Analysis of NHSLA Claims in Orthopedic Surgery

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Abstract

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National Health Service (NHS) statistics in the United Kingdom demonstrate an increase in clinical negligence claims over the past 30 years. Reasons for this include elements of a cultural shift in attitudes toward the medical profession and the growth of the legal services industry. This issue affects medical and surgical health providers worldwide.

The authors analyzed 2117 NHS Litigation Authority (NHSLA) orthopedic surgery claims between 1995 and 2001 with respect to these clinical areas: emergency department, outpatient care, surgery (elective or trauma operations), and inpatient care. The authors focused on the costs of settling and defending claims, costs attributable to clinical areas, common causes of claims, and claims relating to elective or trauma surgery. Numbers of claims and legal costs increased most notably in surgery (elective and trauma) and in the emergency department. However, claims are being defended more robustly. The annual cost for a successful defense has remained relatively stable, showing a slight decline. The common causes of claims are postoperative complication; wrong, delayed, or failure of diagnosis; inadequate consent; and wrong-site surgery. Certain surgical specialties (eg, spine and lower-limb surgery) have the most claims made during elective surgery, whereas upper-limb surgery has the most claims made during trauma surgery.

The authors recommend that individual trusts liaise with orthopedic surgeons to devise strategies to address areas highlighted in our study. Despite differences in health care systems worldwide, the underlying issues are common. With improved understanding, physicians can deliver the service they promise their patients.

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National Health Service (NHS) statistics confirm an increase in clinical negligence claims over the past 30 years. The Pearson Commission reported in 1978 that the number of malpractice claims against doctors and dentists (including those in private practice) was approximately 500 per year.\(^1\) Between 1990 and 1991, the estimated number of new medical claims made against the NHS in England had risen to approximately 7000 for the year. The reasons for this are not entirely clear but likely include elements of a cultural shift in attitudes toward the medical profession and the growth of the legal services industry.\(^2\) This represents an enormous burden on the NHS; the cost of negligence claims between 2001 and 2002 was £446 million.\(^3\) Despite the importance of the subject, information is limited about the cash cost of clinical negligence to the financially constrained English health service.\(^4\)

A complete picture of the NHS’s annual expenditure on clinical negligence compensation in England is available from 1996. This reveals a general upward trend from 1996 to 2005. The figures for this period are higher than those available for the early 1990s, when the annual cost of clinical negligence compensation was reported to have been £53.2 and £51.3 million between 1990 and 1991 and between 1991 and 1992, respectively.\(^5\) Even these are considerably higher than the estimated figure of £1 million between 1974 and 1975.

Despite the increased emphasis on clinical governance and risk management, the numbers of negligence claims continue to rise. Between 2006 and 2007, the NHS Litigation Authority (NHSLA) paid out £424 million in compensation for claims of medical negligence, an increase of almost £40 million on the preceding year.\(^6\) This follows the pattern noted in the United States.

The previous work of the current study’s authors reviewed claims relating to hand surgery referred to the NHSLA.\(^7\) The majority of claims made were attributed to surgery and the outpatient department. The claims were clustered to a few common conditions, such as the management of wrist fractures. No claims were related to complex hand surgery. The authors recommended better training for routine surgery, better description of distal radius fracture parameters at each clinic visit, and better training in emergency departments.\(^7\) The authors now turn their focus to claims made in all orthopedic surgery.

The rise in negligence claims cannot be ignored and needs to be investigated because it affects all medical and surgical health providers worldwide. Only with an improved understanding of the underlying issues can health providers hope to address them and deliver the service they promise their patients. Despite differences in healthcare systems worldwide, the core issues are similar in nature, and the current study’s analysis can be beneficial to others. Under the Freedom of Information Act, data were requested about all claims received by the NHSLA relating to orthopedic surgery. Data were analyzed to identify conditions or practices at greatest risk to highlight areas for improvement.

**Materials and Methods**

Data were requested on all claims and settlements for orthopedic surgery from the NHSLA. The data obtained were for the period between 1995 and 2006. Many cases between 2002 and 2006 had yet to be concluded; therefore, to minimize potential bias, all claims from this period were excluded. A total of 2117 claims between 1995 and 2001 were analyzed. Data were provided under the following headings: incident date; details of specific history relating to individual claim; amount paid in damages, defense costs, and claimant cost; total cost of the claim; cause of adverse event; site of injury; and responsible clinical area.

Data were analyzed with regard to 4 specific clinical areas: emergency department, outpatient care, surgery (elective or trauma operations), and perioperative inpatient care. The following were assessed:

- The number and cost of claims attributable to each of the 4 clinical areas
- The number of cases successfully and unsuccessfully defended
- The average and annual cost of successful and unsuccessful defense of claims
- The conditions that most commonly led to claims
- Claims relating to elective and trauma-related surgery with respect to specialty

**Results**

The number of claims and the overall costs of settling them increased steadily between 1995 and 2001, most notably in surgery (elective and trauma) and within the emergency department (Figures 1, 2). Between 1995 and 1996, a total of 227 claims were made, costing £15,219,917. Between 2000 and 2001, this had increased to a total of 442 claims, costing £22,647,647. The total number of cases that were successfully defended (ie, no compensation was paid) during this time also showed a slight increase: from 69 (44%) between 1995 and 1996 to 138 (46%) between 2000 and 2001 (Figure 3).

The overall annual cost in mounting a successful or unsuccessful defense showed a slight decline (Figure 4); however, the total annual cost of orthopedic claims remained relatively stable for the same period (Figure 5).

The number of claims made was consistent across the orthopedic specialties for the period. Certain orthopedic surgical specialties (eg, spine, hip, knee, and foot and ankle) had the most claims made during elective surgery, whereas shoulder, elbow, and hand and wrist surgery had the most claims made during trauma surgery (Figure 6).

**Discussion**

The study results demonstrate that the number of claims relating to orthopedic surgery is on the rise (Figure 2). Between...
1990 and 1998, hospital activity increased by 30%, yet litigation claims made against the NHS more than doubled in volume during this period. Consequently, an overall increase in the cost of negligence claims to the NHS was borne. Despite this statistic, negligence claims are also being defended more robustly.

The increasing frequency of claims may be attributed to several factors. Patients now have higher expectations of their treatment and anticipate better outcomes. A greater public awareness exists of medical errors, particularly high-profile cases, and consequently, lower levels of confidence and trust exist in the health care system. Furthermore, this is an increasingly litigious society, with more people pursuing legal action and less deference to the medical profession in their role as experts. Legal teams specializing in medical litigation profess that their aim is to improve the quality of care. However, fear of litigation may also be detrimental to patient care. Medical health professionals, while trying to reduce the likelihood of a legal claim, may compromise on clinical decisions for fear of litigation. This may lead to the adoption of defensive practices, eg, ordering unnecessary tests and procedures while turning away high-risk cases.

Our study shows that the number of claims being made almost doubled from 227 between 1995 and 1996 to 442 between 2000 and 2001, yet the number of
successfully defended claims remained stable. The NHSLA and the medicolegal profession may be becoming more skilled at defending negligence cases simply by virtue of having more practice. The NHSLA may also be more actively defending claims to discourage spurious legal cases. As more claims are made, a disproportionate increase is likely in unjustified or defensible claims due to increased public awareness of legal action as a method of recourse.

Since the establishment of the NHSLA in 1995, a large proportion of the legal responsibility for patient care has been taken on by the relevant Trusts, rather than by individual doctors. The NHSLA indemnifies Trusts against negligence claims, and despite widespread fear of a compensation culture, the NHSLA deals with approximately 6000 claims per year in total. This is relatively low compared with the 850,000 medical errors that the NHS estimates occur each year. Of all the claims received by the NHSLA in 2008, forty-eight percent were abandoned during the claims process, and 49% were settled out of court. However, individual doctors are still liable for specific claims, especially in private practice.

Data analysis in the current study shows that although the overall cost of claims to the NHS is increasing (Figure 1), the actual percentage of costs taken up in legal fees remains stable (Figures 4, 5). Previous work in this area observed the percentage of costs taken up in legal fees to be particularly high in medical cases. Between 2005 and 2006, payments made by the NHSLA for claims against the NHS were >£384 million. Between 2006 and 2007, this increased to >£424 million. Between 2005 and 2006, legal costs for claimants were £68.5 million and for defendants were nearly £38.5 million. Thus, legal costs totaled >£100 million—almost one-third the value of the claims. Between 2007 and 2008, the NHSLA received 5470 claims related to clinical negligence and paid out £633.3 million. This figure includes damages paid to patients and the legal costs borne by the NHS.

The current study’s review of the completed claims highlights the fact that the number and cost of claims is highest in cases where patients have undergone surgery, followed by patients treated in the emergency department. In- and outpatient care contributed to the fewest number of claims. Since the initiation of the NHSLA’s Clinical Negligence Scheme for Trusts policy in 1995, surgical specialties have been the leading source of clinical negligence claims.

The most common reasons for a case being settled during the 6-year period analyzed was a postoperative complication or a wrong, delayed, or failure of diagnosis. The reasons for delay in diagnosis varied between specialty areas. In the emergency department, they often occurred where radiographs were not always requested, the wrong or inadequate views were relied on, or visible fractures were simply missed. This supports findings of previous studies, which have shown that 80% of all errors made in emergency departments involved missed fractures because of misinterpretation of the radiographs or because no radiographs were requested. It is essential for emergency departments to have a system in place so that radiographs are reported and patients whose diagnoses have been missed can be recalled rapidly. This has been found to reduce the risk of litigation and to be in the patients’ best interests.

Many cases of delayed or failed diagnosis occurred in the outpatient department and were related to tumor management, notably spinal and bone tumors. Such claims alleged that delay in diagnosis and thereby management compromised the claimant’s prognosis. This issue is being addressed as individual Trusts formulate fast-track referral systems for surgeons referring patients suspected of tumor pathology to regional specialist centers for further investigation and management.

A recurring issue for delayed diagnosis during inpatient care centered on delay or failure to diagnose compartment syndrome. Compartment syndrome is a recognized orthopedic emergency, and individual trusts are backed by British Orthopaedic Association (BOA) guidelines regarding the education and management of compartment syndrome.

Concerning surgery, the claims reviewed predominantly centered on postoperative complications, with a slight preponderance in elective surgery (54%). Most elective claims related to spinal and lower-limb surgery (ie, hip, knee, and foot and ankle surgery), whereas the majority of claims in trauma surgery were related to upper-limb surgery (Figure 6). This may reflect a difference in attitude or work practice among subspecialties within orthopedic surgery. By virtue of there being a greater amount of lower-limb elective procedures performed compared with upper-limb procedures, it is fair to expect a greater number of lower-limb elective surgical complications. Consequently, orthopedic units will have more lower-limb specialists than upper-limb specialists. This may lead to a greater number of complications arising in upper-limb trauma because on-call constraints and consultants’ workloads will mean that more upper-limb trauma is performed by lower-limb specialists.

The issue of informed consent seems to be more prevalent in elective surgery. A large number of claims made centered on the fact that the patient was not fully aware of the risks and potential complications of the procedure. Inadequate consent may be deemed less important in emergency situations where patients have little option but to undergo surgery. In some such cases, it is believed that the knowledge of a potential complication would likely not have prevented the patient giving consent had he or she been informed. A key ruling by the House of Lords in 2004 (Chester vs Ashfar) makes it conceivable that cases where consent is an issue will rise over the next few years. This ruling has modified the principle of causation whereby a clini-
cian can no longer claim that his or her omission to adequately consent a patient would not have affected that patient’s decision to undergo an operation.

An American study reviewed cases from 2 malpractice insurers over a 24-year period and found no cases of proven inadequate consent in emergency surgery, compared with 24 cases in elective surgery. It concluded that taking the time to obtain informed consent in a clinical setting, rather than preoperatively on the ward, significantly reduced the risk of consent-related litigation. Orthopedic surgeons and their patients will be helped in this regard by an initiative to provide clinicians with standardized consent forms as announced by the British Orthopaedic Association.6

Failure of treatment was most notable in claims by patients undergoing trauma surgery. This included cases where patients who were treated conservatively then had to undergo surgery for their injuries. It also incorporates cases where inadequate fracture reduction was performed or in instances of loss of position following manipulation of fractures. Claims of failure of treatment relating to elective surgery centered on a patient’s perception of how successful the surgery had been or if it had ultimately failed (eg, a patient undergoing corrective surgery for hallux valgus and then finding little or no improvement postoperatively). It was evident that many cases of postoperative dissatisfaction related to patients stating that potential complications were not adequately explained at the time of consent.

Wrong-site surgery is avoidable, but tragically such mistakes still occur. Its occurrence is more common than is often appreciated by health care staff and patients in the United Kingdom. A case in point is the removal of a healthy kidney instead of the intended diseased one that led to the death of a patient.17 The incidence of wrong-site surgery in the NHS in England appears to be rising, with 27 cases settled by the Litigation Authority in 2003 and 2004 and 35 in 2004 and 2005. The cost of settling those claims, including damages and legal costs, increased from £447,694 between 2003 and 2004 to £1,098,975 between 2005 and 2006.18

A thorough review of the literature regarding wrong-site surgery focusing on NHS data highlighted orthopedic surgery as responsible for the greatest number of claims between 1998 and 2007, followed by neurosurgery and obstetrics and gynecology. The incidents were predominantly in hand surgery, then foot and ankle and spinal surgery. An American Association of Orthopaedic Surgeons report stated, “a successful legal defense to surgery performed on the incorrect limb is almost impossible.”19

Many studies have looked into causes or risk factors for wrong-site surgery, and the majority center on a breakdown in communication between the surgical team and the patient and family.20 Other causes included the absence of verification checklists, incomplete preoperative assessment, staffing issues, and distracting factors. The Joint Commission in the United States also highlighted detrimental issues: lack of policies, procedures, and controls; miscommunication; pressure to reduce operative time; illegible handwriting; and use of abbreviations to explain the operation, site, or side. The Commission introduced a protocol for preventing such incidents, incorporating a preoperative verification process, marking the operative site, and taking a time-out immediately preoperatively.21

The World Health Organization has made procedures performed on the wrong patient or site one of its key focus areas. The Safe Surgery Saves Lives initiative promotes standard operating protocols in key areas, resulting in the World Health Organization surgical safety checklist.22

The current study had limitations. Data available from the NHSLA database were incomplete. A lack of information or clarity in the details of each case may make the exact cause of the error unclear (eg, “patient cut hand/wrist while on holiday where he was treated. Operation to release scar tissue. Glass fragment came to surface and allegation that radiograph was not undertaken to identify and remove fragment,” or “fractured wrist manipulated under general anesthetic [external fixators and K-wires applied], which subsequently collapsed resulting in wrist deformity. Noncompliance of treatment. Further operative treatment required”).

A further limitation is the lack of denominators for the cases. Risk is not immediately quantifiable because the denominators for each condition or area of practice are unknown. The NHSLA data do not provide details of the grade or experience of the operating surgeon; therefore, the authors were unable to comment on whether lack of experience correlated with the number of claims.

Other details lacking in the NHSLA database relates to patient socioeconomic data, whether claims were of the worker’s compensation type, hospital type, and level/grade of doctor involved.

CONCLUSION

The rate and costs of litigation are rising in orthopedic surgery. Nonetheless, the overall rate of claims remains small, as does the proportion of money paid in compensation relative to the NHS annual budget.

The authors recommend that individual Trusts liaise with senior orthopedic surgeons to devise strategies to combat the main areas from which litigation arises. These include:

- Clear protocols for all emergency department staff relating to certain fracture types with a readily accessible hot-seat radiology reporting service within regular working hours and a prompt radiology reporting service for all radiographs obtained outside of normal hours. Patients whose diagnosis has been missed should be recalled rapidly to a review clinic.
- Typeset or online documentation by surgeons, including a typed operation...
note. National Health Service Litigation Authority data revealed that in cases where complications arose and were the reason for legal action, the presence or lack of clearly documented operation notes were also critical in determining liability.

- Implementation of standardized consent forms along with a clear allocation of time within outpatient clinics to obtain informed consent. The authors recommend for elective procedures a dedicated clinic where the surgeon intending to perform the surgery can review and obtain informed consent from the patient. This will help ensure that patients are fully aware and understand their surgical management plan.

- Use of the World Health Organization checklist to reduce the chances of wrong-site surgery occurring. The final responsibility for correct-site surgery is that of the operating surgeon. These recommendations will help reduce the incidence of litigation following the management of orthopedic injuries. The authors’ aim is to foster an atmosphere where clinicians are concerned with improving and delivering the best available evidence-based care for their patients rather than fearing or becoming pre-occupied with avoiding litigation. By highlighting areas where litigation occurs and addressing some of the most common causes, we hope to not only save money but also, more importantly, raise standards of care for our patients.

REFERENCES