a large number of these smaller components to form sensible combinations or patterns. This process of breaking down sound waveforms and reformulating into combination of nerve signals, allows the brain to distinguish the different frequencies of sound which form the individual notes, different pitches in music, music combinations (harmonics) or noise.

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Misuse of 'toxin'

The helpful article by Thanacoody and Waring on toxic effects on the cardiovascular system mistakenly described the substances involved as 'toxins' (*Clin Med* February 2008 pp 92–5).

For more than a century that term has been applied only to complex substances, almost always of biological, origin form plants, micro-organisms etc, and not to simple organic chemicals of the type discussed in that paper. The distinction is recognised in standard 'British' and 'American' English dictionaries, eg the Oxford English and Webster's dictionaries, in specialised dictionaries, such as Dorland's and Mosby's, and in the titles of many journals and monographs.

The specific term 'toxin' is valuable because it immediately alerts the reader to the general nature of the chemicals being considered and the likelihood of special features of their origins, properties and effects. The simpler, organic substances may be called 'toxic chemicals' as there is no single equivalent word other than the less familiar 'toxicant'.

Please let us maintain a helpful linguistic distinction in English and one that is also mirrored in many other languages.

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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Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section.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.

A new differential for pyrexia of unknown origin?

I was recently involved in the care of a patient under investigation for pyrexia of unknown origin. He suffered from isolated spikes in temperature every evening and occasionally in the morning. During a ward round I noticed that an infrared ear thermometer was being used to take his temperature immediately after he removed headphones connected to his bedside television. On further questioning the patient reported that he had been using his headphones very frequently and he was often asked to remove them to have his temperature recorded. Having obtained the instruction leaflet for the thermometer I discovered that headphones should be removed a least 20 minutes before use. Could this be a new addition to the differential for pyrexia of unknown origin? If this is the case then a large number of admissions may have been unnecessarily prolonged.

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Poor communication: 'hot' dictation rather than pro formas?

The consultant post-take ward round (PTWR) is a critical time for reviewing the relevant history, examination and investigations and planning further investigation and treatment. Poor documentation is common and limits the benefits of consultant decisions on patient care. Pro formas have been proposed as a possible solution to this.

In support of this, a PTWR pro forma introduced locally in 2003 significantly improved PTWR documentation in four key areas: differential diagnosis, management plan, deep vein thrombosis (DVT) prophylaxis, and resuscitation status.[1] Pro formas, however, are not long lasting. Ho *et al* noted an initial improvement in surgical records by a clerking pro forma which had significantly declined only three years later.[2]

In 2007, PTWR pro forma documentation was reassessed (having anticipated that completion was poor) with added stringency of a PTWR consultant countersignature (in the hope this would improve completion). In the study, 75 clinical records were examined. Quality of the PTWR documentation was assessed for the same criteria used in the 2003 study (Table 1).[1] Three additional assessed parameters included clerking doctor bleep number and rank, and PTWR consultant countersignature.

The results from 2007 are shown in Table 1 (Fishers exact test, Graph Pad Prism version 4). Only 72 of the 75 examined records had a documented PTWR. There was a significant decline in three parameters (patient name, clerking doctor name and blood results). A less significant decline was observed in four other parameters (consultant name, differential diagnosis, management plan and electrocardiogram results). Significant improvements were noted in only two parameters (hospital number and DVT prophylaxis). Other parameters were unchanged. The supplementary parameters (bleep number, rank and consultant countersignature) were present in low proportions (33, 29 and 12% respectively).

These results have obvious serious implications on patient care. Although not measured in this audit, it is likely that similar problems in communication to primary care on the discharge papers occur for the same reasons. This increases the chance of hospital readmission as the general practitioner (GP) is unable to access sufficient information about recent admission.

This study confirms that the previous benefits of a PTWR pro forma on standards of documentation decline over four years despite the implementation of a consultant countersignature. Maintaining high quality clinical documentation remains

Table 1. Documentation of key items of information on post-take ward round pro forma in 2003, initially after introduction and four years later with consultant countersignature.

Criterion	2003 results[5] (n=95; %)	2007 results (n=72; %)	Odds ratio	95% confidence interval	p value
Patient's name	100	94	12.55	0.66–237.1	0.03
Hospital number	81	94	0.25	0.08–0.78	0.01
Consultant's name	98	93	3.47	0.65–18.4	0.14
Clerker's name	81	58	3.06	1.53–6.12	0.0018
Differential diagnosis	96	92	2.07	0.56–7.62	0.33
Management plan	99	93	7.02	0.8–61.5	0.086
CXR	47	51	0.85	0.46 –1.57	0.64
Bloods	85	64	3.27	1.55–6.88	0.0018
ECG	57	46	1.56	0.84–2.88	0.16
DVT prophylaxis	24	39	0.50	0.26–0.98	0.04
Resuscitation status	35	36	0.94	0.50–1.79	0.87

CXR = chest X-ray; DVT = deep vein thrombosis; ECG = electrodardiogram.

difficult, despite recommendations by professional bodies and defence organisations. The General Medical Council recommend 'clear, accurate, legible and contemporaneous patient records' and the Medical Defence Union advise legible writing, with a date, time, name and signature.[3,4]

Future interventions (over and above administering the PTWR pro forma at induction programmes and including the clerker's rank and bleep section on the pro forma) need to be innovative and might include consultant dictation at the point of admission. This would obviously require administrative support and funding but if prospective pilot studies could demonstrate a reduction in patient stay (by improved communication to the wards) and readmission rates (by improved communication to the GP), then in the long term this could potentially be cost saving (and hence attractive to commissioners) and improve patient care.

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Junior doctors' awareness of terminology relating to key medico-legal and ethical principles: a questionnaire survey

Trainee doctors often face ethical dilemmas and medico-legal issues in daily practice. However, it is widely perceived that the training in these areas is often inadequate. Furthermore, the awareness of legal and ethical principles among doctors is variable.[1] Junior doctors' familiarity with terminology relating to key medico-legal and ethical concepts was therefore examined.

Methods

Junior doctors in three UK hospitals were surveyed. For this, a standardised questionnaire was developed by a team of senior specialist registrars in geriatric medicine who have experience in the issues covered in the survey (information available from authors). Junior doctors from three hospitals, one university hospital and two district general hospitals were invited to complete the questionnaire, rating their own knowledge and understanding of commonly used medico-legal and ethical terms, on a subjective scale. The consenting junior doctors (pre-registration house officer (PRHO) to specialist registrar (SpR) level) from medicine, surgery, accident and emergency and anaesthetic departments in three hospitals in East Anglia completed the questionnaire anonymously.

Results

Over a four-week period, 100 junior doctors consented and completed the questionnaire. Large proportions of doctors had heard of enduring power of attorney (80%; 95% confidence interval (CI): 78.5%, 81.5%) and advanced directive (72%; 95% CI: 70.7%, 73.3%), but fewer than half had heard of the Assisted Dying Bill (43%; 95% CI: 42.3, 43.7). Of those familiar with these terms, the majority felt they did not have a good understanding of each of these terms (Table 1). The majority of respondents felt their postgraduate training in medico-legal and ethical concepts was inadequate: self-reported adequacy of postgraduate training were 78% (69.9, 86.1) and 71% (62.9, 79.1) for medico-legal and ethical issues, respectively.

Table 1. Self-reported level of understanding on legal issues among junior doctors in acute medical specialties.

	Enduring power of attorney	Advanced directive	Assisted Dying Bill
No understanding	21 (26.6; 16.9, 36.3)	8 (11.1; 3.8, 18.4)	16 (37.2; 22.8, 51.6)
Little understanding	36 (45.6; 34.6, 56.6)	30 (41.7; 30.3, 53.1)	20 (46.5; 31.6, 61.4)
Moderate or exact understanding	23 (29.1; 19.1, 39.1)	34 (47.2; 35.7, 58.7)	7 (16.3; 5.3, 27.3)

n (%; 95% confidence interval).