

other involved paramedical staff, such as physiotherapists.

This work is among the first of its kind in the United Kingdom and with time may prove to be a powerful system for evaluating and improving the care of patients with a stroke. As has recently been pointed out such research is much needed.⁵

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GP referrals for x-ray examination

Sir,

Recent studies^{1,2} of referral for x-ray examinations have recommended active promotion of the Royal College of Radiologists' guidelines³ among general practitioners. These guidelines are not intended to replace clinical judgement but to enhance it in times of doubt or difficulty. However, as far as we are aware general practitioners who refer patients to St George's Hospital, London, for diagnostic imaging have not yet received copies of the guidelines.

As a pilot study on compliance with x-ray guidelines in general practice, x-ray referral forms were analysed for 518 general practice patients who attended the department of radiology at St George's Hospital, London on one day each week during July and August 1991. A total of 598 patient examinations were performed.

The types of x-ray requested were chest 32.6%, spine 28.3%, joint 24.9%, bone 10.5%, abdomen 1.2%, and others 2.5%. The information on each x-ray form was assessed by the authors for compliance with the Royal College of Radiologists' guidelines.³

A total of 389 requests (65.1%) conformed to the guidelines; 209 requests (34.9%) did not. However, this is better than found in a review of 100 general practitioner requests for lumbar spine radiography where 52% were judged to be outside the guidelines.² Overall, 37.5% of x-rays showed positive clinical findings. This rate is comparable with previous studies in general practice.⁴

It has been estimated that at least 20% of radiological examinations carried out in National Health Service hospitals are clinically unhelpful.¹ Although evidence suggests that general practitioners use direct access to x-ray diagnosis responsibly and with discrimination,⁵ it seems likely that there may be room for improvement. Our data lend additional support to previous recommendations for the promotion of the Royal College of Radiologists' guidelines among general practitioners.

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General practice research

Sir,

We read with interest the helpful and informative discussion paper by Murphy and colleagues (April *Journal*, p.162). As researchers who continue to benefit from fruitful collaboration with general practitioners we found much in the paper that accords with our experience. However, we have noted a worrying trend over the last year, that general practitioners are increasingly reluctant or unable to participate in such research.

There remain three fundamental barriers to research in general practice: lack of a solid academic tradition in general practice; increasing emphasis on financial remuneration as a consequence of health service reorganization and fundholding; and the limited value placed on research output in the career structure of general practitioners.

Only when these problems are addressed will research in primary care settings reach its true potential.

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Telephone consultations

Sir,

I read with interest the editorial by Virji (May *Journal*, p.179) and the research papers on telephone consultations by Hallam, and Nagle and colleagues (May *Journal*, p.186, 190) as I had undertaken a project in my training practice investigating doctor initiated telephone consultations. The study was carried out to establish whether telephoning in advance those patients booked to attend the surgery the following day would provide an efficient and acceptable additional service. The hypothesis was that the time saved by patients no longer wishing to attend the surgery following a telephone consultation would be greater than the time spent telephoning.

Using medical notes already prepared for the next day's surgery no additional note retrieval was required and patients were telephoned after evening surgery finished at 18.00 hours in the order of their booked attendances. If the patient was a child, the parents were telephoned. Patients were not telephoned if it was known from a previous consultation that they would need a face to face consultation or if the telephone call would be likely to cause embarrassment. Clearly, the patient needed to have a telephone and the number needed to have been recorded in the notes. On four evenings in different weeks, telephone calls were made to eight, four, five and three patients, respectively, which took 45 minutes, 30 minutes, 25

minutes and 20 minutes. Following a telephone consultation and the issuing of a prescription where appropriate the number of patients no longer wishing to attend the surgery were four, two, two and none on each of the four evenings.

The normal booking interval is 10 minutes per patient. Thus there was no net saving of time in conducting telephone consultations before surgery consultations. The study was therefore not pursued further.

The approach seemed to be acceptable to the patients and was easy to perform. Doctor initiated telephone consultations are an interesting area for research and saving time is only one aspect. Doctor initiated telephoning allows more control over patient selection and workload and as for patient initiated telephone consultations the need for a surgery attendance or home visit may be obviated.

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been entirely comparable. For example, there were significantly more Asian patients in the self referral group — were similar numbers of patients in both groups registered with a general practitioner?

Classifying severity on arrival at the coronary care unit in terms of chest pain is misleading: the general practitioner referred patients may have received adequate analgesia by injection.

Finally, the study did not include those patients who had died before reaching the coronary care unit, and those patients who referred themselves, did not have cardiac chest pain and were not admitted to the coronary care unit. Survival is the most important outcome, not delay in admission, therefore it would be interesting to know whether mode of referral actually affects mortality. Further research in this area, involving general practitioners, would be useful.

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Admission times for patients with myocardial infarction

Sir,

In their paper on mode of referral and admission time to coronary care units for patients with suspected myocardial infarction, (April *Journal*, p.145) Ahmad and colleagues, make some interesting conclusions which I fear are correct but cannot be supported by their study.

I appreciate the value of thrombolytic therapy and see that initiating therapy quickly is important. Therefore, increasingly, when contacted by a patient with a classical history of myocardial infarction I instruct the patient to telephone for an ambulance. I may attend, hoping to meet the ambulance, but usually find the paramedical team more than capable of dealing with the situation. To class these patients as 'self referrals' ignores an important part of primary care. There is a need to reduce unnecessary referrals and the more we encourage a fast track approach then the longer the delay for the 'general practitioner referred' patients. The patients I attend are those who have atypical chest pain or an imprecise history. Obviously, by attending the patient a delay is caused in their hospital admission, but sending them all via emergency ambulance is impractical.

The two groups of patients in the study may not have come from the same population and therefore may not have

Differential diagnosis of otitis media and externa

Sir,

McCombe and Rogers (letters, April *Journal*, p.170) present results of a postal enquiry into the differential diagnosis of otitis media and externa referring especially to confusion in the diagnosis of otitis externa. No mention was made of the age of patients or the diagnosis in children.

In 1976 I reported in some detail a survey of 300 consecutive new cases of earache of aural origin in general practice, and predominantly in children with otitis externa.¹ I discussed the differential diagnosis in children in detail and asserted that otitis media is not as common as is believed. I also pointed out that hospital doctors do not see otitis externa in children because of its fleeting nature. Hospital doctors teach general practitioners how to examine ears, without mentioning otitis externa specifically as a common pathological entity in children.

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Reference

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GP working style and patient health status

Sir,

The paper by Huygen and his team (April *Journal*, p.141) on the relationship between the working styles of general practitioners and the health status of their patients addresses perhaps the most important concern for general practice. Unfortunately I am not yet convinced that the presented data sufficiently support such an important and welcome conclusion, that imaginative practice gives better outcomes. An effect from patient selection is not adequately excluded. If 'good' doctors get 'good' patients, then 'bad' doctors get 'bad' patients; as Robin Pinsent memorably, though in my opinion wrongly, once remarked to me, 'doctors get the patients they deserve.'

If the authors could give more data relating directly or indirectly to the social class of the women in the three general practitioner groups showing no systematic differences this could reinforce their conclusion. However, even within small social categories, selection, and deselection of doctors can have a powerful effect. My own experience with a virtually closed, almost entirely manual working class population, was that over many years a small number of patients (usually about seven families out of about 500 families in the village) were hostile to policies of anticipatory care, and preferred prescription, certification, and referral more or less on demand, which our practice would not provide. This certainly led to systematic bias and, for this reason, when I tried to compare mortality outcome with adjacent practices, I compared the villages, not the practices.¹ Though the group of patients registered with other practices was always small, its group behaviour would probably have been sufficiently deviant to affect results profoundly had we undertaken a study similar to that of Huygen and colleagues.

The conclusion by Huygen and his team may be true (I believe it probably is) but the two explanations (a real effect and an effect of social selection) are not mutually exclusive. I suspect that social selection is quantitatively more important.

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