

CLINICAL GOVERNANCE

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Editorial: Avoiding the same mistakes – learning from incidents

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The need to ensure that adverse events, near misses and so on are reported and that lessons are learnt has been emphasised in *Organisation with a Memory*¹ and *Doing Less Harm*². Not only do lessons need to be learnt but also a proactive approach to the prevention of recurrence should demonstrably improve patient care. The structure and process for risk management are reviewed, audited and inspected by a number of bodies³, including the Audit Commission, the Commission for Health Improvement, the Health and Safety Executive, the NHS Litigation Authority and the Welsh Risk Pool.

Most organisations will have published a risk management strategy dealing with both clinical and non-clinical risk. These strategies encourage staff to report adverse events but this does not guarantee that all incidents are reported, as has been shown in recent research. A retrospective case-note review in two UK hospitals found that as many as 10% of inpatient stays are associated with an adverse event (thankfully with minor effects on patient outcomes)⁴ but only 6% of incidents

are actually reported⁵. The reasons for this are complex but the most important means by which to increase the proportion of events reported are to create the right environment and for the process to be seen to be about 'learning' and not 'blaming'; this requires a change in culture in the NHS.

Now that the structure and process of reporting have been addressed by nearly all health-care organisations, it is time to move to the next stage of development: that is, learning lessons from these events, examining clinical and organisational practice, and implementing change when and where necessary. For reporting to be useful, not only must specific incidents be investigated to identify the root cause of the problem but also trends need to be examined in order to develop a proactive approach to predicting risk. 'Clinical incidents' information needs to be integrated with other sources of clinical information – such as clinical indicators, the content of complaints, and health and safety issues – to identify both areas where service delivery may not be optimal and what action is required. However, this process can be successful only if it is owned by clinical teams and if those teams are empowered to reflect and learn from their experience using what the relevant information tells them, and to act accordingly.

Communication is a prime responsibility of health-care organisations. They should ensure that the lessons from one team are spread to the

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Topics for future issues

- Effective strategy
- Change management
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See page 9 for guidance on the submission of contributions.



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whole organisation and so facilitate the implementation of changes across the organisation when these are necessary.

This issue of the *Bulletin* deals with the reporting of incidents. Papers examine, for example, the way a complex organisation has managed to foster learning and to implement changes as a result of incident reporting, the value of injury analysis and the design and implementation of a '7-Day' incident investigation and root cause analysis model.

Please continue to send in your practical contributions so that your learning can be shared with the wider NHS.

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1 Department of Health. *Organisation with a Memory. Report of an expert group on learning from adverse events in the NHS, chaired*

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Learning and sharing lessons from incident reporting

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- Learning and sharing lessons from reported incidents is challenging but necessary if we are to improve patient care.
- The thrust of the strategy is to create an environment in which staff: are comfortable reporting incidents; have clear routes for reporting risk issues; receive feedback; and recognise improvements resulting from the use of the reporting system.
- The integration of clinical audit and risk departments has led to a better use of clinical audit as a tool to confirm the implementation of changes when lessons are learnt from incidents.
- Local systems (e.g. the intranet) need to be used to disseminate the lessons learnt from incidents.

The aim of an incident reporting system, in any industry, is to learn lessons from experiences and to adapt practice accordingly. In the health-care sector this should result not only in better patient care but

also in an improved environment for both patients and staff. Following *Organisation with a Memory*¹ and *Doing Less Harm*², determined efforts are being made across the NHS to embed incident reporting. Institutionalising a system and culture of reporting is daunting enough, but the task does not end there. Learning lessons from reported incidents and sharing them are just as challenging.

Risk management in practice

Central Manchester and Manchester Children's University Hospitals NHS Trust is a large organisation, comprising seven divisions: Surgical, Medical, Clinical and Scientific Services, Children's, Dental, the Royal Eye Hospital and St Mary's Hospital. Across this trust, a system for reporting incidents is firmly in place and there is a perceptible willingness to report them, so some degree of success in effecting a culture change can be claimed. A new incident reporting form, designed to

cover the minimum data-set stipulated in *Doing Less Harm* while also being simple and quick to complete (one side of an A4 sheet), was piloted in 2002 and fully operationalised across the split-site trust in March 2003. Online reporting, using the same format as the paper version, was introduced a few months later. A risk management strategy spelling out incident reporting policy and procedures was launched simultaneously.

The thrust of the strategy is to create an environment in which staff:

- are comfortable reporting incidents;
- have clear routes for reporting risk issues;
- receive feedback;
- recognise improvements resulting from the use of the reporting system.

Since the launch of the new reporting system there has been a steady rise in the number of reported

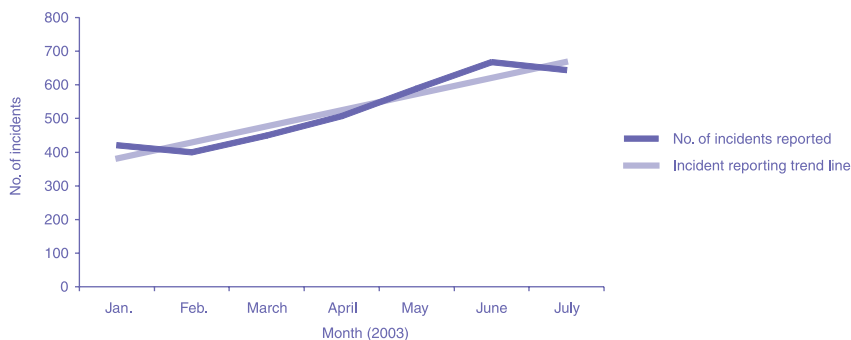


Figure 1. Number of incidents reported by staff each month across the trust before and after the launch of the new reporting system in March 2003.

incidents (Figure 1). We interpret this as an indication of the growing confidence of staff in the reporting mechanism. There was a 53% increase in the number of reported incidents between January 2003 (421) and July 2003 (644). If sustained, this would increase the annual total from 4424 in 2002/03 to over 8000 in 2003/04.

Sharing and acting on lessons learnt

The challenge now is to ensure that the lessons from reported incidents are learned and shared. Most of the reported incidents are of low-grade severity (green or amber on the traffic light grading system) and are investigated within the originating clinical area. Thus, local ownership of the process is established. Many of the clinical areas (admittedly, not all) dutifully compile monthly or quarterly summaries of reported and

investigated incidents. It is now our practice to forward these to the trust-wide Risk Management Committee, which comprises high-level representation from the seven divisions, so that lessons may be shared.

Risk management is a standing item in clinical governance, educational and management meetings across the trust, and this provides opportunities for lessons to be learned and shared. The Risk Management and the Clinical Audit Departments previously operated independently, but since January 2003 have been brought together under one director. The resulting joined up working means that clinical audit can be more effectively used to uphold standards and to confirm that lessons learned from incident reporting have been applied to practice. Other avenues for sharing lessons include the monthly team brief (cascaded to all levels in

the organisation), the intranet, and an annual Clinical Audit and Risk Management Fair (the first of which is scheduled for March 2004).

It is still early days, so no claims to sustainability can be made, and there is still a lot to be done in providing feedback to all staff. Even more work is required to involve service users in incident reporting. However, there are good examples of lessons learned (Table 1).

We currently have over 200 named risk leads across the trust. A train-the-trainer programme in risk assessment and investigation of clinical incidents has recently been delivered, and we expect that by the end of the year all risk leads will have been formally trained, thus raising awareness of risk issues at the front line. This will go a long way towards ensuring that lessons learned from incident reporting inform practice, for these lessons are best learned when the management of risk is seen not as an extra but as an integral part of care.

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- 1 Department of Health. *Organisation with a Memory. Report of an expert group on learning from adverse events in the NHS, chaired by the Chief Medical Officer.* London: DoH, 2000. Available at www.doh.gov.uk/orgmemreport/
- 2 *Doing Less Harm: Improving the safety and quality of care through reporting, analysing and learning from adverse incidents involving NHS patients – key requirements for health-care providers.* London: Department of Health and National Patient Safety Agency, 2001. Available at www.npsa.nhs.uk/admin/publications/docs/draft.pdf

Table 1. Acting on, and learning from, reported incidents

Incident	Action
Babies discharged with an intravenous cannula still in place	Checking of cannula included in discharge procedure and documentation
Fire involving oxygen equipment reported by one clinical area	Safety warning regarding all oxygen equipment disseminated to all clinical areas via team brief
Identification band placed on ankles of babies at birth caused inflammation and redness, potentially leading to infection	This product was withdrawn from use and a more flexible band is now used. Contact was made with NHS Supplies regarding withdrawal of the product from the NHS catalogue
Encrusted blood found on sterilised non-disposable laparoscope when pack was opened before surgery	Across the trust, solvent spray is now routinely applied to laparoscopes before they are sent for sterilisation
Patient kept nil-by-mouth for an unacceptably long time as operation was delayed by more urgent cases	Policy reinforced: non-fizzy, non-particulate drinks may be taken up to 2 hours before surgery
Specimens for collection were found (unrefrigerated) mixed among new supplies of sample containers	Development of a designated specimen collection area and tracking system requiring signature for specimen collection
Automatic car park barrier in open position following car exit descended and struck someone's head	Barriers now carry warning notices; ultimately to be replaced with torque control units

Can we improve the recording of falls-related incidents? Insights from an injury analysis

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- The key types of incident of interest to clinicians and managers concerned with patient falls are 'slip/trip/fall' and 'found on floor'. Solely relying on the former category may ignore unwitnessed falls, which are captured in the latter category.
- Injury analysis is a useful tool with which to estimate the proportion of falls in clinical settings that are unwitnessed.
- Falls injury analysis was used to suggest the reclassification of 'found on floor' into three discrete categories, in order to enrich the data collected. The suggested new categories are: found on floor with injury (suspected fall); found on floor with injury (fall not suspected); found on floor without injury.
- Patients' perceptions of all falls-related incidents should be recorded, particularly in cases of unwitnessed falls.

The National Service Framework for Older People¹ stresses the growing problem of older people falling. Trusts are encouraged to put in place systems to monitor and (it is hoped) to reduce the incidence of older people falling in clinical settings². In line with recommendations from the National Patient Safety Agency, it is important for trusts to accurately classify adverse incidents such as falls, in order to monitor and improve the quality of care for successive patients³. To gain a more complete understanding of an incident's cause, it is important also to record the patient's perception of it.

When an incident or accident occurs within the Older Adults Mental Health Care Group of Sheffield Care Trust, an incident form is completed and submitted to the Risk Department. The incident is recorded by the reporting staff member in one of 15 categories. The categories of key interest to managers and clinicians concerned with patient falls are 'slip/trip/fall' and

'found on floor – cause unknown'. The latter has to be included because fall statistics calculated from the slip/trip/fall category alone may seriously underestimate the number of unwitnessed falls. This raises an important question: what proportion of incidents categorised as 'found on floor' are in fact unwitnessed falls?

By presenting the results of an injury analysis of data collected within an NHS trust over a six-month period, the present paper suggests that an analysis of falls-related injuries can provide a useful indication of the proportion of unwitnessed falls in clinical settings. The data suggest that the categorisation of 'found on floor' is unhelpful in understanding the causes of injuries sustained. Recommendations are therefore offered for reclassifying recorded incidents of 'found on floor'.

Methods

The analysis is based on data collected from incident forms submitted to out Trust's Risk Department. The data originate from 18 settings (both dementia and non-dementia) within the Older Adults Mental Health

Care Group. Each form classified as either 'slip/trip/fall' or 'found on floor' was identified. Data were extracted directly from the incident forms and analysed using SPSS for Windows. The analysis was based on a convenience sample of 385 forms submitted between 1 April and 30 September 2001.

Results

Of the 385 incidents, 209 were categorised as 'slip/trip/fall' while 176 were categorised as 'found on floor'.

Figure 1 displays the percentage of resultant injuries sustained as a proportion of the total number of slip/trip/fall and found-on-floor incidents. Of the people found on the floor, 42% had sustained an injury. In the case of slip/trip/fall incidents, the percentage of people sustaining an injury was 37%.

Figure 2 shows the frequencies of injury type sustained in relation to found-on-floor and slip/trip/fall incidents. The data show that there are similar proportions of cases of swelling and bruising with both types of incident. Slip/trip/fall incidents were associated with more cuts and



Figure 1. Percentage of injuries sustained in found-on-floor ($n = 176$) and slip/trip/fall incidents ($n = 209$) in the Older Adults Mental Health Care Group, 1 April–30 September 2001.

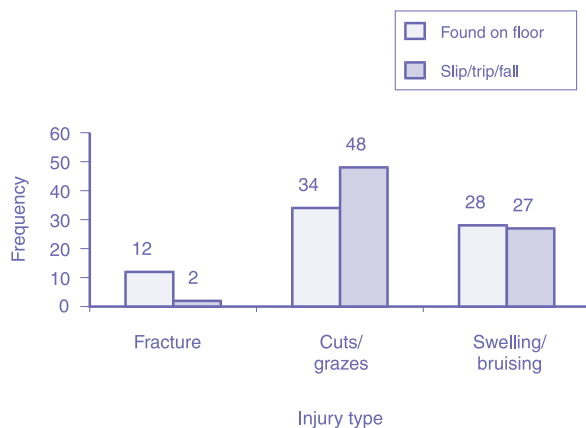


Figure 2. Number of injury types sustained in found-on-floor and slip/trip/fall incidents in the Older Adults Mental Health Care Group, 1 April–30 September 2001.

grazes. However, found-on-floor incidents were associated with a much higher frequency of fractures.

Discussion and recommendations

The reasons why older people fall are complex and involve physiological, behavioural and environmental factors^{2,4}. In order to capture aetiological information, the nature of the incident is recorded in our Trust by the staff member who witnessed or discovered the incident, or the manager in charge of the shift. This information is difficult to capture in cases of unwitnessed falls, thus highlighting the importance of the patient's perception of the incident. Given the government's commitment to listening to the voice of the patient in the NHS⁵, patients' perceptions of treatment and adverse incidents, including falls, should be seen as part of this important agenda. Therefore, we recommend that clients' perceptions of all fall-related incidents be recorded on the incident form.

The total number of injuries arising from incidents categorised as 'found on floor' was surprising. If, as has been suggested, some clients (especially those with a dementing illness) place themselves on the floor, this is unlikely to account for the large number of injuries sustained. Although only an indicator, the injury data suggest that a significant proportion of incidents categorised as 'found on floor' are likely to include unwitnessed falls. This raises the issue of how incidents that involve the client being found on the floor with an injury are documented. One

approach to this problem is to improve the quality of data collected concerning each incident. A more complete set of recording options is suggested in Box 1.

To reduce the number of falls-related injuries, our Trust is making use of interventions such as hip protectors, movement alarms and environmental modification. Injury analysis as discussed in the present paper is a useful tool in assessing the effectiveness of injury-reduction interventions employed in clinical settings.

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Box 1. Recommended format for recording slip/trip/fall and found-on-floor incidents

Please tick the statement that best describes the incident:

- Slip/trip/fall
- Found on floor with injury (suspected fall)
- Found on floor with injury (fall not suspected)
- Found on floor without injury

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Designing and implementing the '7-Day' incident investigation and root cause analysis model

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- The '7-Day' incident investigation model uses a combination of a simple pro forma and root cause analysis (RCA) workshops to define the systemic causes of adverse events.
- The process was adopted as a first step in the establishment of a just and learning-based organisational culture, backed with the full endorsement of the trust board, and the publication of a statement of intent to learn rather than blame when things go wrong.
- A review following the initial six-month pilot of the process has shown that the biggest obstacle encountered thus far is staff time to attend the required one-hour RCA workshops.
- A training programme for '7-Day' investigators is now under way to ensure that the process is adopted as standard throughout the organisation. This training package will be delivered to other local health-care providers to ensure that lessons learned can be shared across the sector.

Newham Healthcare NHS Trust in East London, although officially located in outer London, faces many of the issues associated with inner-city health-care provision. There are the same problems of low staffing and high local poverty with corresponding morbidity levels as experienced in many urban trusts throughout England and Wales.

Furthermore, like similar organisations, we were once as susceptible to the workings of the so-called 'blame culture' when things went wrong. In the past, the Trust's response to clinical and non-clinical errors was all too often to find an individual who could be held solely accountable for a specific mistake. Defensiveness and an unwillingness to report adverse events and near misses understandably resulted. This was not a conscious organisational

decision – it was just the way things were and always had been.

The need for change

In January 2001, an incident happened in the accident and emergency department that forced the Trust to look for the first time at its systems and processes in a more realistic and learning-oriented way. This was what could be described as a 'moment of clarity', when the organisation realised that the most important part of incident investigation was to learn from failures and to implement firm action to prevent a recurrence.

The incident itself was the subject of considerable national media attention and involved the accidental administration of nitrous oxide (an anaesthetic agent) instead of oxygen to a young girl during resuscitation, which tragically resulted in her death. The first reaction was of shock and disbelief that such a basic error could have occurred, and with such appalling consequences.

An internal inquiry was convened with a specific remit to diagnose the root causes of the mistake, to make recommendations and to prevent it ever happening again. No blame was apportioned to the individuals involved and, if anything, the true root causes were found to be a combination of systemic and equipment design failures. The results of the inquiry were shared with the deceased's family, the Chief Medical Officer and the Medical Devices Agency. The findings were also shared with the media.

The Trust subsequently received many enquiries from other health-care providers, who quite rightly feared that the same catastrophic event could have happened within their own organisations. This time, we felt that we had really learned from an incident and we shared the results of that learning. But this was

just the beginning of a far greater organisational change.

Following the publication of the Department of Health documents *Organisation with a Memory*¹ and *Doing Less Harm*², we realised that the groundswell of expert opinion was now pointing very firmly towards the creation and organisational assimilation of a so-called 'low blame' or learning culture. Our particular problem was how to change staff attitudes from the fear of blame that had previously been so prevalent. Research conducted within the Trust in June 2000 showed that this fear was still sufficiently ingrained among staff to render a mere statement by the board on 'low blame' completely ineffective. What we needed was a thorough review of our entire investigation methodologies and to design a model which defined evidence-based facts, diagnosed root causes and facilitated the delivery of clear, time-limited actions to prevent recurrence.

The action taken

In April 2002, the Trust convened a meeting between senior managers, staff representatives and an external legal adviser to work through the existing investigation models and to seek a new approach. What became clear from that discussion was that we needed a process based on justice and factual investigation, in other words a system not founded on the apportionment of blame. Equally, however, there was universal acknowledgement that any investigation would need to occur within a framework of personal and professional accountability for individual actions.

The pro forma

The design of the model we chose was prompted by a system in use at Mid Essex NHS Trust and a document we called the Critical Incident Analysis (CIA) pro forma, previously

used on occasion in the investigation of serious untoward incidents (SUIs). The new '7-Day' incident investigation process was exactly that – a simple pro forma designed to facilitate full investigation within a period of seven days of an incident coming to light.

The pro forma allows staff clearly to define:

- what had happened;
- how it had happened;
- what evidence is available to prove that it had happened.

By using this new method, we hoped to avoid the time-consuming and lengthy drafting of opinion-based statements, which had previously caused such delays in defining what had gone wrong. The basic format for the '7-Day' pro forma is illustrated in Table 1.

Root cause analysis

The investigation alone, however, does not identify the root causes of an adverse event and is merely a means to that end. Several senior managers from the Trust's Controls Assurance function therefore attended external training events on root cause analysis (RCA) and it was decided that this approach would be used in the final diagnosis of system failures and preventive action. The RCA method chosen would be multidisciplinary, closely facilitated and time-limited to one hour, to provide an appropriate focus.

Results of piloting the system

We piloted the new model from May to September 2002 and, at a subsequent review, found that it was suitable for the investigation of a wide variety of clinical and non-clinical events, ranging from the collapse and death of a diabetic patient to the injury of a contractor working on trust premises. The pro forma worked well and provided a simple tool with which facts could be rapidly assimilated. The RCA workshop approach, despite some initial

scepticism on the part of some staff, also proved extremely effective in defining a clear breakdown of each stage of an adverse event. Workshops conducted thus far have successfully identified clear actions to avoid the various system errors which, in combination, had led to each incident. While the model was ideal for the investigation of SUIs (and has since been included as part of the Trust's formal SUI Procedure), it was equally suitable for near misses and less serious events, which are so rich in learning potential.

There were difficulties, however. The review showed that staff availability to attend RCA workshops had often proved problematic. The fact that there was no evidence of a reluctance to cooperate with the new process did, nonetheless, convince us that this really was a positive step forward.

The results of the pilot were therefore presented in full to the Trust board in November 2002. The new approach was unanimously endorsed, together with a statement on the 'just culture' we hope to achieve. The statement gives the organisation's pledge to learn from all adverse events and that disciplinary action will not be initiated through the '7-Day' process unless there is clear evidence of wilful malpractice, intentional harm, fraud, theft or a flagrant disregard for the safety of others. Each new member of staff joining the trust now receives a formal presentation on this approach at induction.

Further development

We are currently at the stage of fully absorbing the new model into our organisational culture of incident investigation and prevention. As expected, we are still learning much from the process itself and how it can be used to optimal effect. Some of the problems around staff availability for RCA workshops have remained and the process can sometimes be delayed, if only for a while. This is a small price to pay for an improved

organisational willingness both to report adverse events and to share in the learning opportunities they present. Indeed, the rate of reported incidents within the Trust continues to increase each month. We believe that this is, at least in part, due to greater confidence in our ability to learn when things go wrong.

The Trust is now in the process of training more staff to use the model and we are recruiting investigators from as wide a range of grades and disciplines as possible. We have even secured Local Delivery Plan (LDP) funding to provide training to the local primary care trust and mental health trust in the use of the model, in the knowledge that a common methodology will provide opportunities for shared learning between local health-care providers.

Conclusion

We should perhaps return to *Doing Less Harm* and a statement which captures the essence of the '7-Day' approach:

In a service as large and complex as the NHS, things will sometimes go wrong. When they do, the response should not be one of blame and retribution, but of learning, a drive to reduce risk for future patients, and concern for staff who may suffer as a consequence.²

It is precisely this 'learning not blaming' approach which has proved so beneficial to us in the reduction of risk and the creation of a more open and just culture.

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Table 1. Structure of the '7-Day' pro forma

Time	Event	Source of evidence	Further details of event
24-hour clock	What happened	How we know	How it happened

Detection of critical incidents in hospital practice: a preliminary feasibility study

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- For 30 years, retrospective case record review (RCRR) has been used as an epidemiological tool for determining the prevalence of adverse events.
- Seventy-six consecutive records from medical and surgical wards were screened by senior ward nurses and senior house officers, and assessed by an experienced medical assessor, shortly after the patients' discharge from hospital. Nineteen incidents were identified, of which five were related to adverse events.
- Retrospective case record review can be used to assess critical incidents at ward level.
- Critical incidents are often specific to a particular hospital, ward or unit and thus amenable to local action.
- The results of this study suggest that multidisciplinary audit may be a useful tool in improving hospital care.

In July 2001, the National Patient Safety Agency (NPSA) was established as part of the Chief Medical Officer's initiative *Building a Safer NHS For Patients*¹. The NPSA is in the process of establishing the means of collecting and analysing reports from NHS trusts of adverse events, errors and near misses (collectively termed 'critical incidents'). The size of the problem has been described in a preliminary report of a pilot study from 28 trusts that collected 27,000 incidents in nine months. Most of these incidents were relatively minor but some important issues have already emerged. For example, in July 2002 the NPSA issued its first 'Patient Safety Alert' on the prevention of accidental injection with intravenous potassium and has recently announced a package designed to reduce errors associated with the use of oral methotrexate. This excellent work is based on the mandatory, confidential, blame-free

reporting of events by individuals and organisations with the aim of improving systems². Nevertheless, there is reason to believe that reporting systems do not tell the whole story³.

For 30 years, retrospective case record review (RCRR) has been used to define the epidemiology of adverse events in hospital practice (defined as disability at the time of discharge, including death, or prolonged or subsequent hospital stay, or both) despite reservations about the validity and reliability of the methodology⁴. Studies from many countries in the developed world have shown that between 4% and 16% of patients admitted to hospital suffer an adverse event related to their health-care. Three years ago a pilot study in London showed an adverse event rate of 10%⁵. Most of these adverse events were experienced by elderly people with significant comorbidities and 50% were regarded as not preventable. However, it is clear that RCRR is a useful method for identifying problems in health-care.

Attempts have been made to move beyond epidemiology to the analysis of events⁶ and this has led to the development of a more analytic method of undertaking RCRR. From these studies we decided to undertake a feasibility study of using RCRR to identify critical incidents in ward care in 'real time'.

Methods

Senior nurses and senior house officers (SHOs) working on three specified wards for acute medical and surgical admissions screened case records immediately after the discharge of consecutive patients over two weeks against a set of 14 pre-defined criteria requiring 'yes/no' answers (Box 1). In addition, the screeners had the option of answering the question 'Was there any

aspect in the care of this patient with which you were unhappy?' An experienced case record assessor then examined all the case records in order to look for evidence of critical incidents and to assess the efficacy of the screening process.

Results

It was not easy to maintain the study on very busy wards and one ward dropped out of the study after the first week. Five senior nurses and four SHOs agreed to undertake screening. In all, 76 case records were assessed – 32 from a surgical ward (20 screened by nurses and 28 screened by SHOs) and 44 from the two medical wards (42 screened by nurses and 39 screened by SHOs).

For both nurses and SHOs, the screening took 5–10 minutes per case record. The nurses knew nearly all the patients whereas the SHOs had been involved in the care of only a few, because the wards provided care for the patients of several clinical teams. Both groups were able to screen effectively after one short period of training. The assessor found only two screening errors, one from each group. The nurses made more additional comments regarding the quality of individual care (in seven cases, whereas SHOs made comments in only two).

The expert assessor identified 19 possible incidents (eight in medicine; 10 in surgery and one from general practice), of which five were related to probable adverse events. Ten of the incidents were regarded as showing serious issues and nine were minor. Sixty per cent of the records of medical patients screened positive and contained eight incidents; 47% of records from surgical patients screened positive and contained seven incidents. Thus four incidents (one potentially serious) would have been missed if only 'screen positive' case records had been examined.

Box 1. Screening criteria

- Previous admission to hospital in the past 12 months.
- Length of stay in hospital longer than expected.
- Length of stay in hospital more than 10 days.
- Significant delay in diagnosis/initiating effective treatment at any stage of admission.
- Unplanned event occurring during surgery/procedure/anaesthesia.
- Unplanned visit to operating theatre or elsewhere (e.g. radiology department) for a procedure.
- Unplanned transfer to another unit/hospital.
- Required period of intensive care/high-dependency care.
- Hospital-acquired infection/sepsis.
- Condition complicated during hospital stay by a serious intervening event (e.g. cardiorespiratory arrest; heart failure; deep-vein thrombosis, pulmonary embolism, myocardial infarction, pressure sore).
- Adverse drug reaction or problem arising from infusion of intravenous fluids/blood (including cellulitis/haematoma).
- Fall or other physical accident.
- Died.
- Patient or relative made a complaint regarding care.

Adapted from Wilson RM, Runciman WB, Gibberd RW, Harrison BT, Newby L, Hamilton JD. The Quality in Australian Health Care Study. *Medical Journal of Australia* 1995;163:458–71.

At the time of the study none of the identified incidents had been reported to the clinical risk manager. The Trust clinical risk team have used the findings of the study to further promote incident reporting by the wards and medical staff. It would be inappropriate to describe the incidents as these were identified by a single assessor and were not analysed in detail.

The need for further studies

Reports of RCRR in the literature have been of studies undertaken many months (or even a year or two) after the patients had been discharged from hospital. As a result, attempts to identify causes of adverse events and thereby to develop strategies to reduce their incidence have been general rather than specific. In the USA, analyses have led to suggestions for the provision of more specialist surgical units and the use of computer-based prescribing, whereas in Australia the emphasis has been on more or better formal methods of quality assurance, and better education and training.

This feasibility study of identifying critical incidents in 'real time' was based on a new review process⁷ and included a module on causative and contributory factors. Scanning the data suggests that a significant proportion of critical incidents may

be specific to a particular hospital, ward or unit, and thus amenable to local action.

It is planned to extend these studies to involve doctors, nurses, ward pharmacists and other health-care professionals in order to improve patients' safety.

Acknowledgements

This study was approved by the Harrow Research Ethics Committee (Submission No. 3054). We wish to thank the BUPA Foundation for funding the study; ALARM (Association of Legal and Risk Management) for help in setting it up; AvMA (Action against Medical Accidents) for administrative support; and the nurses and ward clerks for their willingness and enthusiasm to assist in the project.

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Contributions

The audience is predominantly practising clinicians and managers, so please make your article as practical and relevant to everyday practice as possible.

Length: 500–800 words plus a maximum of five references in Vancouver (numerical) style.

Illustrations: where appropriate, use tables, charts, summary boxes etc. to present information, and to break up the text.

Web links: where possible, provide web and/or email addresses for further information – e.g. Department of Health reports or circulars, publications, societies, etc.

Presentation and submission: On the first page include the article title and author names and addresses (including email addresses); please also indicate which author is responsible for correspondence about the article and proofs. Start the article with three to five brief bullet points summarising the key lessons learned. Use plain, unjustified text throughout, with subheadings in bold upper and lower case.

Please send your contribution, by email (or by post with floppy disk), to:

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WhoWhatWhere?

Risk and reporting on the web

National Clinical Governance Support Team

www.cgsupport.org/

The Team is part of the NHS Modernisation Agency; its website includes a number of interesting case studies.

National Patient Safety Agency

www.npsa.nhs.uk

The website describes the activity of the Agency and has a number of useful information sources.

National Patient Safety Foundation

www.npsf.org

The Foundation is the US equivalent to the National Patient Safety Agency. This site offers an up-to-date bibliography of published articles dealing with all risk issues.

Australian Patient Safety Foundation

www.apsf.net.au

Partnership for Patient Safety

www.p4ps.org

This is a patient-centred initiative to advance health-care systems worldwide.

The Editor's Choice

Agency for Healthcare Research and Quality

www.ahrq.gov/qual/errorsix.htm

The Agency is a US organisation. Its website is rich in online information which can be downloaded. This includes: '20 tips to help prevent medical errors'; information on evidence-based practice; and information for patients. Many guidelines are also available.

Health and Safety Executive

www.hse.gov.uk

This website has information about health and safety issues and a section on risk management, through which a number of publications are available.

National Forum for Risk Management in the Public Sector

www.alarm-uk.com

Commission for Health Improvement risk management document

www.chi.nhs.uk/eng/cgr/risk_management.pdf

This contains a statement of principles agreed by the NHS Coordination Group (of organisations that carry out reviews,

audit and inspections of risk management in the NHS). The role of the respective organisations is also defined.

Audit Commission

www.audit-commission.gov.uk

University of Texas

<http://homepage.psy.utexas.edu/homepage/group/HelmreichLAB/>

This site gives an excellent insight into the similarities and overlaps between air crews and health-care workers. It is rich in online papers, PowerPoint material and links to other useful sites, including the fascinating anonymous critical incident reporting system for anaesthesia run by the University of Basle at www.anaesthesie.ch/cirs/.

Book review

Clinical Governance

By John Wright and Peter Hill. ISBN 04-4307-1268. pp. 228. £19.99. London: Churchill Livingstone, 2003.

The contraction of attention spans has had a marked effect on the style and content of scientific communication. While in the past books were used to communicate ideas and learning, they now seem to be oriented towards the written equivalent of the sound bite. Authors are urged to break up text with lists and boxes in order to keep the attention of readers. Similarly, the use of a simple story to illustrate a point is seen as commendable. Now, all these devices have their place in authorship, particularly when the audience is as hard-pressed for time as today's clinicians and managers. When

taken to the extreme, however, they make for a disconcerting and disjointed reading experience that has much in common with text messages on a mobile phone.

Wright and Hill have brought together much useful material on clinical governance. Although clinical governance is a multidisciplinary undertaking, the book is written from a medical perspective and unashamedly addresses a medical audience, from its preface to its ending. (It ends, by the way, with a box containing the text of the Hippocratic oath – it is surely time that this declaration of a self-perpetuating male medical oligarchy was forgotten.) The broad sweep of the book is commendable but it does mean that individual topics are dealt with in a brief and often unsatisfactory fashion.

The use of illustrative stories to convey meaning to what otherwise might be uninspiring prose is a valuable technique for those engaged in writing about management topics. At their best they can provide insights into how abstract concepts can impinge upon the lives of patients, relatives and carers. Storytelling is a craft, however, and the contents of many of the story boxes will not linger long in the memory.

If you want a quick canter through the topography of clinical governance from a medical perspective, then this book will fit the bill. If, however, you require thoughtful analysis, a multidisciplinary ethos and well written prose, then you may have to look elsewhere.

Gabriel Scally

*Regional Director of Public Health,
South West Region*

Developing an effective system of 360-degree appraisal for consultants: results of a pilot study

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- Assessment of the views of peers and patients is a key component of appraisal and revalidation.
- Questionnaires are viewed as the best means of achieving this, but current techniques are cumbersome.
- This study piloted the use of short five-theme questionnaires given to peers and patients (the latter by interview) in a single directorate, encompassing both physicians and surgeons.
- The positive feedback and ease of completion suggest this may be a pragmatic solution to 360-degree appraisal in the UK.

A series of successful annual appraisals is now the accepted basis for consultant revalidation¹. An important constituent of this process is an assessment of the views of peers and patients, termed 360-degree appraisal. This can be accomplished by means of questionnaires from the American Board of Internal Medicine (ABIM), which are based on the work of Ramsey². That work produced a list of validated questions and showed that reliable, repro-

ducible information can be achieved by sampling 10 peers and 25 patients.

In a pilot study, involving 16 consultants from different specialties, we found that the system advocated by Ramsey was acceptable, but there were adverse comments³. Individual consultants did not feel comfortable handing out questionnaires to peers and patients, and the questionnaires were cumbersome for the British situation, especially the scoring system of 1–9. The use of postal questionnaires produced a variable response, with return rates as low as 20%.

In the present study we piloted the use of peer and patient questionnaires that were based on the original ABIM ones but that were shorter and had a simpler scoring system, in a single directorate encompassing both surgeons and physicians.

Methods

Consultants were approached by letter to nominate a list of 20 peers, from which 10 were selected at random by the second author (NC). They were sent a peer review questionnaire and instructions. The

questionnaire was coded to ensure anonymity and confidentiality for both the respondents and the consultant being peer reviewed. Respondents were asked to consider five category areas and to assign for each a number from 1 to 4 that best reflected the individual being appraised (see Table 1).

In parallel, a patient questionnaire (see Table 2) was used by an interviewer (NC) with an outpatient sample. Patients were asked to assign a numerical figure from 1 to 4 that best reflected their experience in the consultation room with their consultant. Language (interpreting) assistance was available, as it had been organised when necessary for the outpatient clinic appointment. Questionnaires were coded to ensure that patients could complete them confidentially. On average two outpatient clinics per consultant were attended by NC to obtain responses from the requisite 25 patients.

Results

The responses from the minimum 10 peers and 25 patients required per

Table 1. Frequency of scores on the 10 peer questionnaires for an individual consultant

Score	1 – Poor	2 – Fair	3 – Good	4 – Very good
Category 1. Teamwork Works well as a team member	1	–	3	6
Category 2. Availability and help Is available to give advice and help when needed in the elective and emergency setting	–	–	2	8
Category 3. Patient management skills Shows compassion to patients and relatives, avoiding inappropriate involvement	–	1	4	4
Category 4. Leadership Accepts responsibility for actions and is honest with results	–	–	–	10
Category 5. Clinical management Can manage complex medical problems	–	–	1	9

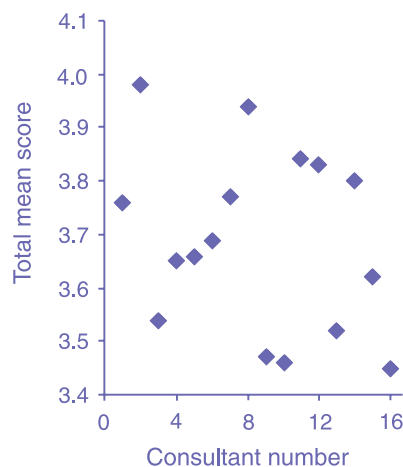


Figure 1. Total mean scores on the five peer questions for each of the 16 consultants.

Table 2. Frequency of scores on the 25 patient questionnaires for an individual consultant

Score	1 – Poor	2 – Fair	3 – Good	4 – Very good
<i>Theme 1. Respect</i> Treats you with respect and consideration	–	–	1	24
<i>Theme 2. Your perspective</i> Encourages you to tell your story and ask questions	–	1	12	12
<i>Theme 3. Clarity and simplicity</i> Uses words that you can understand	–	–	7	18
<i>Theme 4. Involvement in treatment decisions</i> Discusses treatment options with you and your family	–	–	6	18
<i>Theme 5. Information throughout your hospital journey</i> Continues to keep you fully informed throughout your illness and treatment	–	–	3	20

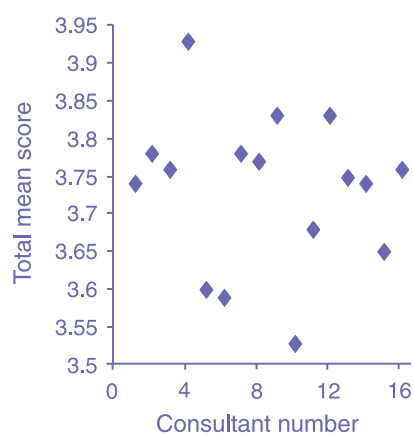


Figure 2. Total mean scores on the five patient questions for each of the 16 consultants.

consultant were obtained within eight weeks of starting the process.

The mean scores on the five questions for peers and patients for all 16 consultants are shown in Figures 1 and 2, respectively. The consultants were told individually their position on the graph, but not the identity of other scores. Tables 1 and 2 show examples of the detailed data given to an individual consultant for inclusion in the appraisal portfolio. This was available at the appraisal interview. Feedback from the individual consultants and Clinical Director was uniformly favourable regarding both layout and content.

Discussion

The need for a robust means of assessing the views of peers and patients is

a key to successful appraisal and subsequent revalidation.

The shortened questionnaires, together with a simplified scoring system, avoided a central ‘non-committal’ score, appeared to work well, were well accepted, and the full range of scores were used. This contrasted with previous experience³ using the longer questionnaires and the scoring range of 1–9, when scores were invariably at the top end and the full range was not utilised.

The use of an interview within an outpatient setting was a pragmatic solution to the difficulties with postal questionnaires and the multiple

languages used by our patients. A translator was available in the clinic as part of the outpatient consultation arrangements. We recognise that there may be a ‘halo effect’ in our results, but we did overcome the problem of poor returns (the need to send 100 questionnaires to get 25 replies), and we were able to assure ourselves that we had recorded the views of the patients themselves. In order to obtain returns from 10 peers we determined that we needed to send out 13 questionnaires.

In conclusion, we feel this technique offers a robust, pragmatic solution to the 360-degree appraisal of consultants, which was well received by the consultants, peers and patients.

Acknowledgements

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