foreseeable future. In the same issue Professor C J Roberts (p 751) asserted that high-technology diagnostic medicine has developed faster than our ability to cope with the financial implications of this progress and wanted us to consider the level of risk avoidance that the NHS should be prepared to undertake.

All this has profound implications for radiology. During the past years NHS investment in conventional x-ray equipment has diminished and yet the demands placed on imaging departments continue to rise. Only in the private medical field is investment in the new imaging technology increasing appreciably. Without more resources the NHS imaging services cannot cope with an increasing demand, and referring doctors will need to restrain themselves or be restrained. It behoves all users to omit examinations that are relatively unlikely to influence management. That is the message of Professor Roberts's paper. We all need to know more about which clinical circumstances justify an imaging examination. This research is more important to radiology in the UK than further development of high-technology diagnostic medicine.

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Organisation of diabetic care

SIR,—I fully agree with Dr P A Thorn and Dr P J Watkins (18 Spetember, p 787) that care of diabetic patients requires "enthusiasm and organisation." I would like to report the findings of a study with 58 general practitioners in east Fife, some of which have important implications for the organisation of diabetic care in general practice. The study included 197 insulin-independent diabetics who were randomly allocated to general practice or hospital clinic follow-up. Regular meetings between hospital staff and general practice staff (consultants, hospital dietitians, nursing sisters, community nurses, general practitioners, and chiropodists) were held before and during the study; a special record form was designed for inclusion in general practitioners' case notes; and an administrative system for recalling patients in general practice was provided for practices that did not organise their own.

After two years' follow-up no statistically significant differences could be demonstrated between the two groups in any of the biochemical or clinical indicators selected for measurement (symptoms, limb function, fundi, blood pressure, weight, and blood sugar and urine analysis), though there was an overall impression that the general practice group included more patients whose diabetic control had deteriorated. The problems of organising a randomised controlled trial in general practice and of measuring outcome over two years, however, make us cautious of attributing too much to relatively small numbers, particularly as the diabetics in the general practice group in this study were seen at regular consulting sessions because each doctor had too few diabetics to make a mini-clinic practical.

General practice care was half the cost of hospital care and was considerably cheaper for patients and the ambulance service. If general practice is to provide effective follow-up care of diabetic patients, our study suggests that hospitals should adopt a selective policy of discharging diabetics to interested practitioners and that, more importantly, those practitioners who are interested should be provided with the resources that will enable them to provide more effective care—diabetes-trained practice nurses, community dietitians, better recall systems, and immediate blood sugar analysis.

One result, however, which did cause concern was the greater number of deaths in the general practice group (17 as against eight), which could not be explained by careful review of each individual case. I would be interested to know if anyone else has had a similar experience.

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ABC of Diabetes: diabetic emergencies

SIR,—My reply to the letter by Dr P Baker (18 September, p 810) is best presented as a personal declaration of priorities. Firstly, having previously encountered one fatality from hypokalaemia during treatment of diabetic ketoacidosis and having read of similar occurrences,[1 2] I attach more importance to the serum potassium than to the serum sodium during the initial phase of treatment. Professor Alberti, who takes an even more serious view of potassium replacement, knows of instances where the serum potassium has taken as long as three hours to come through (personal communication), and he now advocates "blind" administration of potassium infusions in diabetic ketoacidosis.[3] Secondly, I feel that prompt rehydration is a matter of great urgency, justifying even "blind" administration of isotonic saline, because this alone can lower the blood glucose significantly in the first one to two hours[4] and because "rehydrated" cells have improved insulin sensitivity.[5]

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[1] Watkins PJ, Soler NG, Fitzgerald MJ, *et al. Br Med J* 1970;ii:89-91.
[2] Abramson E, Arky R. *JAMA* 1966;**196**:115-7.
[3] Johnston DG, Alberti KGMM. *Clin Endocrinol Metab* 1980;**9**:437-57.
[4] Page MM, Alberti KGMM, Greenwood R, *et al. Br Med J* 1974;ii:687-90.
[5] Waldhausl W, Kleinberger G, Korn A, *et al. Diabetes* 1979;**28**:577-83.

Medical education

SIR,—I read with interest the personal view of Mr Keith Norcross (2 October, p 969).

One of the potential advantages of a period of economic restraint is that it gives us an opportunity to rethink our priorities and to redistribute our resources. One change that I would like to propose is that the universities concentrate on running courses in medical science resulting in an honours or pass degree, and leave the teaching of clinical medicine entirely to the National Health Service.

Within the NHS students would be taught on an apprenticeship basis at both the present established teaching hospitals and the surrounding district general hospitals. The established clinical chairs could be abandoned, and contributions for good teaching and research recognised by the universities by granting more personal chairs; indeed, some jobs could be advertised with this title in order to attract a certain type of person. Clinical research would be carried out by a combination of teamwork between the clinical departments and the university departments, the former producing the medium for the research and the latter the scientific expertise, and from within the NHS using funds attracted from outside sources.

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Compulsory seat-belt use

SIR,—Your article "Compulsory seat-belt use" (2 October, p 987) carries the implication that in certain circumstances it will be possible to issue a certificate for exemption from the wearing of a seat belt on medical grounds without having conducted a medical examination for that purpose. Whereas this is indeed the implication contained in the health notice on which the article was based, it is not the view held by this Association as expressed at the last meeting of the Representative Body. We fully endorse the guidelines laid down by the Medical Commission on Accident Prevention; these indicate that no single condition will of itself entitle the person to an exemption certificate. The dangers of false or cursory certification are set out in chapter 9 of the BMA's *Handbook of Medical Ethics*. Before putting his name to an exemption certificate the doctor would do well to consider the possible consequences and, indeed, if a person is unfit to drive when wearing a seat belt to consider whether he is fit to drive at all.

The health notice in question also contains two other statements to which we take exception. The first of these is that examinations should in all cases be carried out by the person's own general practitioner. We believe that there are considerable advantages in this examination being conducted by an independent doctor, who can consider the matter dispassionately without risk to the continuing relationship between the general practitioner and his list patient.

Moreover, with this belief in mind we have negotiated an agreement with the Department of Transport that certain persons shall be entitled to examination for the purposes of considering exemption by DHSS medical boards. This is an absolute right of any person in receipt of supplementary benefit, and is not, as the circular suggests, conditional on the unwillingness of the doctor to waive his fee.

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Doctors or defence?

SIR,—Professor J Parkhouse's leading article (25 September, p 829) makes several interesting points on medical staffing although it is difficult to discern his main contention. The fundamental question whether we have, or shall have in the near future, too many doctors remains unanswered. While it is acknowledged that we do not know how many doctors we