10. Quality of medical records and audit

Key findings

- **The quality of medical records was poor.**
- **Documentation of resuscitation decisions rarely happened, even in patients at high risk of deterioration.**
- **Retrospective review (audit) of patients' management was infrequent.**
- **Where retrospective review did occur, there was a low level of participation by referring physicians.**

Introduction

Quality in the medical record is crucial. The issues of legibility, attribution of each entry, date and time of each entry and content of each entry are key. This allows good patient care, good communication, and compliance with GMC requirements. In addition, a poor medical record hampers retrospective casenote review. The quality of casenotes reviewed in this study was assessed. Although difficult to measure, the advisor group consistently commented on the poor legibility of a large number of medical records. Table 1 shows that 59% of entries in the medical record did not have adequate contact details recorded and of these it was impossible to determine the grade of doctor who reviewed the patient in 43% of patients.

Entries in medical records

It is clear that the quality of the medical record was poor and not in keeping with current guidance and that significant improvement is required [37,38,39].

Table 1. Contact details recorded in patients' medical records

Contact details* recorded	**Total**	***(%)***
Yes	904	*(41)*
No	1,330	*(59)*
Total	**2,234**	

***Contact details** = at least two of the following:
Name
Bleep number
Grade

It has been recommended that patients at risk of deterioration should have their resuscitation status considered early in their care. The General Medical Council is quite clear in this regard -

"Where a patient is already seriously ill with a foreseeable risk of cardiopulmonary arrest, or a patient is in poor general health and nearing the end of their life, decisions about whether to attempt CPR [cardiopulmonary resuscitation] in particular circumstances ideally should be made in advance as part of the care plan for that patient. A patient's own views, about whether the level of burden or risk outweighs the

likely benefits from successful CPR, would be central in deciding whether CPR should be attempted. It is important in these cases to offer competent patients or, if a patient lacks capacity to decide, those close to the patient, an early opportunity to discuss their future care and the circumstances in which CPR should or should not be attempted" [40].

A more recent joint publication also emphasises the importance of decisions relating to resuscitation status [41].

Such actions will allow for a clear plan of management in the event of deterioration. This is especially important as the impact of shift working has reduced continuity of care significantly and it is less likely that a member of the medical team who knows the patient will be present.

Resuscitation status

Table 2 shows that documentation regarding resuscitation status could only be found in 42 health records (of the 390 sets of notes with sufficient data available for review). Table 3 shows the predicted risk of death on admission to hospital and Table 4 shows the predicted risk of death on referral to the ICU (predicted by referring physician) in the group of patients who died. It is clear that a large number of acute medical admissions in this group were considered to be at high risk of death (expected or at definite risk) - 229 on admission to hospital and 325 at referral to ICU in this study. It is disappointing that only 42 health records contained statements about resuscitation status. This is clearly not in line with GMC guidance.

Table 2. Statement of resuscitation status in health records

Resuscitation status documented	**Total**	***(%)***
Yes	42	*(11)*
No	348	*(89)*
Sub-total	**390**	
Insufficient data	49	
Total	**439**	

Table 3. Predicted risk of death at hospital admission (group of patients who died)

Risk of death at hospital admission	**Total**	***(%)***
Not expected	40	*(12)*
Small but significant risk	58	*(17)*
Definite risk	182	*(53)*
Expected	47	*(14)*
Unable to define	15	*(4)*
Sub-total	**342**	
Not answered	97	
Total	**439**	

Table 4. Predicted risk of death on referral to ICU (group of patients who died)		
Risk of death on leaving the ward	**Total**	***(%)***
Not expected	1	*(0)*
Small but significant risk	7	*(2)*
Definite risk	234	*(68)*
Expected	91	*(27)*
Sub-total	**342**	
Not answered	106	
Total	**439**	

Where a statement regarding resuscitation could be found, an attempt was made to assess whether discussion had taken place with the patient and/or family. This data is shown in Tables 5 and 6. There was a surprising lack of discussion with patients about this aspect of their treatment. Whilst there was greater family discussion, there were still a number of patients in whom it appeared that decisions about resuscitation had been made without involvement of either party.

Table 5. Discussion with patients of resuscitation statement	
Patient discussion	**Total**
Yes	2
No	21
Sub-total	**23**
Insufficient data	19
Total	**42**

Table 6. Discussion with patients' families of resuscitation statement	
Family discussion	**Total**
Yes	17
No	8
Sub-total	**25**
Insufficient data	17
Total	**42**

Morbidity & mortality meetings

Morbidity and mortality (M&M) meetings should be an integral part of the provision of good medical care. It was therefore of great concern that 40% of hospitals within this study reported that the critical care service does not have regular M&M meetings (Table 7a). Where M&M meetings did occur, it is clear from the data in Table 7b that the main input into these meetings was by consultants in anaesthesia and intensive care medicine. Whilst other staff members did attend it was with a much lower frequency and undermined the principle of multidisciplinary case review. We have earlier shown that there are concerns with the management of medical patients prior to admission to critical care. The low participation of referring

physicians in M&M meetings is a missed chance to address some of these issues.

Table 7a. Regular morbidity and mortality (M&M) meetings in ICU		
Mortality meetings	**Total**	***(%)***
Yes	125	*(60)*
No	83	*(40)*
Sub-total	**208**	
Not answered	3	
Total	**211**	

Table 7b. Attendance of morbidity and mortality (M&M) meetings in ICU	
Which health professionals attend (Answers may be multiple)	**Total *n = 202***
Anaesthetists	94
Intensive care consultants	114
ICU trainees	96
Microbiologists/infection control	20
Nurses	76
Nutrition/dietetic staff	15
Operating department practitioners	5
Pathologists	2
Pharmacists	17
Physiotherapists	28
Referring physicians	14
Referring surgeons	19
Other	13

The ICU consultant who completed the ICU questionnaire was asked whether each patient's management would be reviewed at an M&M meeting. This data is shown in Table 8. There were only 168 cases where it was stated that the patient's management would be reviewed. It should be remembered that there were 560 deaths within this study (see Data overview chapter). Whilst there were a large number of cases where the answer to the question of review was unknown or not answered there is the possibility that a number of deaths were not considered at mortality and morbidity meetings. Tables 9a and 9b show that consultant physicians were informed in less than 27% of cases where a patient originally under their care was to be reviewed at an M&M meeting and even with notification, the attendance of a consultant physician was low. Many of the problems in the care of acute medical patients, which have been highlighted in the literature and in this study, are rooted in process issues that are ideally suited to be broached in the forum of M&M meetings. The low level of M&M meetings and participation from medicine is therefore very worrying. In addition, the data suggests that the guidance issued by the Federation of the Royal Colleges of Physicians of the UK is not being complied with [9]. This document states that '"all deaths within 24 hours of admission and other unexpected deaths should be promptly reviewed in a multidisciplinary forum".

Table 8. Review of patients' management at morbidity and mortality (M&M) meetings (answers from ICU consultants)		
Patient's management to be reviewed at M&M meeting?	**Total**	***(%)***
Yes	168	*(20)*
No	686	*(80)*
Sub-total	**854**	
Unknown	178	
Not answered	564	
Total	**1,596**	

Table 9a. Consultant physician informed of patient's review at morbidity and mortality (M&M) meetings		
Physician informed?	**Total**	***(%)***
Yes	21	*(27)*
No	57	*(73)*
Sub-total	**78**	
Unknown	29	
Not answered	61	
Total	**168**	

Table 9b. Consulting physician attendance of patient's review at morbidity and mortality (M&M) meetings		
Physician present?	**Total**	***(%)***
Yes	6	*(33)*
No	12	*(67)*
Sub-total	**18**	
Unknown	2	
Not answered	1	
Total	**21**	

Recommendations

- **All entries in the notes should be dated and timed and should end with a legible name, status and contact number (bleep or telephone).**
- **Each entry should clearly identify the name and grade of the most senior doctor involved in the patient episode.**
- **Resuscitation status should be documented in patients who are at risk of deterioration [40]. Each trust should audit compliance with this recommendation by regular review of patients who suffered a cardiac arrest and assessment of whether a 'do not attempt resuscitation' order should have been made prior to this event.**