

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