

## Accountability sought by patients following adverse events from medical care: the New Zealand experience

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### ABSTRACT

**Background:** Unlike Canada's medical malpractice system, patients in New Zealand who are dissatisfied with the quality of their care may choose between 2 well-established medicolegal paths: one leads to monetary compensation and the other to nonmonetary forms of accountability. We compared the forms of accountability sought by patients and families in New Zealand who took different types of legal action following a medical injury. This study offers insights into the forms of accountability sought by injured patients and may help to inform tort-reform initiatives.

**Methods:** We reviewed compensation claims submitted to the Accident Compensation Corporation (ACC), New Zealand's national no-fault insurer, following injuries associated with admission to a public hospital in 1998 ( $n = 582$ ). We also reviewed complaint letters ( $n = 254$ ) submitted to the national Health and Disability Commissioner (HDC) that same year to determine the forms of accountability sought by injured patients. We used univariable and multivariable analyses to compare sociodemographic and socioeconomic characteristics of patients who sought nonmonetary forms of accountability with those of patients who claimed compensation.

**Results:** Of 154 injured patients whose complaints were sufficiently detailed to allow coding, 50% sought corrective action to prevent similar harm to future patients (45% system change, 6% review of involved clinician's competence) and 40% wanted more satisfying communication (34% explanation, 10% apology). The odds that patients would seek compensation were significantly increased if they were in their prime working years (aged between 30 and 64 years) (odds ratio [OR] 1.66, 95% confidence interval [CI] 1.14–2.41) or had a permanent disability as a result of their injury (OR 1.75, 95% CI 1.14–2.70). When injuries resulted in death, the odds of a compensation claim to the ACC were about one-eighth those of a complaint to the HDC (OR 0.13, 95% CI 0.08–0.23).

**Interpretation:** Injured patients who pursue medicolegal action seek various forms of accountability. Compensation is important to some, especially when economic losses are substantial (e.g., with injury during prime working years or severe nonfatal injuries). However, others have purely nonmonetary goals, and ensuring alternative options for redress would be an efficient and effective response to their needs.

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Patients who sue for clinical negligence do so for a variety of reasons. Surveys of plaintiffs in the United Kingdom<sup>1</sup> and the United States<sup>2-4</sup> suggest that monetary compensation is frequently not the primary goal. Explanations of what happened and assurances that care will improve appear to be highly valued objectives.

A sceptical view of these findings is that, regardless of how litigants may describe their reasons for taking medicolegal action, they have elected to seek money by filing a lawsuit and alleging negligence. The critique is plausible, but it highlights a larger problem: in countries where litigation is the dominant avenue for obtaining redress for perceived problems with care, patients have little choice other than alleging negligence and suing for monetary damages, whatever the specific nature of their concern. These are extremely difficult environments in which to disentangle the different forms of accountability sought by those taking medicolegal action.

In New Zealand, the task is simpler. Patients reveal their preference for monetary or nonmonetary remedies by the choice of legal action they pursue. Those seeking monetary compensation file claims with the Accident Compensation Corporation (ACC), which awards compensation on a no-fault basis.<sup>5</sup> Claims data are analyzed and shared with providers in an anonymous form to support improvements in patient safety. Those seeking nonmonetary remedies may complain to an independent Health and Disability Commissioner (HDC), who resolves complaints by advocacy, investigation or mediation; acts as a gatekeeper to disciplinary proceedings; and disseminates findings so that lessons can be learned.<sup>6</sup> The processes are separate and designed to meet different patient objectives. They are also highly accessible.

We analyzed ACC claims and HDC complaints from patients who had experienced verifiable injuries due to medical care. Our goals were 2-fold: to determine the forms of accountability sought by injured patients and to test for systematic differences between the characteristics of patients who sought monetary and nonmonetary relief.

### Methods

The ACC and the HDC provided us with national data sets of all filed claims and complaints that related to care associated

with admissions to public hospitals in New Zealand in 1998. The filing dates ran through to June 30, 2004. This allowed at least 5.5 years for patients to initiate medicolegal action — a conservative window given that virtually all activity in New Zealand occurs within 2 years.

In 1998 more than 50 000 patients experienced adverse events in New Zealand hospitals (Fig. 1). An adverse event was defined as a prolonged hospital stay or disability after discharge that was due to medical care as opposed to the underlying disease process.<sup>7-9</sup>

The ACC sample consisted of 1148 claims. ACC adjudicators had determined that 582 (50.7%) of the claims involved adverse events. A pilot study of compensation decisions established good interrater reliability between ACC adjudicators and New Zealand Quality of Healthcare Study reviewers.<sup>10</sup>

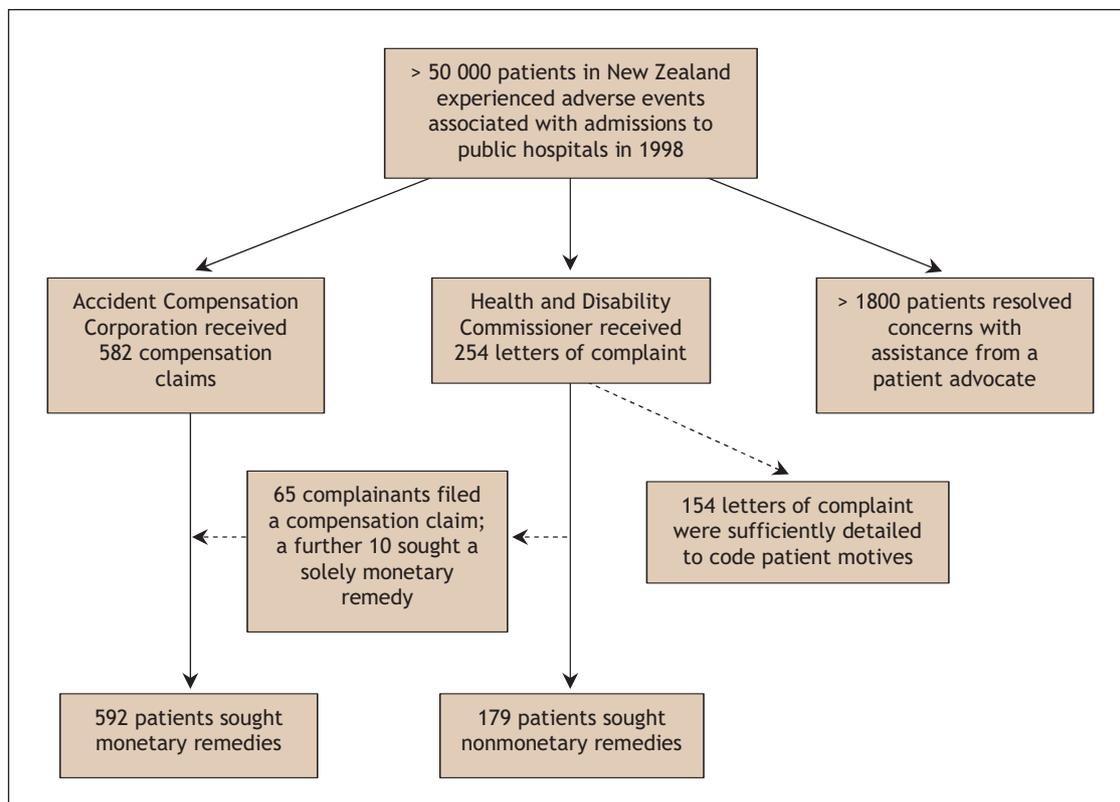
The HDC sample consisted of 398 complaints. We obtained the administrative files on these complaints, which typically included the original letter of complaint, a copy of the patient's medical record and information obtained through any further investigations by the HDC. Next we determined which of the complaints involved adverse events. We reviewed relevant administrative information using an established implicit review methodology.<sup>8,11,12</sup> A total of 254 complaints (63.8%) were judged to involve adverse events.

To test the reliability of this review, a second lawyer-doctor with extensive experience in adverse event reviews independently assessed a random subsample of 98 complaints, a quar-

ter of the sample. Interrater reliability for determination of adverse events was excellent (estimated kappa value = 0.84).

Ninety-seven (38.1%) of the letters of complaint contained cursory information that did not permit identification and categorization of the type of accountability sought by the complainants. The rest of the letters ( $n = 157$ ) were independently reviewed. The type of accountability sought was divided into 4 nonmutually exclusive categories, each with 2 subcategories. The categories, the bases of which have previously been described,<sup>13</sup> are designed to delineate different forms of accountability sought by the patient: communication (explanation or apology, expression of responsibility), correction (competence review or system change to protect future patients), restoration (compensation or intervention) and sanction (punishment or discipline). The coding by the reviewers matched for 131 of the 157 complaints. For the remaining 26 complaints, 1 or more of the selected categories differed. The discrepancies were discussed and consensus on coding was reached for all but 3, which were added to the group that had insufficient information to support accurate coding.

We compared the characteristics of ACC claimants with HDC complainants. Patients who pursued remedies in both arenas ( $n = 65$ ) were included in the claimant group. We also treated HDC complainants who sought only monetary remedies ( $n = 15$ ) as claimants. (In other words, these patients were reassigned to the path that better matched their statements, because the HDC does not serve a compensatory func-



**Fig 1:** Identification of patients who filed claims and complaints that related to care associated with admissions to public hospitals in New Zealand.

tion in the New Zealand system.) These adjustments resulted in a reclassification of 75 complainants as claimants (5 patients were in both groups).

We used Student's *t* tests to compare continuous age variables and Fisher's exact tests to compare all other characteristics of complainants and claimants. We used logistic regression analysis to explore multivariable differences between the 2 groups. The dependent variable in the model distinguished claimants from complainants. The independent variables were sex, ethnic background (Maori, non-Maori), patient age (newborn, 1–17 years, 18–29 years, 30–64 years, 65–74 years and 75 years or older) and disability (temporary, permanent or death). An additional covariable provided a measure of the patient's socioeconomic status using the New Zealand Index of Deprivation Score.<sup>14,15</sup> This index, based on small geographic areas, combines 9 census variables reflecting aspects of material and social deprivation. Following previous studies,<sup>16</sup> index scores were separated into quintiles for analysis. The level of significance was set at 5% and no adjustment was made for multiplicity.

This study was approved by the Wellington Ethics Committee and the Harvard Institutional Review Board. All identifying patient details have been changed or removed to protect their anonymity.

## Results

Table 1 shows the number of HDC complaints by accountability category and subcategory. Table 2 provides examples. About 50% of the complainants articulated a desire to ensure that no one else suffered a similar harm. In general, patients and families demonstrated high levels of goodwill, public interest and altruism. Typical comments included: "I hope that this complaint makes a difference for the treatment of others" and "We certainly wouldn't want anyone else to go through what we went through." Of the 48 complainants who had experienced the death of a friend or family member from an adverse event, 28 (58.3%) stated altruistic motives for complaining, and 4 (8.3%) sought sanctions against the clinician involved. Nearly half of the complainants (40%) sought an explanation of the events that led to their injury. Many of them questioned whether there was anything they themselves could have done to prevent the harm.

Such clarification seemed particularly important to the families of infants and children who had been harmed by medical care: 60.0% (12/20) sought an explanation, compared with 30% of other complainants. This was the only subgroup of patients for whom a desire for communication was mentioned more frequently than a desire for correction. For example, the mother of a child who died of carbamazepine-induced liver failure wrote: "Nothing can ease my pain over my inability to tell him that I did try to save him. I require answers in order to come to terms with the death of my son."

A smaller number of complainants sought other forms of communication. One in 8 patients wanted an apology or

assurances that someone had accepted responsibility. Although the HDC's function is not to award monetary damages, 18% of complainants mentioned a desire for compensation. Of these, 54% sought nonmonetary relief as well. Overall, 25.6% of the complainants in the sample (65/254) filed a compensation claim with the ACC before, during or after filing with the HDC.

Although patients in New Zealand who wish to initiate disciplinary proceedings against doctors must do so through the HDC, 12% of complainants sought disciplinary action or punitive measures.

## Characteristics of claimants and complainants

Analyses identified several significant differences between patients who sought monetary and nonmonetary remedies (Table 3). Those who sought monetary compensation (claimants) were younger than complainants (44 v. 48 years,  $p = 0.02$ ). Two discrepancies drove this age difference: a comparatively large proportion of claimants in the 30–64 year age group (60% v. 43%) and a comparatively large proportion of complainants in the older age groups.

Claimants were also more likely than complainants to have experienced permanent disability from their adverse event (41% v. 21%,  $p < 0.001$ ); cases in which the patient died, on the other hand, were more common among complainants (4% v. 33%,  $p < 0.001$ ). Among patients for whom data on their ethnic background were available, the proportion of Maori patients was lower among claimants than among complainants (9% v. 16%,  $p = 0.03$ ).

Age and disability differences persisted in the multivariable analysis (Table 4). The odds that patients would seek compensation for their injury were significantly higher if they were aged between 30 and 64 years (odds ratio [OR] 1.66, 95% confidence interval [CI] 1.14–2.41) and had permanent

**Table 1:** Forms of accountability sought by complainants following adverse events

Form of accountability	No. (%) of complainants* <i>n</i> = 154
<b>Communication</b>	61 (39.6)
Explanation	52 (33.8)
Apology, expression of responsibility	15 (9.7)
<b>Correction</b>	77 (50.0)
Lessons learned, system change	70 (45.4)
Review of provider's competence	10 (6.5)
<b>Restoration</b>	34 (22.1)
Compensation for economic losses	28 (18.2)
Intervention with care or waiting lists	6 (3.9)
<b>Sanction</b>	19 (12.3)
Professional discipline	13 (8.4)
Other punitive measure	8 (5.2)

\*Percentages do not add up to 100 because complainants could seek more than 1 outcome.

impairment as a result of their injury (OR 1.75, 95% CI 1.14–2.70). When injuries resulted in death, the odds of a claim were about one-eighth those of a complaint (OR 0.13, 95% CI 0.08–0.23).

## Interpretation

In this study we found that patients who pursued legal action in the aftermath of medical injury displayed a range of objectives that fall under 4 categories of accountability: communication, correction, restoration and sanction. Those who sought nonmonetary relief were primarily interested in better communication and correction. Injury during prime working years and severe nonfatal injuries were associated with higher odds of seeking monetary compensation.

The most commonly sought form of nonmonetary accountability, raised by some 50% of complainants, was the desire for corrective measures to address the causes of harm. This finding underscores the growing recognition that patients can be powerful allies in the quest for safer care if they are given appropriate channels through which to voice their concerns.<sup>17,18</sup> Another form of accountability

that was frequently sought was the wish to secure information and greater transparency about what had happened. A growing emphasis on the need to disclose adverse outcomes of care may help to head off such concerns.<sup>19–21</sup> However, with some notable exceptions, such transparency remains more of an ideal than a reality.<sup>22,23</sup> Patients who sought nonmonetary relief also expressed a desire for restoration and sanction, although these were less prevalent factors.

Researchers have already identified severe nonfatal injury as a predictor of litigation claims.<sup>24–26</sup> This study included the prime working years of 30–65 as an independent predictor. Access barriers are not a convincing explanation for these differences, since claim filing is free in New Zealand and does not require a lawyer. Rather, we attribute these findings to economic realities. Lost wages and serious injury are hallmarks of higher value of claims. The potential returns on filing a claim to injured patients who fit this profile are relatively large. A related explanation is that the financial needs of injured patients in these subgroups may be considerable, especially if they have dependents. It seems plausible that a threshold exists with respect to bearable monetary

**Table 2:** Examples of accountability sought by patients taking medicolegal action

Form of accountability	Example
<b>Communication</b>	
Explanation	Family of woman who died of sepsis after delay in instituting appropriate antibiotic therapy following hospital transfer: “We would like this case thoroughly looked into with an explanation and our questions answered”
Apology, expression of responsibility	62-year-old man with paraplegia in whom extensive bedsores developed while he was in hospital for rotator cuff surgery: “Apologies are extremely important to people who are hurting and who feel that their hurts have not been taken seriously”
<b>Correction</b>	
Competence review	Parents of baby who was stillborn after inexperienced homebirth midwife delayed hospital admission: “[We] feel an obligation to mention these matters in case it should be felt that some wider review of the midwife’s competence is advisable”
System change	Young mother who underwent termination of pregnancy at 21 weeks following 4-week delay in being notified that her prenatal scan showed severe congenital abnormalities: “... hope I have raised some areas of health care that need to be addressed to save others suffering”
<b>Restoration</b>	
Compensation	40-year-old woman in whom multiple abscesses and a gangrenous nipple developed following breast reduction surgery: “I would like to be compensated for the dreadful experience I have undergone”
Intervention	On behalf of 75-year-old patient whose basal cell carcinoma increased significantly in size during a 9-month wait for radiotherapy services: “I would be grateful for your help expediting treatment for this lady”
<b>Sanction</b>	
Professional discipline	61-year-old patient in whom biliary peritonitis developed in association with major bile duct injury following laparoscopic cholecystectomy: “I believe there is a case for disciplinary action”
Other punitive measure	Family of 62-year-old patient who died after ruptured aortic aneurysm was misdiagnosed as postural hypotension: “If this means that someone has to be severely reprimanded for malpractice, then so be it”

losses due to injury. Beyond the threshold, the need for monetary compensation may become more pressing, whatever other concerns the patient may have. As important as corrective action and improved communication may be, they cannot pay bills.

The economic considerations also help to explain the preponderance of deaths among patients who filed complaints. Compensation in these cases is essentially limited to funeral expenses, unless the deceased was an earner with surviving dependents. Moreover, true restoration is impossible when a family member dies, so it is not surprising that bereaved families gravitate toward other forms of accountability.

New Zealand's medicolegal system presents a remarkable opportunity to observe injured patients' motives for legal action. ACC and HDC data are rich enough to help disentangle the different forms of accountability sought by injured patients. A weakness sometimes noted about the studies in the United States and United Kingdom is that they relied on survey responses from patients filing claims within a traditional litigation system.

Our data have several limitations. We ascertained the forms of accountability sought by complainants through letters of complaint, nearly 40% of which did not state one clearly or at all. Some of these complainants may not have been clear in their own minds as to what they were hoping to achieve. The direction and potential magnitude of any bias resulting from the excluded letters are unknown.

Information on ethnic background was missing for a significant number of patients, especially among the HDC complainants, and misclassification is a well-recognized problem with this type of data.<sup>27</sup> The New Zealand Index of Deprivation's use of measures based on small geographic areas to assign socioeconomic characteristics at the individual level creates the potential for measurement error.<sup>15</sup> However, neither of these data limitations is likely to have led to biases in our main findings.

In pursuing legal action in the wake of an injury, patients in New Zealand vote with their feet, accessing either or both of 2 different medicolegal paths. Their behaviour reveals that injured patients seek manifold forms of accountability, many of which are predominantly or exclusively nonmonetary in nature. This implies that systems that offer litigation as the key or sole mechanism for consumers to bring strong external oversight to bear on clinicians and hos-

pitals may not respond to the wants of many patients. In such systems, a subset of plaintiffs will resort to litigation for lack of more fitting options.

Medicolegal systems based on medical malpractice litigation allow few outlets for achieving nonmonetary goals.<sup>28</sup> Money must serve as a proxy. In contrast, the New Zealand system has the capacity to offer patients different forms of accountability, including, but not limited to, financial compensation for their injuries. The offering of apologies, explanations and assurances of system change, where appropriate, may address many patients' true concerns without the need for expensive and protracted litigation. However, for some injured patients (e.g., those for whom the financial consequences of injury are particularly devastating) nonmonetary remedies will be inadequate. They should be viewed as supplementing, not supplanting, the need for an effective compensation mechanism.

**Table 3:** Characteristics of injured patients who sought monetary and nonmonetary forms of accountability

Characteristic	No. (%) of patients*		p value
	Sought monetary compensation n = 592	Sought nonmonetary compensation n = 179	
<b>Sex</b>			
Female	365 (61.7)	103 (57.5)	0.29
Male	227 (38.3)	77 (43.0)	
<b>Age, yr</b>			
Mean (SD)	44 (42-46)	48 (45-52)	0.02
Newborn	28 (4.7)	7 (3.9)	< 0.001
< 18 (except newborn)	33 (5.6)	13 (7.3)	
18-29	76 (12.8)	25 (14.0)	
30-64	353 (59.6)	77 (43.0)	
65-74	72 (12.2)	29 (16.2)	
≥ 75	30 (5.1)	29 (16.2)	
<b>Ethnic background†</b>			
	n = 515	n = 129	
Maori	45 (8.7)	20 (15.5)	0.03
Non-Maori	470 (91.3)	109 (84.5)	
<b>Deprivation quintile (socioeconomic status)</b>			
1 (least deprived)	92 (15.5)	33 (18.4)	0.66
2	118 (19.9)	39 (21.8)	
3	185 (31.3)	47 (26.3)	
4	110 (18.6)	32 (17.9)	
5 (most deprived)	87 (14.7)	29 (16.2)	
<b>Disability‡</b>			
	n = 584	n = 180	
Temporary impairment	319 (54.6)	83 (46.1)	< 0.001
Permanent impairment	239 (40.9)	37 (20.6)	
Death	26 (4.6)	60 (33.3)	

Note: SD = standard deviation.

\*Unless stated otherwise.

†Calculations exclude observations with missing values. Information on ethnicity was missing for 128 patients and disability level was missing for 8 patients.

**Table 4:** Multivariable odds of filing a claim for monetary compensation among injured patients taking legal action\*

Variable	OR (95% CI) of patient seeking monetary compensation	p value
<b>Sex</b>		
Male	1.00†	0.76
Female	1.06 (0.73-1.55)	
<b>Age, yr</b>		
< 30 or > 64	1.00†	0.009
30-64	1.66 (1.14-2.41)	
<b>Ethnic background</b>		
Non-Maori	1.00†	0.12
Maori	0.60 (0.31-1.14)	
<b>Deprivation</b>		
1 (least deprived)	1.00†	
2	1.14 (0.63-2.07)	0.66
3	1.84 (1.04-3.27)	0.04
4	1.47 (0.79-2.73)	0.23
5 (most deprived)	1.22 (0.64-2.34)	0.54
<b>Disability</b>		
Temporary impairment	1.00†	
Permanent disability	1.75 (1.14-2.70)	0.01
Death	0.13 (0.08-0.23)	< 0.001

Note: OR = odds ratio, CI = confidence interval.

\*Dummy variables for missing ethnic information and disability were included in the model in an attempt to retain the patients with missing values for these characteristics. However, all 8 patients with missing disability information claimed compensation, which dropped them from the model and left 764 observations (584 claimants and 180 complainants).

†Reference category.

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