Clinical & Scientific letters

Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section. Clinical and scientific letters should not exceed 500 words and may include one table and up to five references.

Cardiopulmonary resuscitation: the thought and the deed.

In the last few years there has been much concern amongst the public and national press about 'do not resuscitate' (DNR) orders made on hospital inpatients {see previous articles in this issue of *Clinical Medicine* by Peter Watkins and John Saunders}. This has coincided with a seismic shift in the way in which DNR orders are made. Until recently, the majority were made by junior doctors[1]. This year the British Medical Association in conjunction with the Resuscitation Council (UK) and the Royal College of Nursing have produced guidelines to help doctors make these decisions[2]. These re-emphasize the importance of senior clinicians in making DNR orders for specific patients.

We distributed a questionnaire to all physicians attending the weekly medical grand round. This consisted of forced binary or multiple-choice questions aimed at assessing physicians' recent experiences of cardiopulmonary resuscitation. Sixty-five physicians completed questionnaires: 18 consultants, 11 specialist registrars (SpRs), 24 senior house officers (SHOs), and 12 pre-registration house officers (PRHOs).

Our results illustrated that more than half the registrars and consultants were making resuscitation decisions on a weekly basis (17/29) and 80 per cent were making these decisions at least once a month (23/29). Junior doctors were much less likely to make resuscitation decisions. Two of the PRHOs had made resuscitation decisions despite both national and local guidelines. All but one of the medical SHOs were making some DNR orders, although less frequently than their senior colleagues (Table 1 below).

Despite making the DNR orders most frequently, consultants and SpRs had attended the fewest arrests in the previous year. Over half the consultants had attended none (10/18), and only one more than five (Table 1).

Our worry is that doctors attending less than five arrests a year will not have up to date knowledge of arrest situations and may therefore find it more difficult to relay realistic information to patients and their relatives. The vast majority of doctors making DNR orders are now consultants or registrars, but our study shows that almost all consultants and nearly half the registrars had attended fewer than 5 cardiac arrests in the previous year. This does not conform to the recent Department of Health guidelines for consent to treatment, which recommend that doctors only seek consent if they are capable of performing or have received training in seeking consent for that procedure[3].

The solution to this problem is not obvious. Neither the public nor doctors are likely to want a return to the old system of decisions being made by the junior doctors alone. It does however re-emphasize the importance of making resuscitation decisions as a team rather than as individuals.

References

1 Hayes S, Henshaw D, Rai GS, Stewart K. Audit of resuscitation decisions has little impact on clinical practice. *J R Coll Physicians Lond* 1999;33:348–50

2 Decisions relating to cardiopulmonary resuscitation. A Joint statement from the British Medical Association, Resuscitation Council (UK), and the Royal College of Nursing.

3 Department of Health. Twelve Key Points on Consent. London: DoH, 2001.

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A standardised order form improved decision-making and documentation of DNR orders

The department of health has announced strict guidelines for NHS Trusts on drafting policy to address 'do not resuscitate' (DNR) decisions[1]. The importance of audit in this area of medicine was emphasised. Audit of resuscitation decisions may have little or no impact on clinical practice, and even where guidelines are present they are frequently ignored[2]. We successfully used significantly

Table 1: Frequency with which physicians make DNR orders, and their attendance at cardiac arrests.

	Frequency with which doctors make 'DNR' orders				Number of arrests attended in previous 12 months			
	Never	Infrequent	At least once a month	Most Weeks	None	0–5	5–20	20+
Consultant (*n*=18)	0%	22%	22%	56%	56%	39%	0%	6%
SpR (*n*=11)	9%	9%	18%	64%	9%	36%	56%	0%
SHO (*n*=24)	4%	38%	42%	17%	0%	8%	50%	42%
PRHO (*n*=12)	83%	17%	0%	0%	0%	8%	83%	8%

to improve our decision-making and documentation of DNR orders. We used a standardised order form (SOF), which addressed all-important areas of this decision.

DNR decisions in medical case notes were audited before and after the introduction of a SOF. All aspects of the decision were scrutinised against recommended guidelines[3].

In the initial 9-month audit period, 94 case notes with DNR decisions were retrospectively identified. Having noted shortcomings in documenting and recording the decision, we introduced a SOF to complement case note entries. We then prospectively re-audited our performance. Results between both audits were examined and compared using the Chi^2 test.

In the initial audit, 81/94 (86.2 per cent) of DNR indications were in keeping with accepted guidelines (relating to patient wishes, likely futile outcome, the presence of an advance directive or poor quality of life). In the re-audit period this improved to 61/92 (98.4 per cent) ($p<0.01$). The patient was actively involved and consulted about the decision in 1/94 (1.1 per cent) when case notes alone were used, versus 9/62 (14.5 per cent) when combined case notes and SOF were used ($p<0.001$). In both audit periods, 60/94 (63.8 per cent) and 44/62 (71 per cent) respectively, the patient was too ill or too confused to be consulted about the decision. More decisions were authorised by the consultant in charge of the patient when an order form was used, 56/62 (90.3 per cent) versus 35/94 (37.2 per cent) ($p<0.001$). In addition DNR decisions were more likely to be reviewed during the re-audit period when the SOF was used 50/62 (80.6 per cent) versus 36/94 (38.3 per cent) ($p<0.001$).

Since our audit was completed, further updated guidelines have been issued[4]. The General Medical Council have also issued a draft policy relating to good practice in this area of medicine[5]. This makes it quite clear that doctors 'must be prepared to explain and justify your actions and decisions, to patients and their families, your colleagues and, where necessary, the courts and the GMC'. We recommend using a standardised order form to complement case note entries to facilitate better decision-making and documentation of the DNR decision.

References

1 HSC/028/200. *Resuscitation policy*. London: NHS Exectuive (UK), 2000.
2 Hayes S, Henshaw D *et al*. Audit of resuscitation decisions has little impact on clinical practice. *J R Coll Physicians Lond* 1999;33:348–50.
3 BMA/RCN/RC(UK). Decisions relating to cardiopulmonary resuscitation. London: BMA, 1999.
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Delayed hospital discharge

A proportion of hospital inpatients stay longer than expected or required for their medical diagnosis. These patients are elderly, often with poor social support or requiring long-term care due to disability of disease, including hospital acquired infection. These patients put a considerable strain on both resources and staff morale[1,2].

The reasons for the 1405 extra days spent in hospital by a total of 317 patients over a four month period are summarised in Table 1. A 'seasonal' ward, opened for the winter, admitted 22 patients under the medical team, 8 (2 per cent of total) of whom stayed an extra 180 days (13 per cent of total extra days). In comparison, 30 patients admitted to non-medical 'outlier' beds incurred only 3 extra days from a total of 223. While patients over 65 years represented half of the total admissions, they accounted for over two-thirds of extra days (Table 2). The longest inpatient stays were incurred by patients with cerebrovascular events, urinary tract infections and falls.The major reason for the delay was the unavailability of appropriate long-term care facilities. Delay in requesting arrangement of facilities was not a major contributor.

Other studies have confirmed this indirectly[3], but there are few data on delayed discharge in the UK. Immediate transfer of appropriate patients to an Acute Elderly Care service is only viable if levels of staffing and ancillary support are comparable to the general medical service. Intermediate care wards merely shift the problem and their costs are often greater because patients in these wards may not be

Table 1: Reasons for delayed discharge.

Reason for delay	*n*	Mean age (years)	Total days	Extra days
Medical team	206	57.7	1288	8
Social Services	37	72.2	1477	1030
Occupational therapy	8	71.4	240	157
Tertiary transfer	17	60.5	212	87
Other	49	65.7	436	195

Table 2: Relation between age and inpatient stay.

Age (years)	*n*	Average stay {range in days}	Total days	Extra days
60–64	24	15 {1–103}	327	134
65–69	36	10 {1–61}	376	77
70–74	51	18 {1–106}	846	396
75–79	27	18 {1–88}	446	232
80–84	17	10 {1–41}	177	60
>85	28	13 {1–82}	350	167