

Culture of safety

Evaluating the culture of safety

J Firth-Cozens

Leaders need to stay close to the action if their organisations are to be not just seen as safe, but actually to be safer

Where once poor patient safety was deemed to be the result of individuals and technical inadequacy, ways of improving safety increasingly focus on the interaction of technology, human resources and organisations, together with the value systems or culture which lie behind them.¹ In this issue of *QSHC* Pronovost *et al*² describe the development of a scale from a tool which looked at cockpit management attitudes, with questions focusing very much on the leader's role in the enhancement of a safety culture. They found that staff saw their supervisors as having a greater commitment to safety than the more senior leaders.

Their emphasis on views of leadership—including management—is important. Leadership style in terms of personality and attitudes can have real consequences for safety^{3,4} and for accurate reporting of error.⁵ It is not just personality or style that matters, however; the larger the gap between management's view of risks within their organisation and the views of the actual workers, the greater the number of actual accidents.⁶ Similarly, Pronovost *et al*² show that management had a rather rosier view of safety in their hospital than did those most closely involved. Leaders need to stay close to the action if their organisations are to be not just seen as safe, but actually to be safer. Others have found that leadership influences employees' perceptions of the way safety is managed in their organisations, and those perceptions go on to influence their "on the job" behaviour and decisions which can lead to a lowering of actual accidents.⁷

These individual behaviours have been explored too in the operating theatre by Carthey *et al*.⁸ While they found that certain actions of individual surgeons—such as planning and adapting fast to change—affected outcomes, there were also a number of important organisational factors which influenced the process. For example, some organisations or teams within them had policies in place to reduce potential sources of distraction during surgery, to cut down non-case related communications to the surgeons, and to reduce the number of observers in theatre. Such policies—emanating from management—go on to form part of the culture of the theatre.

It is this everyday management commitment to safety which helps to make up a safety culture. This culture will also include wider organisational concepts such as the degree to which members report unsafe conditions, the speed of remedial action by management, the number of near miss reports, etc—factors which Cooper⁹ called the "safety product", a useful dependent variable with which to assess any organisational improvements which occur after initiatives to increase safety.

However, the relatively sudden rise in the attention currently being given to patient safety should not mean that we focus on safety as a culture in itself, separate from quality and separate from the organisational culture as a whole. It exists within other aspects of the organisation and the wider culture, such as financial restraints, mergers, the skills market, political change, media attention, and so on. So staff instability in a theatre team has an effect on patient outcomes,⁸ and sleep loss affects

cognitive skills and dexterity¹⁰—both the result of wider organisational practices. In high risk organisations like health care, safety needs to be the dominant element of organisational culture rather than something which lies adjacent to but largely separate from the rest.⁹

Individuals can change their attitudes to safety,¹¹ but this is unlikely to be maintained without the organisational commitment to safety being clearly strong. Pronovost *et al*² show, however, that organisations can also change through feedback of survey results. A regular demonstration of the "products of safety" to staff and management alike may be a way to unite them in a single organisational goal to create the safest organisation possible.

Qual Saf Health Care 2003;12:401

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Reviewing case record review

R McL Wilson

More public discussion is needed on the role and content of the case record

In their paper in this issue of *QSHC* in which they redesign current case (or medical) record review methods for the purpose of detecting adverse events and teasing out opportunities for preventing recurrence of this patient harm, Woloshynowych *et al*¹ state that “in our view the full potential of retrospective record review has yet to be explored”. Their view on the so far unrealised potential of the medical record is true, despite current efforts in some countries.

The medical record has a time honoured place as a chronological account of the clinical state and care of a particular patient. This place has been reinforced by the routine use of the medical record as part of any legal or insurance inquiry about care, as well as in clinical or peer review processes that are designed to improve the delivery of health care. But, unlike an incident report or computer alert, the medical record has a passive nature that requires and rewards systematic examination after an alerting process identifies the records that need review. That alert may be an adverse clinical outcome—for example, death of the patient—or of a procedural form such as a complaint or subpoena. For effective use of the medical record to improve health care, two elements are therefore needed—an alerting system to indicate records worthy of detailed examination and a systematic approach to that examination. The paper by Woloshynowych *et al* provides new insights into such a systematic approach to medical record review. It builds on the previous work that started with the Californian Insurance Feasibility Study² to estimate the incidence of adverse events and adds questions from experience with clinical investigation of adverse events to better understand potential causes and contributory factors. This is a major step forward in using the medical record for improvement of health services, by understanding causation then generating recommendations for actions to prevent recurrence or alleviate effects of adverse events.

But what about the commonly cited shortcomings of the medical record?³ Availability and legibility of the record and reliability of the judgements made by reviewers are key areas for comment. The Quality in Australian Health Care Study⁴ reported that in only 24 out of 15 000 records from 28 Australian hospitals was there insufficient information in the record to confirm a suspected adverse event, and that there was 80% agreement ($\chi = 0.55$) between two senior medical reviewers as to the presence or absence of an adverse event in the remaining records. From similar work in New Zealand, the reliability of determination of adverse events was 87.5% agreement ($\chi = 0.47$).⁵ These findings indicate that case record review performs better than any other currently available modality for detecting the frequency of adverse events to patients. But it is also clear that performance could be better.

Given the fundamental importance of successful case record review and its progression towards automation with the electronic health record, the patchy success of case record policy is both surprising and disappointing. When this is combined with relative lack of investment in the content and accessibility of these records, it is not surprising that records do not enjoy the reputation that this unique data source should have. The following list of essential elements comes from the reviewers in the Quality in Australian Health Care Study⁶:

- Medical admission.
- Medical discharge.
- Discharge summary.
- Medical continuation notes.
- Management or treatment plans.
- Consultations.
- Results of investigations.
- Short stay documentation.
- Referral/follow up letters from GPs or specialists.
- All volumes of the medical record simultaneously accessible.

They further recommended:

- Standardise the layout of the medical record
- Use admission dividers as a standard requirement for medical record filing.
- Devise a policy for loose sheet filing.
- Use an integrated medical record for all healthcare professionals.
- Keep all records relating to a patient in a single medical record rather than divided between clinics or sites of care.
- Devise standardised systems for linking mother and baby records after discharge.

If we could add the suggestions from Woloshynowych *et al* on detecting and preventing adverse events, then we could further improve the quality and usefulness of medical records. Even allowing for the fact that these latter recommendations need further formal evaluation and probable refinement, what is really lacking is the leadership to improve the usefulness of medical records for improvement. The incentives for many of the contributors to the medical record to improve their contribution consistent with particular standards are few and the barriers may seem large. If we then automate a current “faulty” system of medical records into an “electronic health record” we can only expensively perpetuate the problem.

We are now at a crucial time where more public discussion on the role and content of the medical record is required, and it is not clear where the leadership for this work is located. Once agreed, then appropriate standards can be internationally agreed and local incentives for implementation can be elucidated. There are current standards in this area, but it is not clear whether they take into account all the necessary functions of the record, especially the role of the record in quality improvement. Even when standards are in place—for example, through accreditation in the US or Australia—it is not obvious that these standards are being followed. Perhaps the readers of this journal could help this discussion gain momentum by using the rapid response function <http://qhc.bmjournals.com/cgi/eleter-submit/12/6/402> to answer three questions:

1. What are the key functions of the medical record?
2. What are the key elements that would need to be included in a medical record in order to achieve these functions?
3. How do we implement the recommendations from 2 above?

You, as the readers of *QSHC*, can make a difference here.

Qual Saf Health Care 2003;12:402–403

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Patient involvement

User responsiveness in health care

S Pickard

Effective methods are needed to evaluate patients' perceptions of the quality of their encounters with healthcare professionals

At the heart of the issue of lay involvement in the British NHS lies a contradiction—the enthusiastic rhetoric advocating it at all levels is not matched by significant and meaningful user involvement in practice. Since increased participation of patients and the public in health care is recognised internationally to be desirable, an examination of the implementation of the policy in the NHS will be of benefit to policy makers, managers, and clinicians struggling with this issue more widely.

Publications such as “*The new NHS: modern, dependable*”¹ produced shortly after the Labour government came to power in the UK and subsequent policy statements such as “*The NHS Plan*”² certainly demonstrate a rhetorical commitment to lay involvement backed up by the introduction of particular models, including the patient advocacy service and patients' forums. However, evidence so far indicates that, despite these professions of intent, there is little lay involvement taking place on the ground. Findings from two successive cycles of the annual national tracker survey of Primary Care Groups and Trusts (PCGs/PCTs),³ the main purchasers of health care in the new primary care led system within the NHS, found the role of lay members in decision making to be peripheral. It also found the effectiveness of attempts by the PCGs/PCTs either to inform or consult users to be poor, with little evidence that such consultations had had any major impact on decision making.⁴ A study which looked at user involvement in clinical governance found a similar lack of lay influence on quality activities,⁵ and an ongoing study examining the impact of differing PCT organisational and governance models on user involvement is

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It may therefore be that, despite the impressive array of mechanisms in place, a focus on governance arrangements in terms of policy implementation is misplaced. Instead, the focus should be shifted much further down to the level where patients interact with healthcare professionals. As Coulter points out: “Instead of beginning at the rarefied level of formal involvement in organisations and official committees, implementation of the policy to promote patient centred care should have started much nearer the ground at the point where patients and professionals interact”.⁶ It is therefore of crucial importance to develop and disseminate effective methodology which will pick up and act on patients' perceptions of the quality of such encounters, such as that described in the paper by Entwistle and colleagues in this issue of *QSHC*. Their paper will certainly be of interest to all those working to develop similar methodology in other healthcare systems internationally. There is no doubt that the “new NHS” is struggling to be user responsive; only by thoughtful improvements to the methodology and approach used in primary care will it be possible to rectify the situation.

Qual Saf Health Care 2003;12:403–404

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Error classification

Classifying and identifying errors

A J Avery

There are no easy answers to developing an all encompassing medical error classification system in primary care

Classifications can help us to make sense of the world and, in the field of medical errors, they can help us to assess what are the most important problems. There have been numerous attempts to develop classifications of medical error, although relatively few of these have come from primary care. This commentary highlights some issues in the classification of medical errors and considers the case for more systematic attempts to determine the incidence of these errors.

One of the problems with classifying medical errors is that there are so many ways of doing it. For example, one can focus on processes such as diagnosis¹ or describe underlying system failures.² Also, one can classify errors in terms of the types of disease, drug, or procedure most commonly associated with error or in terms of the severity of outcomes.

The paper by Rubin and colleagues³ in this issue of *QSHC* provides a classification containing six categories of error. The classification was based on broad themes coming out of the analysis of 65 events and it may prove to be useful in primary care along with other classifications.⁴ In common with other classification systems, there is room for overlap between categories. For example, a “clinical error” might also be a “communication error”. Some investigators have tried to get around this problem by “cross cutting” between different types of classification. For example, Bhasale and colleagues¹ have classified errors in primary care in terms of types of incident such as those relating to prescribing or diagnosis. They have then described contributing factors such as communication problems or errors of judgement. Nevertheless, Bhasale *et al* note that there is still overlap between some of the categories that they developed.

Most attempts to classify errors in primary care have been based upon the reporting of incidents by health professionals.^{1–5} This type of approach provides valuable information but it is problematic because of under reporting and reporting bias. This means that classifications will be based on incomplete data and estimates of the incidence of error are likely to be inaccurate. It is therefore worth asking if there are better alternatives.

There is little doubt that the reporting of incidents by health professionals can provide useful feedback on errors. This is the approach that is being adopted by the National Patient Safety Agency in the UK with the aim of helping the NHS to learn more from mistakes. This type of approach has been used successfully in other industries and there are good reasons to expect it to have a positive impact in health care. Nevertheless, a more systematic approach to identifying errors could provide better evidence on which to identify priorities for action. This has occurred in the field of prescribing in primary care⁵ where, for example, a recent prospective cohort study has examined the frequency of preventable adverse events resulting from prescriptions,⁶ and another study has identified the errors in medicines management associated with preventable medication related admissions to hospital.⁷

In secondary care there have been a number of descriptive studies documenting the nature and scale of errors. Rather than using incident reports from healthcare professionals, many of these studies have worked on the basis of detailed review of patients’ records, sometimes with further information being collected from healthcare staff. Review of patients’ records could be used in primary care, although there might be problems due to incomplete

documentation. A combination of record review and interviews with staff and patients might therefore be more successful in providing the information needed to judge whether errors have occurred and their underlying causes. This approach would lend itself particularly well to analysis of serious adverse events such as hospital admissions, but it might also work if a study were to be done of all healthcare encounters in a primary care setting. Even so, this approach would not pick up errors such as the equipment failures identified by Rubin and colleagues.³

It seems, therefore, that there are no easy answers when it comes to the development of all encompassing classification systems for medical error in primary care. Approaches based on self-reporting clearly provide useful information and more robust descriptive studies would still not give the full picture. Nevertheless, I think it would be worthwhile undertaking more systematic analyses of primary care encounters to determine the most important errors and how frequently they occur.

Qual Saf Health Care 2003;12:404

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