

1990
THEN
and
2000
NOW

*The 2000 Report of the National Confidential Enquiry
into Perioperative Deaths*

Data collection period
1 April 1998 to 31 March 1999

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The analysis of data from anaesthetic and surgical questionnaires is not included in full in this report. A supplement containing additional data, and copies of the questionnaires, is available free of charge from the NCEPOD office.

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FOREWORD

The recent Department of Health report on learning from adverse events, 'An Organisation with a Memory'¹, commented upon the serious difficulty in establishing the rate of change when good practice recommendations are made by National Confidential Enquiries. This report, therefore, covering a period of almost ten years enables us to evaluate some of the changes that have occurred, but possibly more particularly to highlight the issues where changes have been less than adequate and certainly the rate of change has been unacceptably slow.

If there is a single issue that has bedevilled the activities of NCEPOD throughout this period, it has been that of clinicians' access to data from within the medical records departments of their hospitals. The treatment of notes of deceased patients remains a cause of concern since access to these records is essential if data submitted to NCEPOD is to be timely and meaningful. This report also covers the year in which mandation to participate in clinical governance activities was first introduced. Part of that compliance must involve a hospital's ability to provide facilities for clinical staff to assess their overall activity within the spirit of accountability; fundamental to this is access to good records.

Surgical activity since 1990 has changed significantly with a greater number of patients being admitted as emergencies, for which no obvious reason has been found, and who are both older and more severely ill. Although an increase in critical care facilities has been provided during this period, this report demonstrates that 40% of the hospitals from which deaths were reported, still have no high dependency facilities. Repeated NCEPOD reports have stressed the need for an improvement in critical care at all levels and our previous report 'Extremes of Age'² emphasised the need for such facilities to be available to support the older patient at time of emergency. It is well recognised that this lack of facilities is linked to an inadequate availability of key nursing staff but, even taking account of that, there can be no explanation for why some Trusts give priority in this area whilst others apparently do not. We would make a plea at this time of increasing attention on quality of care for an urgent recruitment drive for nursing staff specialised in critical care activities, and for Trusts to recognise the importance of providing adequately for both high dependency and intensive care unit facilities.

Concern is clearly demonstrated within this report about the number of procedures being carried out by non-consultant career grade staff who may by definition not be in an educational environment.

There is a concern that our comments on the lack of supervision of senior house officers has now transferred itself to lack of supervision of non-consultant career grades, who themselves may have had an inadequate training. With the enormous rise in the number of non-consultant career grade appointments by comparison with those at consultant level, the potential for a person in these grades to be working independently has to be recognised and compensated for by an adequate increase in consultant staffing.

Audit activities at local level appear to have moved in one of two directions. There has either been a very significant increase in activity so that audit departments are now flooded with requests which they are unable to meet or, alternatively, they have gone into a state of decline through lack of support for unfocussed audit activities. It is difficult to see why the audit of perioperative deaths has declined to the level that it has, but the fact that as few as 13% of deaths may be audited in some specialties may be linked to the decrease in postmortem activity, both of which have to be deplored. In the light of the openness and accountability under the banner of clinical governance, audit of all activities on a daily basis should become a normal event. It would seem essential, therefore, for all clinicians to be taking due notice of this fundamental requirement and turning their attention to accountability on a daily basis. Without this it is very difficult to see how a spirit of openness and credibility can be expected with the public who are served.

The importance of this report demonstrates a change in the attitude towards NCEPOD by the profession. Whereas a decade ago NCEPOD was obsessed with the rates and causes of death, the situation now is very much one in which the quality of care is the main thrust of the Enquiry. Alongside this change has been the recognition within the profession of the value of NCEPOD. Despite the occasional adverse comment, the overall response from the profession has been one which demonstrates a very positive change in attitude and a recognition of responsibility and greater accountability for an individual's own activity. There is no doubt that extension and further improvements will all demand an increase in resource to support the clinicians. That resource takes the form of increases in workforce, facilities and finance. It is hoped that the next ten years will see many of these issues addressed, with improvement of quality the consequential outcome.

John Ll Williams
Chairman

INTRODUCTION

THEN ...

John Lunn

Readers will recall the fact that the first enquiry carried out by NCEPOD³ was concerned with children aged ten years or less. This sample was selected for several reasons, not least of which was the fact that it was anticipated that there would be few deaths in this age group and thus the work would not be too onerous for the first attempt by the new organisation.

When we came to select the sample for the second year we were particularly keen not to overburden specific groups of clinicians, which had been inevitable in our first sample. The choice of a random selection would tend to lessen this and children were actually excluded from the sample of deaths. The 20% random selection of deaths within 30 days of a surgical operation which was used in 1990⁴ was intended thus to allow our sample to be unbiased and to reflect all surgery. A good, if not the desirable 100%, response rate was required to this end; this was not achieved since merely 73% of surgeons' and 66% of anaesthetists' questionnaires were included in the final analysis. This was a disappointing result and immediately raised doubts. Confident extrapolation to all surgery and anaesthesia was not really justified although our misgivings about this aspect were suppressed. One cause of delay, and the difference between the two disciplines' return rates, was the method of distribution of the questionnaires; at that time anaesthetists' questionnaires were sent to them via the surgeon. Any response by NCEPOD was inevitably slow and it was two years before our collection system could be completely changed. Anaesthetists were, wherever possible, mailed directly with the eventual result that both disciplines now return in the region of 80% of questionnaires. The customary working arrangements of departments of anaesthetics, and record systems of hospitals, do not allow convenient identification of anaesthetists, as distinct from surgeons, in relation to postoperative deaths. The good offices of tutors of the Royal College of Anaesthetists have improved matters considerably although there is still some improvement possible.

The closer the compliance rate approaches 100% the more confident the reader may be about the general applicability of any conclusions to the population. It should be remembered that NCEPOD was still not accepted by all clinicians and it was perhaps naive of the coordinators then to

expect sufficiently good response rates to enable valid conclusions to be drawn from a random sample. Nevertheless, we did.

The occurrence of death is an unarguable event; albeit after operation it is relatively uncommon. Investigation of events before the death enabled the identification of factors that might, if not present or corrected, have averted the death.

NCEPOD was then still obsessed with rates and causes of death. Neither of these aspects features dominantly in recent enquiries. Thus the notion of obtaining information to enable direct comparisons between the management of those who died with that of those who survived surgery (index or survivor cases) has, at least for the time being, not been pursued.

The tally of 'finished consultant episodes' (FCEs) is not the same as the number of operations. Annual totals of operations performed is the crucial denominator. Death is a unique event so it is the number of patients who die (within thirty days of a surgical operation) which is the important statistic to enable calculation of rates of death. Neither of these summations was made by the Department of Health in a timely fashion so we were unable to verify our data with independent figures and no calculation of rates was possible. Thus NCEPOD now unashamedly considers the quality of care as exemplified in that of those patients who die. As data collection systems, such as that providing statistics for the NHS Performance Indicators, become more robust, we hope this information will be available to support NCEPOD.

It is worth pointing out, however, that the use of death as a sentinel event could be applied in other spheres than surgery; both the clinical coordinators in 1990 foresaw the possibility that any death could serve as a trigger for investigation of the efficacy of any public service for that individual before their death. That ambition has yet to be achieved although several more confidential enquiries about death now exist.

The clinical coordinators in 1990 recognised the value, not only to the public, but also to the profession, of open discussion of outcomes of surgical operations, even if these were negative. There is no doubt that at that time the coordinators were still struggling to convince their colleagues that there was nothing 'subversive' or 'anti the medical profession' in this endeavour. My friend and colleague, the late Brendan Devlin, was personally involved in this debate, particularly with

surgeons, but we both remained optimistic, or at least hopeful, that voluntary cooperation would be sufficient to avoid what was otherwise likely - coercion. However, cooperation by clinicians with NCEPOD when voluntary was far from total. Had cooperation been less grudgingly given then, clinicians today might not be compelled by government to participate. The messages promulgated by the early reports were often described as 'disturbing'; they were perceived as new then, but now they are merely repetitive.

One of the primary aims of the confidential enquiries into perioperative deaths was to reassure patients that surgeons and anaesthetists were examining their own practice in order to improve deficiencies in the care given to patients. This is still the aim. There was public disquiet because of some of the early findings but the politicians' response was limp and much of the profession remained lukewarm in its reaction. Small wonder then that so few of the deficiencies in hospitals have been rectified. Nevertheless, the hope, and indeed expectation, of the two clinical coordinators in 1990 was that our enquiry would be effective in helping doctors modernise and improve care of patients.

The up-to-date facts are presented here but should not again be ignored. It is a new generation of clinicians who must take up the challenge; could the public now support the doctors in their attempts to improve the NHS?

... AND NOW

Stuart Ingram and Ron Hoile

The selection of a randomised 10% sample of all deaths in 1998/99 was intended to enable comparison to be made with the randomised 20% sample examined in 1990, almost ten years ago. It was proposed to look at the ways in which delivery of care given to patients had altered. Dr Lunn has set out some of the aspirations of the original authors of the Enquiry back in 1990. What then has been achieved over the intervening period?

In today's National Health Service central 'initiatives' come thick and fast, and always with an impossibly short timeframe but, if the experience of NCEPOD is a barometer, real change is somewhat slower. The medical profession has made considerable changes in order to improve the delivery of care to patients and many of the recommendations previously made have been addressed. For instance, consultant input is now very high (and has risen since 1990 for many specialties), both anaesthetists and surgeons have demonstrated a willingness to subspecialise within their own specialty, there are fewer instances of trainee grades operating inappropriately and critical care services have improved. All these changes in practice have taken place despite an increasing workload (compared to 1990) due to a burgeoning number of unplanned emergencies and an increasingly older and sicker patient population.

It is the economic resourcing of healthcare that is most commonly quoted by clinicians as the stumbling block for further change. However, there is also a large human resource working in healthcare and obstacles to change can also be attitudinal. We believe that future change will depend on money, manpower, mentality and mentoring.

Money

The current debate on health care expenditure, and the additional funds it is producing, will undoubtedly help to overcome some of the shortcomings highlighted in this report. But as money becomes available, will it necessarily be spent where it is most needed? We have previously stressed the importance of high dependency unit (HDU) critical care facilities in the management of surgical patients. Why is it, therefore, that some hospitals have these facilities and others do not, yet both are undertaking similar complex cases? Is the reason always regional variation in funding or is it the priority that individual hospitals give to different aspects of their activities? As clinicians, it

is our experience that too often it is those with the loudest voice, or alternatively those placed closest to the Chief Executive's ear, who see their priorities met first. An HDU should, however, now be at the top of the list of priorities in any hospital that does not already have one. Improvement in the organisation and management of patients' medical records should be close behind.

Manpower

If the current trend towards specialisation within anaesthesia and surgery is to continue, then more doctors are needed. In order to provide specialist emergency rotas large numbers of consultants and trainees will be required. For instance, for a district general hospital to provide cover for children, anaesthetists with a regular practice in paediatric anaesthesia will need to be on-call. This should be together with surgeons in all the surgical specialties, who not only have a regular children's practice but have also attended regular refresher courses in paediatric surgery as it affects their practice. There would ideally, just within general surgery, need to be separate rotas for vascular, upper gastrointestinal, colorectal and endocrine surgery. These would involve large increases in consultant numbers. Such subdivisions may seem Utopian and unachievable but there is evidence that they are necessary and public opinion may demand them. Alongside this expansion there will need to be sufficient training posts and less reliance on service delivery by NCCGs, who may simply have replaced the untrained junior doctors of previous reports.

In addition, there is a need for more specialised nursing care (particularly within the hoped-for HDUs and certain specialties such as otorhinolaryngology). There is no doubt that outcomes improve for patients when specialist nurses work within specialist units (rather than being widespread throughout a generality of surgical beds).

It is to be hoped that an NCEPOD report in a further ten years could show that there were no shortages of staff and that the appropriately trained nurses, anaesthetists and surgeons treated all patients.

Mentality

It is impossible at the present time to consider how surgical and anaesthetic practice can be improved without having constantly in mind the stream of recent well-publicised cases of medical incompetence. Reporters at the door of the General Medical Council describing another series of damaged patients have become a regular feature of our television screens. In the cases reviewed by

NCEPOD such extreme failure is not seen, but there are identified aspects of practice which may indicate why such incompetence has sometimes gone on unchecked. Occasionally there is the overt hostility to the sense of inquisition that the arrival of an NCEPOD questionnaire engenders. This is evidenced by written comments on the futility and idiocy of the whole exercise that sometimes turn up on returned questionnaires. We would not suggest that NCEPOD is not itself open to criticism, but the nature of some written comments from clinicians suggests a sense of their personal worth based mainly on arrogance.

The self assessment that is afforded by reviewing a case to complete an NCEPOD questionnaire must in itself be of benefit and this too is sometimes noted in written comments on the questionnaire. An element of peer review and feedback to individual clinicians could enhance this aspect of the exercise and has been considered as part of developing the Enquiry. However, the lack of systematic audit of so many of the deaths that occur in surgical and anaesthetic practice must be addressed. Poor surgery and anaesthesia does not inevitably result in the death of a patient, excellent care elsewhere can compensate over time for many of these acute inadequacies, but death represents a defined end point on which audit can be based. As the coordinators and advisors at NCEPOD know, it affords an opportunity to look at many aspects of practice; performed at local level and without the anonymity of the national enquiry, much could be revealed.

Mentoring

Many of the deaths that we have reviewed over the years may have occurred because there was a failure to seek an opinion from someone more experienced or senior by the anaesthetist or surgeon. The days have gone when a consultant needed to stand alone and prove his/her mettle by struggling through no matter what. We should be encouraging joint care (sadly lacking at present), internal referral for difficult cases, teamwork and the pairing of younger, less-experienced consultants with a more experienced and wiser colleague. This would create an atmosphere of mutual learning, support and appraisal whilst benefiting patients and their outcomes.

The work done by NCEPOD, since John Lunn and Brendan Devlin first introduced the concept, has created a world first in terms of a review of the delivery of anaesthetic and surgical care to patients. The collection of the raw data about surgical deaths remains incomplete and the method of feedback to professional colleagues, their teams and managers (who must provide the services we rely upon) are

crude and impersonal. Clinical governance is now established and there is further change afoot which should bring more accurate, standardised data, openness and personal feedback to clinicians. Surgeons and anaesthetists should welcome and actively participate in any system that improves data collection. These changes should enable NCEPOD to continue informing the professions of their performance whilst basing comment and recommendations on more reliable evidence.