Estimating the cost of compensating victims of medical negligence

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The current system in Britain for compensating victims of medical injury depends on an assessment of negligence. Despite the sporadic pressure on the government to adopt a "no fault" approach, such as exists in Sweden, the negligence system will probably remain for the immediate future. The cost of this system was estimated to be £52.3m for England 1990-1. The problem for the future, however, is one of forecasting accuracy at provider level: too high a guess and current patient care will suffer; too low a guess and future patient care will suffer. The introduction of a mutual insurance scheme may not resolve these difficulties, as someone will have to set the rates. Moreover, the figures indicate that if a no fault scheme was introduced the cost might be four times that of the current system, depending on the type of scheme adopted.

In 1988 in a briefing paper for the King's Fund Institute¹ we calculated both the approximate cost of the existing system of claims for medical negligence in Britain and the potential cost of replacing this with a system based on the Swedish model of "no fault." We had to make assumptions about the extent to which the rate of claims would rise towards that experienced in Sweden, the likely level of payments under the putative scheme, and the costs of administering the scheme. Moreover, we based the estimated costs of the existing negligence system on a small scale postal survey of regional health authorities' solicitors. While the response was good, considerable diversity of approach existed to claims data across the country, and we acknowledged that a more comprehensive survey was needed.

We also acknowledged that the picture obtained at the time from the health authorities alone was in many ways incomplete because of the special position of the medical defence societies. This, of course, has now changed, and the introduction of NHS indemnity was accompanied by a resurgence of interest in no fault compensation. Two private members' bills were presented to parliament; the BMA published its own suggestions for a no fault scheme²; the Royal College of Physicians produced a working party report that called for a particular model of no fault³; and the government indicated its willingness to look into a form of arbitration that is intended to reduce the costs and delays associated with suing for medical negligence.⁴ At the same time the state of New York commissioned a large scale study of medical malpractice, which estimated the cost of implementing no fault compensation in that state.⁵

The NHS has changed appreciably since our earlier study. Responsibility for clinical negligence claims now rests with NHS trusts or directly managed units, who may borrow the funds to meet them from the Department of Health or regional health authorities respectively and then pass on the cost to purchasers. The Department of Health is investigating the possibility of a mutual insurance scheme against the cost of clinical negligence claims under section 21 of the NHS and Community Care Act 1990. The management of any such scheme will, of course, depend critically on the availability of data relating to current and past claims within the NHS.

All of these developments make the need for more

Information from 142 district health authorities on claims during financial year 1990-1

- Number of outstanding claims at 31 March 1991 for 100 districts
- Number of settled claims for 130 districts
- Total costs of settlements for 125 districts
- Plaintiffs' combined legal costs and damages for 86 districts
- Plaintiffs' legal costs alone for 38 districts
- Damages alone for 53 districts
- Health authority's legal costs for 85 districts

data in Britain a clear imperative. In 1991 the Nuffield Provincial Hospitals Trust committed funds to a research project at the Centre for Socio-Legal Studies, Oxford University. Our aim was to collate available sources of data for England and use them to estimate the costs of not only the current system for compensating victims of medical accidents but also several hypothetical schemes.

Cost of present system

From information provided by district health authorities we obtained a fairly clear picture of the frequency and severity of claims relating to NHS hospitals. In 1990, after the introduction of NHS indemnity, the Department of Health agreed a transitional scheme for the payment of claims that originated from before 1990. A threshold of £300 000 was agreed; claims above that threshold would be met from pooled reserves from medical defence societies. To monitor the running down of these reserves and to help to evaluate the threshold, the Department of Health required the districts to submit quarterly and annual medical claims returns for the financial year 1990-1. The subsequent transfer of responsibility for claims to individual trusts and directly managed units means that such an exercise would be difficult to repeat.

The annual claims returns (HC(98)34) contain information on the number of outstanding claims at 31 March 1991; the number of cases settled during 1990-1, with the health authority's costs, including damages payable, in four different cost bands; and the total cost of settlements reached or awards made, with the authority's costs distinct from the payment of the plaintiffs' costs and damages. Data were obtained from 142 of the 190 district health authorities. When data items appeared incomplete, district health authority staff were telephoned for the missing data or to resolve the inconsistencies. The final information available to us is shown in the box. In addition, some information was available on new claims, abandoned claims, lengths of cases, and specialties involved.

We calculated for different samples the number of new claims, settled claims, and outstanding claims in relation to population, doctors, and admissions. Data on these three variables were obtained from the then NHS Management Executive's performance indicators for 1990-1. We then extrapolated from our sample an estimate of the total number of claims for

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Estimated totals of settled, outstanding, and new medical negligence claims for England 1990-1, based on size of population and numbers of senior doctors and admissions in sample of district health authorities

	Claims		
	Settled	Outstanding	New
No of district authorities	130	97	11
Size of population of district health authorities (millions)	31 298	23 528	3337
No of:			
Senior doctors (whole time equivalents)	17 477	13 512	1914
Admissions (millions)	4011	3021	407
Mean No of claims per:			
District health authority	8.23	113.38	36.73
100 000 Population of district health authority	3.43	46.74	12.11
100 Senior doctors	6.15	81.37	21.11
10 000 Admissions	2.68	36.40	9.93
Estimated No of claims based on data for:			
District health authorities	1564	21 542	6979
Population of district health authority	1636	22 290	5775
Senior doctors	1579	20 888	5419
Admissions	1593	21 654	5905

each category of claim for England as a whole (table).

We estimated the number of claims for England in 1990-1 to be between 5419 and 6979 for new claims; between 1564 and 1636 for settled claims—that is, those settled with payment; and between 20 888 and 22 290 for outstanding claims. After adjustment for the proportions of senior and junior doctors and the extent of part time working, the approximate rate of new claims per 100 hospital doctors from our data was 10.5. This rate is similar to the most recent figure from the United States of 13 per 100 doctors, down from a peak of 16 per 100 doctors in 1984. This comparison may be misleading, however, because the rate for the United States is for all doctors, including those in the primary sector, whereas our calculations relate only to hospital doctors. Because litigation rates in the primary sector are much lower than in the secondary sector our figures would be appreciably lower if we were to include general practitioners. Moreover, the Harvard study reported 14.1 new claims per 10 000 admissions in New York state,⁵ compared with our figure of 9.93 for England. Litigation rates clearly remain much higher in the United States than in Britain, but the gap is narrowing, particularly when allowance is made for the higher number of doctors and admissions per head in the United States.

In terms of the cost to the NHS we found that the mean settlement cost per claim, including the legal costs for both sides, came to £27 242. As about 1600 claims were settled in 1990-1 in England, the annual cost of hospital claims to the NHS would be about £43.6m. With a notional 20% administrative load to cover the cost to district health authorities of dealing with both settled and abandoned cases, the total NHS cost would be about £52.3m. We did not estimate the proportion of this cost that was met from the reserves of the medical defence societies as few of the settled claims in our sample were over £300 000.

If the current claims system remains unchanged its future cost will clearly depend on the extent to which the rate of settlements rises above 1600 a year and on the possibility that the average cost of a claim will rise substantially as a result of more cases of injury related to childbirth. In fact, 6% of the claims yet to be settled with three regional health authorities are anticipated to cost over £300 000, compared with 5% in 1990-1. While we expect some increase in both the rate and unit cost of settled claims over the next few years, the rise is unlikely to be dramatic, as was the rate of change in the mid-1980s. Since our work was completed a recent parliamentary answer by the secretary of state for health indicated that in England for 1990-1 and 1991-2 the number of claims settled was 1618 and 1751 respectively, at a total cost of £53.2m and £51.3m

respectively.⁶ These figures confirm the findings reported here, with respect to both the level of litigation in 1990-1 and its rate of growth.

No fault schemes

To consider the likely cost of other mechanisms for compensating victims of medical injury we must know how eligibility would be determined and awards calculated under such schemes. What are the basic features of the three no fault schemes that have been proposed for Britain?

BMA'S SCHEME

Eligibility would be based on proof that the injury was related to the medical treatment received and not merely the consequence of the progress of the disease being treated. Criteria for eligibility would not include unforeseeable diagnostic error, unavoidable complications and infections, or complications of drug treatment carried out according to manufacturers' instructions. Awards would comprise a capital sum that reflected conventional levels of compensation for pain and suffering and a regular payment of compensation for economic loss, with income replacement limited to twice the national average wage. The scheme would be administered by a no fault compensation board and financed out of general taxation.

ROYAL COLLEGE OF PHYSICIANS' SCHEME

Eligibility would be based on proof of adverse consequences of medical intervention. Awards would compensate for pain and suffering as well as for economic loss, with all elements subject to a threshold and prospective loss of earnings limited to average net earnings. Regular payments would be made whenever practicable, subject to review at stated intervals. People who claimed under the no fault scheme would be disqualified from suing for negligence. The administration of the scheme would include a separate mechanism for the scrutiny of each claim to ensure that appropriate standards of care were not transgressed.

NHS (COMPENSATION) BILL

Eligibility would be based on proof that the injury resulted from a "mishap" in NHS care and was not a foreseeable and reasonable result of that care or the person's pre-existing condition. Awards would be payable to those who required inpatient treatment for more than 10 days, could not continue with normal activities for more than 28 days, or suffered appreciable pain and suffering. The level of awards is left open for further guidance. The scheme would be administered by a medical injury compensation board and financed at a level determined by the secretary of state for health.

Cost of no fault schemes

The potential cost of a no fault scheme varies greatly according to the assumptions about the rate of claims and the size of awards. Anticipating the rate of claims under a no fault scheme is difficult. The BMA's working party predicted the rate by using a sample survey of claims records in several district health authorities and calculating the proportion of claimants eligible for payment without proof of fault.⁷ The obvious problem with this approach is that it excludes the possibility that many more people would make a claim if a no fault system existed than do so under the current system. A rough and ready way round this problem is to assume that the rate of claims would be similar to that experienced in other countries that have adopted a no fault scheme. This is the approach that we followed in our earlier exercise.¹

The Swedish no fault scheme currently receives about 65 new claims annually per 100 000 population from all areas of health care but most of which relate to hospital treatment.⁸ This is equivalent to 47 new claims per 10 000 admissions. About 45% of these claimants receive compensation, so a similar rate of claims and payment in England would result in about 13 500 awards a year—that is, over eight times the current number. Clearly, if the awards paid under such a scheme were to be as generous as at present the overall cost would be considerable, about £500m, even though we might expect appreciably lower administrative costs.

Two reasons exist, however, why payments might not remain at their current levels. Firstly, the reduced cost of access to compensation would probably mean that the average severity of claimants' injuries would fall as patients might find it worthwhile to seek compensation for relatively minor injuries. Secondly, all the schemes proposed for Britain include some provision for limiting payments. For both of these reasons the increase in the overall cost of a no fault scheme would probably be much smaller than the increase in the number of awards. How much smaller is the key question. This question cannot be answered adequately without more information about the severity distribution of medically related injuries, such as that gathered through the patient survey in the Harvard study, and a clear specification of the criteria for eligibility and the structure of payments in any proposed no fault scheme.

Consider the three schemes outlined above. Each of them imposes some restriction on the nature of injuries that qualify for compensation: in general they would have to be related to the treatment received, not merely a consequence of a patient's underlying condition. An incidence similar to the incidence of "adverse events" reported in the Harvard study—that is, 370 per 10 000 hospital admissions—would imply 235 000 such events in England. A substantial proportion of these events, however, would not lead to any loss that would be compensated: the extra medical expense associated with iatrogenic injury is usually borne in Britain by the NHS, not by patients or their insurers as in the United States. Consequently, the primary type of loss in Britain would be the economic loss that results from interrupted employment. Data in Britain on the distribution of absence from work after accidental injury shows that the proportion of absences that would be excluded from the scheme suggested by the NHS (Compensation) Bill—even without the eligibility restrictions—would be over 30%;⁹ figures from the Harvard study imply that the proportion might be as high as 40%. This suggests that the number of adverse events that would lead to sufficiently serious losses might be around 140 000. Moreover, each claimant would need to show that his or her losses were the result of the iatrogenic injury rather than the underlying condition. In the Harvard study this reduced the total number of events eligible for compensation by 75%, implying an equivalent figure of 35 000 claims a year in England. On the assumption that about a third of the claimants would receive an award, the total would be just under 12 000 payments a year, a similar figure to that determined by us on the basis of the Swedish scheme.

LOWER COST

The cost of each successful claim would probably not be as high as under the current system for two reasons. Firstly, collateral payments by social security or employers would presumably be deducted in full in each of the proposed schemes. Secondly, in the Royal College of Physicians' scheme and the scheme proposed by the NHS (Compensation) Bill the amount

received by workers for lost wages would be limited to the average wage and twice the average wage respectively. We have calculated that limiting payments to the average wage would reduce the average payment to working claimants by 35%. If these two factors, as well as the limiting of non-economic loss payments and the introduction of lower legal fees, result in an average payment of £20 000 then the overall cost of a no fault scheme would be about £235m. Raising the eligibility threshold of work absence to above one month would reduce this figure, as would improvements to social security provision for disabled people, as such changes would result in additional collateral payments.

Given the absence of a study in Britain similar to the Harvard study, we cannot calculate precisely the effect of the above restrictions on the likelihood that an adverse event will lead to a claim or on the size of a typical claim. We can show, however, that the cost of a proposed scheme will depend crucially on the restrictions placed on eligibility and payment levels as well as the extent of collateral payments such as social security benefits. In effect, a no fault scheme can be constructed to a given budget—for example, the restrictions necessary to deliver a no fault scheme costing no more than the current system could be determined. Moreover, the higher the level of collateral payments, the less severe those restrictions would be. This is why the Swedish scheme is so comprehensive compared with the scheme proposed for New York state by the Harvard study: each scheme simply reflects the generosity of the social security provisions for sickness and disability of its country.

Conclusion

Despite the sporadic pressure on the British government to adopt a no fault approach to compensating victims of medical injury the negligence system will probably remain for the immediate future. The calculations reported in the first part of this paper are a valid starting point for estimating the current cost to the NHS of compensating patients. An estimate of £52.3m for England for 1990-1 is low compared with some of the figures that have been quoted. This does not mean, however, that the shortcomings of the current system should be ignored. Our data show that the total cost of medical negligence settlements to individual district health authorities varied from zero to over £1.5m in 1990-1. The relative variability would be even greater if individual trusts were compared. The problem for the future is one of forecasting accuracy at provider level: too high a guess and current patient care will suffer; too low a guess and future patient care will suffer. Passing the risk to a mutual insurance scheme may not resolve these difficulties as someone will have to set the payment rates. No easy fix exists to the problem of inadequate information about the numbers of future claimants and the size of future claims.

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