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PROFESSIONAL ISSUES

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ABSTRACT – The structure of medical records becomes ever more critical with the advent of electronic records. The Health Informatics Unit (HIU) of the Royal College of Physicians has two work streams in this area. The Records Standards programme is developing generic standards for all entries into medical notes and standards for the content of admission, handover and discharge records. The Information Laboratory (*i*Lab) focuses on hospital episode statistics and their use for monitoring clinician performance. Clinician endorsement of the work is achieved through extensive consultations. Generic medical record-keeping standards are now available.

KEY WORDS: medical records, performance monitoring, risk management standards, structured documentation

The structure and quality of medical records has been a matter of clinical, administrative and legal interest for many years. The days when physicians kept the records of all their patients in a single ledger for their own use are long gone, however, it is remarkable that so many entries in medical notes are still written as though purely for the purpose of the clinician communicating information to themselves. Medical records are now used not only for primary but also for secondary clinical purposes including reporting the activity of hospital services, monitoring the performance of hospitals, and research. As the pressure to improve the quality of doctors' practice and hospital services grows, with ever increasing expectations and costs of medical care, so the focus on the structure and content of the clinical record is becoming ever more important.1 The advent of electronic medical records is also bringing with it an added urgency for standardisation so that notes can be recorded, stored and reliably retrieved using computers.

The Health Informatics Unit (HIU) of the Royal College of Physicians (RCP) developed a programme on medical records that identified the need, reviewed the literature and established two major streams of work – the Information Laboratory $(iLab)^2$ and the Records Standards programme.

The Information Laboratory (*i*Lab)

The *i*Lab examined the routine outputs from medical records, coded locally in hospitals and subsequently submitted centrally to the Hospital Episode Statistics database (HES) and the Patient Episode Database for Wales (PEDW). The source documentation for these datasets is the clinical record, but the end product is rarely validated by clinicians, and very few physicians report any regular communication with clinical coding staff.³

The first phase of the *i*Lab's work involved the sharing of individual, consultant-level analyses of HES and PEDW with consultant physicians, specifically to investigate attitudes towards the validity and usefulness of these data in supporting appraisal and revalidation, and monitoring performance. Significant problems with data quality were highlighted, although clinical engagement led to improvements by identifying local process issues and raising awareness of the need for record-keeping standards. The *i*Lab concluded that hospital episode statistics are not presently fit for monitoring the performance of individual physicians.⁴

The Records Standards programme

The aim of the HIU's Records Standards programme is to improve the quality of clinical information in the hospital setting by:

- developing standards for recording and communicating information about patients
- applying these standards to medical records to improve the validity and utility of patient data
- structuring the records so that the information can be incorporated into electronic records, shared with other healthcare providers and analysed for performance monitoring with confidence.

The process of developing these standards started with a review⁵ and the publication of draft record-keeping standards.⁶ The draft standards have a number of components:

- standards that apply to all medical entries (generic medical record-keeping standards)
- structures that should be applied to all admission clerking records (structured admission records)

Table 1. Generic medical record-keeping standards. In this context, the medical record is the operational record of clinical information relating to hospital care. Many of the standards will be recorded automatically in electronic records.

Standard	Description				
1	The patient's complete medical record should be available at all times during their stay at hospital.				
2	Every page in the medical record should include the patient's name, identification number (NHS number [*]) and location in the hospital.				
3	The contents of the medical record should have a standardised structure and layout.				
4	Documentation within the medical record should reflect the continuum of patient care and should be viewable in chronological order.				
5	Data recorded or communicated on admission, handover and discharge should be recorded using a standardised proforma.**				
6	Every entry in the medical record should be dated, timed (24-hour clock), legible and signed by the person making the entry. The name and designation of the person making the entry should be legibly printed against their signature. Deletions and alterations should be countersigned.				
7	Entries to the medical record should be made as soon as possible after the event to be documented (eg change in clinical state, ward round, investigation) and before the relevant staff member goes off duty. If there is a delay, the time of the event and the delay should be recorded.				
8	Every entry in the medical record should identify the most senior healthcare professional present (who is responsible for decision making) at the time the entry is made.				
9	On each occasion the consultant responsible for the patient's care changes, the name of the new responsible consultant and the date and time of the agreed transfer of care, should be recorded.				
10	An entry should be made in the medical record whenever a patient is seen by a doctor. When there is no entry in the hospital record for more than four days for acute medical care or seven days for long-stay continuing care, the next entry should explain why.§				
11	The discharge record/discharge summary should be commenced at the time a patient is admitted to hospital.				
12	Advance directives, consent and resuscitation status statements must be clearly recorded in the medical record.				

The NHS number is being introduced as the required patient identifier.

"This standard is not intended to mean that a handover proforma should be used for every handover of every patient rather that any patient handover information should have a standardised structure.

[§]The maximum interval between entries in the record would in normal circumstances be 24 hours or less. The maximum interval that would cover a bank holiday weekend, however, should be four days.

standards that should apply to handover and discharge summaries.

The research results pointed not only to the benefits of standardised records but also identified substantial differences between hospitals in the way records are structured and organised.^{1,7,8} While there may be a policy or administrative desire to reduce variation in the structure and content of medical records across NHS hospitals, the views of clinicians, who are responsible for the care of their patients and for making entries into the medical notes, must be considered in any process that aims to improve standardisation. The HIU is therefore consulting widely. The consultation process includes seeking the views of practising doctors and professional and policy bodies. Professional groups have included medical directors of acute trusts, the BMA specialist subcommittees, the RCP Acute General Internal Medicine Committee and the RCP Clinical Standards Board. The policy consultation has included the Department of Health (DH) Care Records Service, DH Digital and Health Information Policy Directorate and the NHS Connecting for Health Common User Interface project.⁹ The HIU is also collaborating with a number of academic groups with research projects in this field.

The generic medical record-keeping standards

Following initial consultations the HIU simplified the description of the generic medical record-keeping standards to increase their usability and applicability in the clinical setting. It was agreed that the standards should be:

- consistent with best medical practice
- clear and concise
- in line with national guidance on record standards
- auditable.

There are 12 generic medical record-keeping standards which are applicable to any patient's medical record (Table 1). Comments from the wide-ranging consultation process have been incorporated with the published standards. Many of these standards, such as date and time of each entry, will be automatically recorded in electronic records. Others such as the Table 2. Results from the Doctors.net email survey in response to the question: Should the same, standardised headings be used in the proforma for acute medical admissions in all NHS hospitals?

	Number of responses (% within group)			
Position	Agree	No opinion	Disagree	Total
Consultant	283 (74.1)	22 (6.2)	70 (19.7)	355 (100)
Registrar	255 (61.9)	29 (7.0)	128 (31.1)	412 (100)
Non-consultant career grade/GP	115 (72.8)	14 (8.9)	29 (18.4)	158 (100)
SHO	297 (61.7)	24 (5.0)	160 (33.3)	481 (100)
Other	83 (74.1)	9 (8.0)	20 (17.9)	112 (100)
Total	1,013 (66.7)	98 (6.5)	407 (26.8)	1,518 (100)

GP = general practitioner; SHO = senior house officer.

Table 3. Results from the Fellows and Members of the Royal College of Physicians email survey in response to the question: Should the same, standardised headings be used in the proforma for acute medical admissions in all NHS hospitals?

	Number of responses (% within group)				
Position	Agree	No opinion	Disagree	Total	
Consultant	539 (86.0)	33 (5.3)	55 (8.8)	627 (100)	
Registrar	272 (79.5)	11 (3.2)	59 (17.3)	342 (100)	
Non-consultant career grade	21 (91.3)	O (O)	2 (8.7)	23 (100)	
SHO	40 (83.3)	3 (6.3)	5 (10.4)	48 (100)	
Other	40 (85.1)	3 (6.4)	4 (8.5)	47 (100)	
Total	912 (83.9)	50 (4.6)	125 (11.5)	1,087 (100)	

SHO = senior house officer.

frequency of record entries are designed to be flexible and pragmatic.

These generic medical record-keeping standards, applicable to all medical entries, have now been agreed and are available on a separate laminated sheet.

Structured admission records

As part of the HIU consultation process relating to structured admission records, practising UK doctors were invited to respond to a question in two email surveys. The first, conducted on behalf of the RCP by Doctors.net, was to all Doctors.net members (including GPs). The second was to all Fellows and Members of the RCP. Both polls were open until at least 1,000 doctors had responded. The question in both surveys was: 'Should the same, standardised headings be used in the proforma for acute medical admission in all NHS hospitals?'

Results of both polls show that doctors are overwhelmingly in favour of a standardised structure for the recording of admission clerking (Tables 2 and 3). A further online questionnaire has explored opinion in relation to proposed specific headings that should appear on an admission proforma. This poll received over 3,000 responses which are currently being analysed.

Next steps

The *i*Lab's current work is focused on the sharing of locally produced analyses of routine data with clinicians from all specialties in hospitals in Wales. A report of the findings will be published in the summer of 2007.

The RCP is currently developing an audit tool to support the implementation of the generic medical record-keeping standards. Use of this tool can contribute evidence of good practice towards the clinical records criteria assessed by the Healthcare Commission's Framework for Risk Management.¹⁰

The HIU project developing standardised admission clerking records has been recognised by Connecting for Health as an important component of the electronic patient record-keeping programme in hospitals. Piloting of the draft structure in paper format will commence during the summer of 2007.

The work on the admission, handover and discharge records is continuing.

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