with splenomegaly but, unexpectedly, bone marrow fibrosis and hypocholesterolaemia (total cholesterol concentration 2.4 mmol/l, low density lipoprotein cholesterol concentration 1.5 mmol/l). It seems to us that the common denominator in low proliferating disorders with hypocholesterolaemia—that is, hairy cell leukaemia, myelofibrosis, and Gaucher's disease—is splenomegaly with an expanded reticuloendothelial system. Acute myeloid leukaemia, in contrast, is a disease of rapidly proliferating tumour cells, in which hypocholesterolaemia is associated with tumour cell burden and increased degradation by tumour cells mediated by low density lipoprotein receptors.

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Primary care in accident and emergency departments

Outcomes of study cast doubt on sensitivity of triage decisions and triage criteria

EDITOR,—Jeremy Dale and colleagues highlight the difficult and unresolved problem of appropriate triage for patients attending accident and emergency departments with "primary care" type problems.¹ We have had a primary care service in our accident and emergency department since February 1993, which we recently analysed.²

At St Mary's Hospital we developed a triage decision tree to help nurses differentiate between accident and emergency and general practice patients. Those presenting with minor injuries considered to be unlikely to require radiography were channelled to see a general practitioner, while those likely to need a radiographic investigation were directed to an accident and emergency doctor. We think that it is appropriate to include this differentiation in the triage scheme because general practitioners are not specifically trained in interpreting x ray films. In the community general practitioners receive a radiologist's report of the investigation they have requested rather than the film itself. In contrast, doctors working in an accident and emergency department gain experience and specific training and feedback on interpreting x ray films.

When the triage decision tree was used 9960 (16.6%) of the 60 000 patients presenting to the accident and emergency department of St Mary's Hospital were deemed appropriate for primary care, compared with the 40.9% in Dale and colleagues' study at King's College Hospital. In contrast to the study at King's, where 25.5% of primary care patients and 46.7% of accident and emergency patients underwent radiography, only 152 (15.8%) of 960 primary care patients in our study did.

We agree with the authors that some of the outcomes of this study cast doubt on the sensitivity of the triage decisions or perhaps the triage criteria themselves. We believe that patients with recent injury who are likely to require radiography are best treated by doctors trained in accident and emergency medicine.

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Cost of employing general practitioners in department may outweigh savings

EDITOR,—Jeremy Dale and colleagues state that important benefits in terms of resource allocation might result if general practitioners were employed in accident and emergency departments to manage patients with "primary care" type problems.¹ Although this may be the case at King's College Hospital, where the rate of patients attending with such problems is 41%, in areas of Britain with lower primary care attendance rates the cost of employing general practitioners might outweigh any savings from reductions in investigations.

The accident and emergency department at the Royal Hospital, Wolverhampton, is in an inner city area and sees roughly 76 000 new patients a year. A prospective study was undertaken between 12 July 1993 and 19 September 1993 to determine the size and epidemiology of the primary care problem. Primary care patients were defined as those whose condition could best be managed by a general practitioner (for example, those with ear or throat infections, urinary tract infections, or chronic back pain). Staff were trained so that consistency of categorisation was assured. A total of 13 453 new patients were seen, 13 184 (98%) of whom had a general practitioner (compared with 91% at King's College Hospital). Altogether 461 (3.4%) patients were judged to have problems that would have been more appropriately managed by their general practitioner. Three hundred and twenty seven (71%) primary care attenders presented on Monday to Friday, two thirds of them presenting during surgery hours. On average, therefore, the Royal Hospital saw seven primary care attenders a day, most of whom attended when access to their general practitioner was easiest. The cost of employing general practitioners to deal with such a small number of patients is unlikely to outweigh the cost of excess investigations.

Why two similar departments should have such a wide variation in the primary care attendance rate is unclear, but this comparison highlights the need to exercise caution when extrapolating from the experience of one department to that of another. We believe that the individual accident and emergency departments should analyse the size and epidemiology of the primary care "problem" locally before adopting expensive solutions.

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Parents practise triage for paediatric attendances

EDITOR,—We agree with Jeremy Dale and colleagues that there is considerable overlap between the conditions presenting to primary care and those presenting to accident and emergency departments.¹ We would point out, however, that, like many other authors, Dale and colleagues have drawn conclusions using information collected from only one side of the interface between primary and secondary care.

Our own study of paediatric attendances in accident and emergency was also a prospective study but examined attendance and process measures in primary care simultaneously to provide a more complete picture of the use of health care services by this group of patients.² Dale and colleagues point out that triage can be used to differentiate patients into primary care and accident and emergency groups. The results of our study suggest that parents already practise a form of triage before seeking medical help. For example, over six weeks 730 children from the study practice sought medical advice; of these, 629 presented initially to the general practitioner, who dealt with all but 25 without onward referral to the accident and emergency department (two of the 25 did not attend the department). One hundred and twenty seven practice patients were seen at the accident and emergency department, of whom 104 were referred by their parents. The patients taken direct to the accident and emergency department differed in several important respects from those who attended their general practitioner initially. Of the 96 patients who consulted after injury, 74 (77%) presented direct to the accident and emergency department, compared with 27 (4%) of the 634 children who had not been injured ($P < 0.0001$). This finding is supported by another study of childhood injuries, which found that 102 (85%) of 120 injured children were taken direct to an accident and emergency department by their parents. In addition, seven of eight children with fractures in our study were taken direct to the accident and emergency department by their parents. The median age of children who consulted their general practitioner first was 3 years, compared with a median of 6 years for those who presented to the accident and emergency department first.

We broadly agree with Dale and colleagues' conclusions, but we would emphasise the need for caution in interpreting studies that examine only one side of the interface since a distorted perspective may be obtained.

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Causal link between low cholesterol and cancer is unlikely

EDITOR,—Goya Wannamethee and colleagues report that very low total cholesterol concentrations (< 4.8 mmol/l) are associated with an excess risk of cancer and other non-cardiovascular diseases, which seems to be due to preclinical cancer, chronic ill health, smoking, and heavy drinking.¹ Yet even patients with clinically overt cancer rarely have such low cholesterol concentrations. We studied the cholesterol concentrations in

200 consecutive patients with various malignancies (83 men, mean (SD) age 62.6 (1.5) years; 117 women, mean age 63.7 (1.3) years). Thirty five of them had lymphoma, nine leukaemia, 15 bronchioalveolar carcinoma, 32 breast cancer, 28 urogenital carcinoma, 19 gastric carcinoma, 22 cancer of the colon, and 40 other carcinomas.

Only in the 51 men with weight loss (mean weight loss 8.0 (0.9) kg) was the mean cholesterol concentration (4.68 (0.21) mmol/l) lower than Wannamethee and colleagues' limit of 4.8 mmol/l. The cholesterol concentration was 5.50 (0.35) mmol/l in the 32 men who did not lose weight, 6.43 (0.40) mmol/l in the 62 women who did not lose weight, and 5.35 (0.33) mmol/l in the 55 women who did lose weight (mean weight loss 6.2 (1.2) kg). When the patients were divided according to the stage of cancer the mean cholesterol concentration was higher than 4.8 mmol/l in all groups, being 5.19 (0.38) mmol/l in the men with a localised tumour, 4.88 (0.21) mmol/l in the men with metastases, 6.30 (0.35) mmol/l in the women without metastases, and 5.61 (0.40) mmol/l in the women with metastases.

These data support Wannamethee and colleagues' conclusion that a very low cholesterol concentration is associated with only a slightly increased risk of cancer and that there is no causal relation. Our data also show that preclinical cancer is not likely to be responsible for low cholesterol concentrations because even clinically overt cancer produces low cholesterol concentration only in men with weight loss. Even in patients with advanced cancer (metastases) the cholesterol concentration was higher than 4.8 mmol/l. Therefore, there must be other factors (chronic ill health, smoking, and heavy drinking, as Wannamethee and colleagues suggest) that lead simultaneously to an increased risk of cancer and to low cholesterol concentrations in some subjects.

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Beware of the distorting interpreter

EDITOR,—Michael Phelan and Sue Parkman's article on the problems that arise when an interpreter is used during clinical work is instructive.¹ A small point that I would like to add concerns personal feelings and overt or covert interests or prejudices. Phelan and Parkman mention this as an important issue when one is counting on "friends or relatives" of the client, but it can also be important when interpreters are used, as I found when interviewing a young widow from an Asian culture.

I first met the family when I saw both parents about their son's behavioural problems at primary school. The father was much older than his wife, and it was clear that he thought that his son was perfect and that the mother was supposed to serve the boy, whatever issue was involved.

When the father died of a sudden heart attack we heard reports of the mother's grief and of the boy's intense distress. Because the mother was supposed to speak little English (the father's good knowledge of English had meant that this was not a factor in earlier meetings), we organised the services of an

interpreter for a meeting with her and her son.

After considerable discussion of the widow's feelings, and after we had asked the son to leave the room, I felt justified in verbalising my impression that the widow was experiencing not only pain but also relief at her husband's death. When I asked the interpreter to convey this to the mother he laughed and told me that my idea was plainly wrong. After some discussion he said something to the mother, but her facial expression suggested that she had not been told my views, and I had to argue this further with the interpreter. Finally, he said something to the widow that must have been closer to my interpretation, since she smiled, nodded vigorously, and said—in English—that perhaps it was wrong that she should harbour such feelings but that she certainly did so.

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Critique of fundholding study contained errors

EDITOR,—We wish to correct three errors that Jennifer Dixon and Howard Glennerster make in their article on fundholding when they discuss our comparative study of fundholding and non-fundholding practices.¹

Firstly, they state incorrectly that in our study in Oxford fundholders' prescribing costs decreased while costs in non-fundholding practices increased. In fact, costs increased in both groups, although the increase was slightly less steep among the fundholders (13.2% compared with 18.7%).² Further follow up of the practices showed that fundholders were unable to sustain this advantage two years later.

Secondly, the authors repeat Keeley's erroneous claim that most of the non-fundholding practices in our study were preparing for fundholding in 1991-2.³ This is not true. Some of these practices have now joined the scheme, but they had not done so by the time that data collection for phase 2 of our study ended in 1992.

The third mistake is to suggest that Howie *et al*'s Scottish study and our study produced conflicting findings on the impact of fundholding on referral rates.⁴ The two studies used different definitions of referrals, different denominators, and different methods of collecting data. They are therefore not directly comparable, and the patterns observed in the two studies are at least potentially compatible.

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The case for student fundholding

EDITOR,—Teaching in medical schools is of variable quality, and I have often pondered how good teaching might be promoted by those who are taught. The answer, in fact, is learnt early by most students: "selective attendance," which is also sometimes disparagingly termed "skiving."

This laudable activity is usually misinterpreted by the medical school authorities, who seek to combat it. Undergraduates are adult learners capable of determining whether an hour is better spent with a textbook or being taught badly. If the authorities fear that the few main selective attenders will pass their examinations but make bad doctors then surely the error is with the examinations and not the students.

Picture the typical scene. The professor of surgery is searching for his students. "Where are those lazy blighters? I'm going to fail the lot of them." But with insight he would say: "Where are those students? Not here? The teaching on this firm must be awful; I'd better do something about it."

A close look at selective attendance, rather than the selective attenders, would provide the medical school with revelatory insights. This time honoured process should be formalised by allowing market forces to operate. Students should be given control over the vast sums of money they bring into the NHS, to spend where they see fit, by a system that I propose to call student fundholding.

The service increment for teaching provides about £40 000 per clinical student each year for the teaching hospitals.¹⁻³ Teaching hospitals, however, have always been more expensive than other hospitals, and the service increment was simply a soubriquet attached post hoc to this additional cost.¹ Since this money is not spent entirely on teaching, the loss of all of it might affect a hospital's patient care. However, students must have control of a sufficient sum to hurt the hospitals to encourage them to improve their teaching to win back the money.

Bad education would vanish with the pressures of open competition. Teaching would have its own kudos. Teaching and research would separate, which would eliminate the paradox of teaching hospitals having staff interested primarily in research. Teaching qualifications would become advantageous or necessary. The ridiculous situation whereby most medical educators know nothing about educating, perhaps having had only a few courses on how to deliver lectures when they began in their post, would disappear. Who would appoint a consultant surgeon with no surgical experience, expecting her just to muddle through after the odd afternoon course on how to repair a leaking aortic aneurysm? Long live skiving.

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Correction

Vitamin D receptor genotype and bone mineral density

Owing to an editorial error, one of the authors was omitted from the footnote to the second of the two letters in this cluster (the authors' reply, 30 September, p 875). The missing name was that of J S Lanchbury, senior lecturer in immunogenetics at the Molecular Immunogenetics Unit, United Medical and Dental Schools, London SE1 9RT.