overall patient care by controlling the intake to unified rotational training programmes within national guidelines.

Specialists would then gain advanced clinical experience and attend programmes of continuing education. In due course they would become senior specialists, clinical teachers, medical managers, or whatever they wish. The varied training opportunities available under this scheme would lead to "a wide range of specialist posts."²⁴

The future of research and development in medicine is of vital importance to its viability, and there is still a cohort of trainees, albeit a small one, that would not wish to climb this ladder of academic clinical practice.

An academic career could start with a post as lecturer for research minded specialist registrars during the last year of their training. With their certificate of completion of specialist training they would be appointed senior lecturer or assistant professor with clinical specialist status. Each would associate with a reader, associate professor, or a professor and with junior staff form an academic clinical unit. Further progress would depend on the incumbent's performance.

We have an unprecedented opportunity to construct a pattern for postgraduate and continuing professional progress in both clinical and academic practice. Let us not lose it because of rigid outdated and no longer viable concepts.

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Continuing medical education

Competence and performance are measurable but do not equate with practice

EDITOR,—T M Hayes's personal view is shared by many doctors, at least in the context of primary care.¹ In the name of adult education, the continuing medical education industry is growing rapidly—carving out a niche for its existence. The structures are proliferating in the form of mentors, preceptors, cotutors, tutors, clinical supervisors, facilitators, "fellows," and associate and assistant advisers. The processes are also expanding. But, unfortunately, the outcomes are dubious and unproved. Marinker has warned about the rare link between structures, processes, and outcomes.²

Although competence and performance are measurable, they do not equate with practice. Performance can focus only on isolated subjects, which are selected for measurement. Practice is more gestalt than performance. One method of personalised continuing medical education is portfolio based learning,³ in which the individual learner collects experiential evidence. Crucial to the value of portfolio based learning are identifying further learning needs, documenting how this would be achieved, and monitoring the progress. Though it is relevant, it is labour intensive—and perhaps would be taken on by those who live to learn rather than those who learn to live. Though outcome in the form of health gain for the population cannot be proved, continuing medical education seems to increase the density of the neocortical

synapses by promoting dendritic growth⁴ at least in the educators if not the educated.

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The suppliers of continuing medical education may be the only ones to benefit

EDITOR,—T M Hayes argues cogently for linking continuing medical education to audit and peer review. This view, however, may be ignored in the sudden dash towards implementing continuing medical education. The conference of the medical royal colleges and their faculties is already designing formal education programmes and giving approval for various activities of continuing medical education.² Given the background of the purchaser-provider split in the NHS, a boom in the continuing medical education industry, much on the lines of what has happened in the United States, can be expected. The crucial question is "Does continuing medical education improve health outcomes?"

Currently the proposals entail monitoring only the processes constituting such education. Courses, conferences, distance learning, and skills upgrading have all been suggested as forming part of the scheme. The initial requirement is for 50 credits (one hour of real educational time) a year with an eventual target of 100 credits a year.²

Unless the needs of the scheme are set objectively there is a danger that continuing medical education will become an end in itself. It can be effective only if it is linked to specific outcomes that are defined explicitly at the outset. If we are not careful scarce NHS resources will be wasted on initiatives with unproved effectiveness and the only people to benefit from continuing medical education will be its proliferating suppliers.

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College programme will be acceptable to clinicians

EDITOR,—T M Hayes has an unnecessarily pessimistic view of continuing medical education.¹ I agree that continuing education has been with us for as long as there has been a medical profession; what is new is that doctors are finding increasing difficulty in keeping up to date with the prodigious growth of knowledge while working within the straitjacket of a health service.

The programme currently being launched by the medical royal colleges is designed to ensure that all career grade physicians have both the time and the opportunities for learning to maintain and improve their competence. The main obstacle to doctors keeping up to date is scarcity of time. The colleges are committed to the provision of protected time for education and to full use of

study leave. Much medical education is already provided at a local level, and in addition to this many of the specialist societies run successful postgraduate activities around Britain.

In formalising continuing medical education we have aimed at creating a simple, easily documented, and realistic system that will nevertheless be sufficiently robust to withstand scrutiny. As well as providing doctors with a record of their own professional development the programme should yield valuable information on the strengths and weaknesses of medical education throughout Britain.

The style of continuing medical education that we envisage at this college is far removed from that which Hayes fears. We hope that it will be flexible, self developed, and acceptable to doctors.

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Assessing quality of economic submissions to the *BMJ*

EDITOR,—Health economics literature has increased exponentially in the past 10 years.¹ Some authors have expressed concern at the variability of its quality^{2,3} and the absence of written policies on economic submissions.⁴ We report the results of a pilot study to investigate the *BMJ's* practices concerning peer review of economic articles and the desirability of criteria for economic submissions.

To assess the difference between accepted and rejected economic manuscripts we examined all submissions to the *BMJ* from 1 July to 29 September 1994. Of 712 submissions, 28 were economic items (3.9% of total submissions (95% confidence interval 2.6% to 5.6%)). After authors' names, affiliations, and any other distinguishing items (for example, editing marks) had been removed the submissions were assessed by two reviewers, who scored specific characteristics by answering yes, no, or don't know to questions in checklists assessing methodological and presentational issues.

Papers with an economic component are heterogeneous because of the type of work undertaken and their destination. We identified three types of manuscripts with different editorial fates, which we classified as (a) economic evaluations—studies in which analytical methods are used to define choices in the allocation of resources; (b) economic studies—descriptive and comparative studies, methods, and overviews giving the cost of illness; or (c) other economic papers—letters, opinion pieces, and manuscripts with minimal economic input (for instance, those that mention costs in passing).

A high proportion of economic evaluations were

Fate of economic manuscript by type. Figures are numbers (proportions and 95% confidence intervals)

	No in study	Refereed	Accepted
Economic evaluations	5	4 (0.80 (0.28 to 0.99))	3 (0.60 (0.14 to 0.94))
Economic studies	14	11 (0.78 (0.49 to 0.95))	1 (0.07 (0.01 to 0.33))
Other economic papers	9	2 (0.02 (0.02 to 0.60))	0 (0.00 to 0.33))

refereed and accepted, but most economic studies were refereed and rejected (table). We found high overall concordance between the *BMJ's* and reviewers' decisions for economic evaluations,

suggesting that their peer review is relatively straightforward, but low concordance for the rest.

Quality checklists available in the literature² are inadequate to assess the wide variety of types of economic submissions as they are aimed at economic evaluations, which possibly make up a minority of the literature. More thought needs to be devoted to the importance and assessment of economic studies and other economic papers. Authors need guidance about which journal to submit their work to and how it will be judged.

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Adjusting for underenumeration in the 1991 census

EDITOR,—The problem of non-random underenumeration in the 1991 census has recently been highlighted in the *BMJ*.^{1,2} This problem may be substantial for certain groups in the population. Glover pointed out that the population figures for black Caribbeans, especially young men, may be substantially underestimated.³ Such issues are important for those concerned with estimating the differential prevalence of diseases among minority groups. We, for example, are estimating the prevalence of psychosis among different ethnic groups in two inner London geographical sectors as part of a wider study of psychiatric services. Case identification is crucial, but we also need to use the most accurate population estimates as denominators, and these have proved difficult to ascertain.

The Office of Population Censuses and Surveys has produced factors for adjusting the census for ethnic group but these are based on the whole United Kingdom; adjustments for age and sex are given for smaller areas, but the two types of adjustment are not independent effects and so cannot be used together. Until these matters can be resolved, we are using the so called estimating with confidence (EwC) gold standard population estimates produced at the Census Microdata Unit at Manchester University.⁴ These are available for electoral wards and enumeration districts in five year age bands by sex, and they have been derived by adjusting the census according to sociodemographic characteristics. They are available to registered users of the 1991 local base/small area statistics datasets distributed by Manchester Information Datasets and Associated Services (MIDAS), as are the factors used to adjust the census figures. The factors can be applied to

whichever of the tables are of interest: in our case we have applied them to the breakdown by ethnic group-age-sex.

To the extent that people from ethnic minority groups tend to live in more socially deprived areas their populations are adjusted appropriately with these factors. To give an idea of the magnitude of adjustment, the standard OPCS adjustment in inner London for men aged 25-29 is 1.22; for one particular ward in our area the equivalent estimating with confidence factor is 1.40, which means that nearly 30% are estimated to have been missed from the census. We recommend that those who require population figures over small areas or for minority groups, or both, should consider using these population adjustments. Further details are published by MIDAS (tel: 0161 275 6109 or email: info@mcc.ac.uk).

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Journals sponsored by single companies

EDITOR,—The *BMJ*, like most journals and many postgraduate educational activities, is subsidised by the support of pharmaceutical companies. This is usually in the form of advertisements from many companies, and readers hope that that support, freely coming from numerous companies, in no way influences editorial content. Some other journals, however, now receive support from a single company, which is not immediately apparent. This is material to the assessment of content and yet not immediately obvious to busy readers or browsers.

Over six years ago I gave up the editorship of one particular respiratory journal the instant that the journal became sponsored solely by one company. This was a wrench to me for I had thoroughly enjoyed producing what I believed was a useful tool for sharing information about respiratory medicine with others in primary and secondary care. I subsequently watched as the journal was sponsored first by one company and then by another. It seemed that the editorial content initially often mentioned the first company's products and then subsequently mentioned a variety of the second company's drugs, giving the impression to me at least that this was more than coincidence.

That this is now a journal sponsored by one company should be apparent, for each advertisement is for the products of one company. It is also true that on the title pages are the minute words "supported through a sole advertising arrangement from company X." I wonder, however, whether the average reader realises this, and as a profession shouldn't we insist on larger declarations of sole sponsorship? I am tempted to wonder whether all three photographs of inhalers would be of one company's products if the journal was not sponsored solely by that company? An illustration on the front cover of a child using an inhaler carries the legend inside, "Trouble free use of inhaler X"; this seems to be little more than a tacit advertisement.

I value the superb support that all the pharmaceutical companies offer to postgraduate education in Britain, but shouldn't that sponsorship be obvious and stated boldly rather than have to be deduced?

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Deputising general practitioners' role in emergencies

EDITOR,—The other day my neighbour died. As she became ill her husband called their general practitioner and was referred to a deputising service. Later he called an ambulance as she deteriorated further, and the ambulance and the deputising doctor arrived together. I witnessed this and went to help; cardiac massage had been started. I am a staff doctor in accident and emergency and an instructor on an advanced life support (cardiac) course. I have no experience of care in the community and was well aware that this was not my "turf," but I knew the paramedic crew and could see that they needed help. I soon realised that the deputising doctor had had no training in cardiac resuscitation.

We attempted advanced life support resuscitation, including intubation and defibrillation (both done by the paramedics), monitoring, and drug administration, but the patient died. The deputising doctor said that he could not certify the body, gave his apologies, and left, saying that he would call the police. The old man (who had cared for his wife for years) was left. His daughter arrived. He wanted to call his own doctor out; "He'd have stayed with me," he said. The police came and did a masterful job in difficult circumstances. I spoke to the paramedic crew, helped prepare their report, and then went home.

This experience left some worries.

Firstly, I was concerned that a doctor on call in the community should have had no training in cardiac resuscitation. Even his technique for cardiac massage was woefully inadequate.

Secondly, the paramedic crew, who were fully trained, were held back by this doctor's lack of knowledge and acceptance of them. They were unable to override him and take control; it was only my presence and our understanding of the common language of cardiac resuscitation that enabled us to sideline the deputising doctor and get on with the emergency in hand. The crew were grateful for my intervention, which helped diffuse their frustration.

Thirdly, in a time of increasing use of deputising services for night calls, who now cares for the family? This family's general practitioner would have done but was not on duty. The two police officers did a good job: they were polite, courteous, and comforting to the old man. No such care was given by the deputising doctor, who just left.

Attention must be given to this aspect of emergency cover. Prompt treatment of cardiac arrest can save lives. We now train paramedic crews to help in this. It is surely wrong that they should be held back from performing this job by inexperienced deputising general practitioners.

The old man was just left; there was no care or counselling for him. If this practice is widespread, the use of deputising services will lead to a drop in the standard of care. This may be inevitable, but it must be acknowledged if we are going to address the care of our patients and their families honestly.

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