erence ranges. We therefore suggest that the problems of standardising the reporting of results for anticoagulation clinics would be reduced by use of the proportion of patients achieving therapeutic international normalised ratios, the percentage of time for which the ratios are within the therapeutic reference range, and the mean (± 1 SD) ratio.

The model of care reported by Macgregor and colleagues may have a place in anticoagulant treatment, but their small observational study cannot draw the broad conclusion that if we "are willing to devolve management to pharmacists then good therapeutic control is achievable in the surgery."

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Authors' reply

EDITOR,—The lack of methodological detail, information on the patients studied, and data to support our conclusions are a consequence of publication as a short report. The full peer reviewed report of our study includes all these data.¹

The study included all patients prescribed anticoagulants, and hence all indications for warfarin. Of the 23 measurements of the international normalised ratio (in 12 patients) that were outside the target range, 15 were in patients recently discharged from hospital and not yet stabilised. Four occurred after interacting medicines were started (two during hospital admission and two by a general practitioner). Referral to the next clinic by the prescribing general practitioner avoided adverse effects, which is one advantage of monitoring the ratio at the point of prescribing. The remaining four cases were probably attributable to changes in cardiac status.

Patients' knowledge was assessed by structured interview when they first attended the surgery clinic. Altogether 24% did not know what action to take if they missed a dose of anticoagulant, 69% could not state signs of excessive ratios, 34% were unaware of the effects of alcohol, and 14% did not know that they should avoid medicines containing aspirin. After reinforcing information was given over three months the results were 0%, 14%, 7%, and 4% respectively.

Surjeet Adlakha and colleagues rightly point out the need for near patient testing to meet good quality control standards. Evaluation of the Biotrack has found good correlation with laboratory methods of evaluating the prothrombin time.² Contrary to the authors' comments that portable coagulometers cannot be entered into national external quality assurance schemes, it is possible to register with the schemes for quality assessment of tests that use a Boehringer-Mannheim coagulometer. The most important issue in assessing suitability is whether differences between results obtained by the instrument and by laboratory methods would alter the dose of warfarin prescribed. In this study random venous samples were submitted to the hospital laboratory. On no occasion would the

dose prescribed have been different had the laboratory result been used instead.

We agree with D A Fitzmaurice and F D R Hobbs that results from anticoagulant clinics should be standardised, provided the system can accommodate inappropriate changes of dose in stabilised patients with international normalised ratios marginally outside the target range. Adjusting the dose in these patients may be more detrimental than beneficial.

The management of chronic diseases should consider patients' convenience if possible. Several patients discharged from hospital have required home monitoring or initiation of treatment. Near patient testing facilitates this. Having up to date information on medical problems and treatment available in medical notes is also advantageous. Our patients asked to continue with management in the surgery when the practice became fundholding.

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GPs in Glasgow are in favour of primary care emergency centres

EDITOR,—Val Lattimer and colleagues ascertained views about the future provision of out of hours primary medical care from general practitioners who were members of two research networks; their response rate was 74% (n=199).¹ A similar survey was carried out among the 610 general practitioners registered with Greater Glasgow Health Board; the response rate of the doctors was also 74% (n=454), and that of the practices was 88%. The objective was to find out the extent to which proposals for developing primary care emergency centres were in tune with professional opinion and, therefore, the likelihood of their acceptance.

Of the general practitioners in Greater Glasgow who responded to the survey, 327 used a commercial deputising service out of hours. More than half of those who responded (238) thought that primary care emergency centres should be established but that home visits out of hours should continue for those requiring them. Most general practitioners (249) thought that primary care emergency centres would be an effective and efficient method of delivering out of hours care, although they were uncertain whether patients would find the service acceptable and thought that trivial calls might increase.

General practitioners over the age of 50 and female general practitioners were more likely to endorse these centres (83/130 v 159/322 (P<0.01) and 109/179 v 129/270 (P<0.01) respectively). This may be related to the finding that these two groups contained a high proportion of doctors who used a commercial deputising service almost all of the time or who had no out of hours commitment at all. Could this be a consequence of the pressures of home visiting (often in the dark) in a city like Glasgow? Is the job perceived as too dangerous and too stressful? These questions should be researched and debated as the results may affect the way in which out of hours care is delivered in the larger cities.

The general practitioners who responded to this study believed that primary care emergency centres should be situated locally (not necessarily in casualty departments) and that they should be staffed

by at least two doctors, one nurse, and one receptionist and should have a security guard. Altogether 198 general practitioners stated they would be prepared to work in these centres.

The results of this survey informed the decision to set up six primary care emergency centres in Glasgow covering 900 000 patients and over 90% of the city's general practitioners. These centres opened last March.

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Evidence-Based Medicine

Reviews may not be sufficiently critical of evidence

EDITOR,—The deficiencies of the approach taken by *Evidence-Based Medicine* in reviewing research papers, pointed out by NJ Pearson and colleagues,¹ are highlighted by the almost diametrically opposite conclusions reached in its review of a recent trial of interferon beta-1b² and in a more thorough review of the same evidence in the *Drug and Therapeutics Bulletin*.³

The review in the *Drug and Therapeutics Bulletin* critically examined the design of the trial⁴ and pointed out that the results were not analysed on an intention to treat basis and that this might have favoured interferon beta-1b. Also, the double blind nature of the design did not hold since the side effects of the drug identified those in the arm given active treatment. The review further made the point that this is not an idle criticism of the design since a fifth of the relapses (a primary outcome measure) were self reported. If these self reported relapses were excluded and the analysis confined to objectively verified cases of relapse then the difference between the groups became non-significant. None of these points are brought out in the commentary in *Evidence-Based Medicine*.

These criticisms may not vitiate the broad conclusions of the trial, but the difference in approach of the two publications led to very different bottom line statements. *Evidence-Based Medicine* concluded, "Physicians are advised to consider the use of [interferon beta-1b] in their patients with relapsing-remitting [multiple sclerosis]." The *Drug and Therapeutics Bulletin*, on the other hand, concluded, "In selected patients with [multiple sclerosis] interferon beta-1b possibly reduces the number and severity of clinical relapses. The drug is expensive and the evidence for its benefit is weak."

The moral of the story seems to be that even hard evidence may not be all that it is made out to be. Those who depend on reviews of published research rather than the original reports should be warned that such reviews may not always be sufficiently critical of the evidence.

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