they arise.

The second practical difficulty relates to the potential for a system of proportionate liability to generate more complex litigation. The basis for this argument would be that a plaintiff may have to bring separate actions against a number of different defendants in order to recover compensation where those defendants have exposed the plaintiff to different kinds of risk of harm. The avoidance of the necessity for a plaintiff to bring multiple actions to recover compensation is one of the primary rationales for the doctrine of solidary liability.¹³⁴ This problem of increased complexity is an important but not overwhelming concern.

The doctrine of joint and several liability will continue to apply where a number of health care providers are responsible for causing the same damage.

133 Above nn120-127.

134 New South Wales Law Reform Commission, *Contribution Among Wrongdoers: Interim Report on Solidary Liability* (1990) at 5-7. See also above nn36-39.

This will occur where a team of health care providers are all responsible for exposing a plaintiff to a specific risk of harm.¹³⁵ In these circumstances a plaintiff would be able to take advantage of the doctrine making each of the defendants jointly and severally liable for the damage. Where, however, two defendant health care providers exposed a plaintiff to different risks of harm, that is, each defendant is liable for causing the plaintiff to suffer different damage, that plaintiff would have to initiate separate causes of action against each defendant. In this sense the proposed system of proportionate liability may have the effect of increasing the complexity of litigation. The central theme of this article is that this kind of complexity is an inevitable consequence of the application of systems of compensation to complex decision-making processes like those involved in the delivery of health care services.

The problem of devising a system of compensation for medically related injuries is a multi-faceted one. It requires that tort law develop in new, and perhaps, unexpected ways of characterising the right to recover compensation. Whether or not the central thesis of this article stands up to scrutiny this particular problem cannot be simply ignored. There is no doubt that tort law, along with other institutions, will need to go through a period of profound change if it is to survive the social, economic and political change that is re-defining our understanding of the community in which we live.

135 For example, *X and Y v Pal* (1991) 23 NSWLR 26 where the breach of duty by a number of doctors caused the plaintiffs to suffer the same damage, that is, the failure to screen for syphilis caused each of the plaintiffs to suffer damage.