

### Medical admissions can be made easier, quicker and better by the use of a pre-printed Medical Admission Proforma

Doctors on-call for emergency medical admissions spend a great deal of time recording and assimilating clinical information in hospital case notes. Audit has shown that important data may be omitted in many cases<sup>1,2</sup>. Rapid retrieval of key data by other doctors in emergency situations may be difficult because data entry is not standardized. However, careful design and presentation can improve patient care and patient safety<sup>3</sup>. Benefit has been shown when structured documents were used in acute asthma management and in geriatric medicine<sup>2,4,5</sup>. We have devised a medical admission proforma to facilitate the recording and retrieval of key data for patients admitted as medical emergencies to a 900 bed teaching hospital. The proforma was developed and modified extensively over two years based on wide consultation with junior and senior medical staff.

A survey of 64 junior physicians and 10 consultant physicians showed that the new system was preferred to blank history sheets by 83% of junior doctors and 100% of senior doctors. Doctors believed that the new system helped them to record a more complete history of the patient's medical condition and to extract key data quickly,

especially on 'post-take' ward rounds or when called to review ill patients under the care of other medical teams. 64% of junior doctors and 90% of consultants reported that the new system saved them time compared with their experience using plain history sheets and a further 20% of junior doctors felt that the new system was time-neutral (much of the form is pre-printed including checklists for items such as Mini-Mental score or Glasgow Coma Score). Structured audit of 110 medical admissions (53 using plain history sheets and 57 using the new proforma) showed significant improvements in almost all aspects of history recording (see table 1). There was no reduction in the number of words used to describe the patient's presenting complaint. The use of customised proformas for 217 patients with asthma and COPD improved the recording of Peak Expiratory Flow by the admitting doctor from 41% to 84% ( $p < 0.0001$ ).

A well designed medical admission proforma can reduce the workload of the medical admissions team whilst improving the quality and quantity of data recording and the ease of data retrieval. The development of high quality proforma required constant feedback from junior and senior physicians and elderly care teams. Even slight changes to the format had major effects on the effectiveness of the document. We are happy for other medical teams to use the Hope Hospital Medical

Admissions Proforma in hospitals throughout the UK and in other countries (and to modify the document for local use). The full proformas (general medical, asthma and COPD) are available free of charge from the Royal College of Physicians website ([www.rcplondon.ac.uk](http://www.rcplondon.ac.uk)) or by return of e-mail from [rodriscoll@hope.srht.nwest.nhs.uk](mailto:rodriscoll@hope.srht.nwest.nhs.uk)

#### References

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#### Audit of 110 medical admissions using free text history sheets or structured medical admission proformas.

Statistical comparisons used Fisher's Exact test.

(\*Case records of 164 patients with asthma or COPD were audited for blood gas results).

Audit item	Freetext history sheets n = 53	Medical admission proforma n = 57	P value (Fisher's Exact Test)
Legible identity of admitting doctor	30%	65%	p=0.0003
Legible job description of admitting doctor	41%	81%	p=<0.0001
Clear record of past medical history	92%	100%	NS
Clear and complete smoking history	68%	89%	p=0.0089
Clear and complete alcohol history	62%	84%	p= 0.034
Clear history of drug allergies	72%	89%	p=0.0276
Clear record of laboratory test results	75%	91%	p=0.0378
Inspired oxygen concentration recorded with blood gas results*	67% (52/78)	95% (82/86)	p=<0.0001
CXR result recorded clearly in notes	73%	93%	p=0.0088