

Medical errors: a common problem

It is time to get serious about them

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Medical errors continue to dominate newspaper headlines. There is rarely an informed comment on likelihood or cause, rather a tacit assumption that they should never happen—and an implicit conclusion that they are getting more common. What is the truth? Firstly, errors have always happened. Secondly, there has been no clear indication as to how common they are in the United Kingdom—though a pilot study in this week's issue represents a first attempt to quantify the size of the problem (p 517).¹ Alongside this is the difficulty of indicating risk. To a bereaved relative the knowledge that there was a 1 in 1000 risk is no consolation—for them it was 1 in 1. In a country where millions are spent every week on the national lottery the concept of risk is obviously alien. What is clear, however, is both that we need to know more about errors and to do more about them.

How common are errors? Can they be minimised? And how should we tackle risk management? One problem in assessing the frequency of errors is that we are deeply immersed in a blame culture, so it is hard to persuade people to report them. Many errors do not cause harm, but in many ways these are as important as those that do. They indicate a breakdown in the system or a wrong decision. If we are to learn from mistakes then we need to know about as many as possible so that corrective action can be taken. This requires a cultural change and sensitive handling of the individual making the report. A recent report from Chesterfield has shown a 150% increase in error reporting by threats of disciplinary action—apparently effective but perhaps not the best approach.²

Few reliable studies of adverse events exist. Two seminal studies were reported some years ago from the United States^{3,4} and Australia⁵ showing adverse event rates of 3.7% and 16.6% of admissions respectively, with intermediate rates in Colorado and Utah.^{6,7} In the Colorado study rates were higher in the elderly.⁸ Problems arise because of definitions; and retrospective analysis can be subjective. What appeared to be clinically reasonable at the time may be second guessed if an adverse event occurs. Nevertheless, a figure of 5-10% is worrying, particularly since a half or more of these events were deemed preventable.⁸ Similar rates were found for interpreting emergency radiographs.⁹

Finally, we now have some British data from London based on retrospective record review. In their study of over 1000 records in two acute hospitals, Vincent et al found that almost 11% of patients experienced an adverse event, over half of which were

deemed preventable judged by ordinary standards of care.¹ More worryingly, at least a third of these events led to disability or death. This was a pilot study but there is no reason to believe that the results are unrepresentative. The frightening extrapolation of these data suggests that in England and Wales adverse events lead to an extra 3 million bed days at a minimum cost of £1bn per year. Only a full scale study can substantiate this estimate, and if the NHS is serious about learning about and reducing errors it should fund such a study.

What can be done about these errors? They cannot be ignored. Once errors are recognised their causes must be analysed so that preventive measures can be applied. Some of the mistakes are caused by systems failures—this has been shown, for example, with drug errors or wrong transfusions. Clear definition of clinical responsibilities is needed. Fatigue may also cause problems, as does the use of inappropriately junior staff. The main causes of adverse events relate to operative errors, drugs, medical procedures, and diagnosis. Each of these is amenable to prevention. Better surgical training is obvious. This has been taken on board by the Royal College of Surgeons, though concerns remain that, because of shorter training and tighter working hours, young surgeons are less experienced than previously. Better training programmes will also help with medical procedures. Fewer operations and procedures during the night may also help. Drug errors remain a problem—no one can remember all the possible drug interactions that may occur, and incorrect dosages are also a recurrent problem. A computer linked pharmacology system, such as that described from Birmingham,¹⁰ seems an ideal preventive and learning tool. This system sends warnings when incompatible or otherwise dangerous drugs are prescribed, and the introduction of such a system nationwide could prevent hundreds, indeed thousands, of errors. Errors in diagnosis could be minimised by better training and wider use of protocols and diagnostic algorithms.

Errors are problems that will not go away. A pilot study by the Royal College of Physicians into deaths after admission for medical emergencies suggests that some error occurred in as many as one in five cases, although not necessarily leading to an adverse event (unpublished). These data should be interpreted cautiously but do suggest that actual recorded adverse events are the tip of the iceberg. Analogies are often drawn with airline pilots. These are overinterpreted in that an aeroplane should behave predictably on all occasions, whereas every patient is different and the

same disease can present in myriad ways. Nevertheless, we can learn from the airlines, as David Johnson suggests on p 563.¹¹ They spend a much higher proportion of revenue on training and they report all incidents, with “blame” being minimised. This is a habit which we should adopt, but it requires a much more sympathetic approach from management than has pertained in the past.

Even more important, we need, as suggested by Vincent et al¹ and England’s chief medical officer¹² to put in place a national system for recording adverse events. This is an enormous undertaking and could be introduced initially in high risk areas—but in the end it should be a matter of course in every medical setting, public and private, in the United Kingdom. Only then will we really learn and improve our practice to the ultimate benefit of the public.

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New approach to the consultant contract

This offers a clearer relation between workload and reward

Whatever the merits of Britain’s consultant contract when it was first agreed in 1948, there can be few now who do not agree that it needs substantial and perhaps radical revision. The average consultant coping with increasing clinical demands and the medical and general managers trying to ensure productive use of scarce expertise are well aware of its deficiencies. Lack of flexibility, poor relation between reward and effort and outcome, and lack of recognition of extra responsibilities resulting from more intensive training of junior doctors and the introduction of clinical governance are some of the issues that need to be tackled by a new contract. The government has now set out its proposals, promised in the NHS Plan,¹ for a new approach to the consultant contract² and to rewarding commitment and excellence in the NHS.³

Many of the government’s proposals in its paper on contracts² are welcome. The increase in consultant numbers from 27 000 now to 34 500 in 2004, and to 40 000 in 2009, highlights the importance placed on the medical contribution to modernising the NHS and reflects the increasing emphasis on a service largely delivered by consultants. Such increases, seen as necessary to deliver safe and effective care, have long been demanded by the profession.⁴ The suggestion of a consultant career that has three broad phases should be welcomed in principle as a recognition and expansion of current practice. The proposed initial phase focuses on service delivery and on enhancing and consolidating clinical expertise, the middle phase also assumes a continuing focus on service but with more emphasis on a leadership role, and the third phase allows for reduced clinical workloads and opportunities to expand other roles. Such a phased career might be enhanced by payment for extracontractual work,

improvements in the recently introduced work intensity arrangements, earlier access to a revamped distinction awards scheme, and possible improvements in the pension scheme to protect the accrued rights of consultants who reduce their workloads in the third phase.

Also welcome are the related proposals to merge discretionary points and distinction awards into a single reward system.³ Few would disagree that the current schemes would benefit from further work to improve their perceived fairness and openness and focus on service contribution, together with increased clarity of purpose and more explicit criteria for awards. An increase in numbers of awards; better representation of women, ethnic minorities, and unpopular specialties; and earlier access to awards are uncontroversial. Views on these proposals are invited by the end of May—an opportunity that should not be missed by those dissatisfied with the present system’s ability to provide suitable incentives and rewards for consultants who make an above average contribution to the service.

A potentially contentious area within the contract proposals is the issue of mandatory job plan review and appraisal. Clearly fair and transparent methods for assessing workload and outcomes are needed, but it will be important in developing these to distinguish between, on the one hand, issues of performance management and financial reward, and, on the other, the developmental and supportive aspects of appraisal. Despite an understandable emphasis on the need for clarity in the links between job plans and reward, the document also includes a welcome commitment to looking creatively at different methods of achieving this, including an interesting suggestion regarding an annualised hours approach, with weighting factors for

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