The timing of surveys may also be of critical importance. The longer the gap between use of services and interview the greater the chances of recall bias, of people overlooking matters that affected them during the episode of care and of changes in their appreciation of services. Such considerations led Rees and Wallace to conclude that factors relating to the timing of research interviews 'make it difficult to interpret the 'meaning' of the results and once again suggest caution in accepting some research conclusions about client satisfaction'.⁷

Perhaps the most important methodological consideration relates to the type of questionnaire used to acquire data. It is axiomatic that the questionnaire should not distort the consumers' view, but achieving this is not an easy task. There are two basic ways of surveying satisfaction, either through a closed structured questionnaire or through an open ended questionnaire which allows respondents to express their opinions more freely. With open unstructured questions respondents will only mention important aspects of care that occur to them at the time of interview while with direct questions respondents will have their attention drawn to specific aspects of the service. These will be aspects that are important to the researcher, a view that the respondent may not necessarily share. A review of previous questionnaire surveys shows that dissatisfaction ratings with the more open style are consistently lower than those obtained with closed questions.3

Having acquired the data the next problem arises when an attempt is made to rank satisfaction on a scale. Such ranking is of particular importance when different services are to be compared or when the same service is to be compared at different times. There are essentially three approaches to rating satisfaction: a global evaluation of the service to give an overall satisfaction score; a satisfaction measure for each aspect of care; or a composite score derived from satisfaction scores for each aspect of care. The advantages and disadvantages of each approach have been well documented³ and Kincey and colleagues reported considerable differences in satisfaction scores between the three methods.⁸

The definition and measurement of satisfaction is fraught with difficulties but is still likely to be worthwhile, providing that those who commission such surveys know the limitations and hence the legitimate uses of the resulting data. If surveys are sufficiently comprehensive to include details of peoples' experiences and suggestions for change, they may quite reasonably be used to indicate aspects of the services that need to be modified. They may also be used to measure satisfaction before and after a service change.

Such surveys should not, however, be used alone as evaluations of the quality of care. If 90% of patients are satisfied with

a service this observation only becomes a measure of quality if some agreed standard of excellence is available for comparison. Setting this standard is likely to be a difficult task. Who will decide for example, if 90% satisfaction with a particular general practitioner's service makes it a quality service? Will it be the family practitioner committees, the doctors or the public?

Ultimately, it is only worthwhile measuring consumer opinion if those who measure it are going to regard it as being of value. At best it could provide an indirect means by which patients could participate in policy development and decision-making in the NHS. Unfortunately, the many problems and pitfalls outlined above will mean that, like politicians dismissing opinion polls, those who want to will be able to discount the results of future surveys. Given these problems, a more appropriate way of increasing consumer participation in the NHS might be to allow the public greater representation on family practitioner committees, district and regional health authorities and the boards of self governing hospitals.

BRIAN KEEBLE

Registrar, Department of Community Medicine, Oxford District Health Authority

ANN KEERI E

Research co-ordinator, Department of Community Medicine and General Practice, University of Oxford

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Prescribing research: PACT to the future

In the past, research into general practitioners' prescribing has consisted of a variety of descriptive studies, attempts to identify factors that influence prescribing behaviour, audit of patient management protocols, and latterly the development and evaluation of information feedback systems and general practice formularies. Now that the PACT (prescribing analyses and cost) information system has been installed, the government proposes to introduce indicative prescribing budgets for general practitioners, and to foster the production of agreed local formularies in an attempt to exert 'downward pressure' on drug expenditure. While the government's motives can be debated, there is no doubt that these changes will have an effect on

prescribing habits and on the future direction of prescribing research.

Less than a year after doctors received their first PACT reports, the government has indicated that a major enhancement of the system is needed for the operation of the indicative budget scheme. The PACT scheme had a long gestation. Full computerization of the Prescription Pricing Authority was recommended in 1977² but only completed in 1986. Before the PACT system began only a small minority of doctors requested analyses of their prescribing,³ yet several studies had demonstrated that feedback to doctors can result in change in prescribing⁴⁶ though this change may disappear if the feedback ceases.⁷

PACT is an inexpensive system, and as more than 25% of doctors have asked for more detailed reports it has at least generated interest (Wakefield J, personal communication). Although PACT is not equal to underpinning the indicative budgets, it may be valuable for education and audit, and it is to be used in pilot studies in six family practitioner committee areas.

There is general agreement on the criteria for rational prescribing — the prescribed drug should be necessary, effective, safe and economic — but no single method has yet been devised to promote or evaluate good prescribing behaviour. 8 The information provided by the PACT system — cost and number of items in various permutations — is at best a proxy outcome measure of the complex act of prescribing, and it is unlikely to discriminate between good and bad prescribing.9 The notion that low cost always equates to good care is in any case unsupported. 10 Nevertheless, PACT is a vast improvement over the PD2 scheme, especially in the presentation of the data, but it has limitations. It is not related to clinical care or consultation rates, and it provides no clue to the proportion of consultations that end without a prescription being issued. Repeat prescriptions cannot be identified, though they may comprise 66% of the total items, 11 and make a major contribution to the overall cost.¹² In addition, practices in deprived areas may incur higher costs by issuing large numbers of prescriptions for over-thecounter items, but this is not acknowledged.

Although the PACT system would be much enhanced if repeat prescriptions could be identified, it is possible to audit drugs used mainly for acute conditions (for example antibiotics) or those used mainly for chronic conditions (for example antihypertensives). Equally 'systematic' or 'symptomatic' prescriptions can be audited. 10 The pilot studies could usefully concentrate on facilitating better control of long-term medication, about which there is justifiable concern. Many of the patients receiving repeat prescriptions are elderly, 13 and some of the drugs commonly prescribed in this way are of questionable value and potentially dangerous, for example psychotropic¹⁴ and nonsteroidal anti-inflammatory drugs. 15 The doctors involved in the pilot studies should also agree a standard definition of a repeat prescription. We would argue that 'any third or subsequent prescription of the same drug issued consecutively for the same episode of illness'16 is a better definition than 'a drug given without a direct consultation' which is more commonly cited.¹⁷ Computerization of repeat prescribing has shown its worth in the review of long-term medication, 18 and the PACT system now offers this opportunity to practices that are not computerized. It remains to be seen whether the family practitioner committees involved in the studies can achieve similar success across a number of practices. They should certainly concentrate on improving care rather than simply reducing cost.

The information provided by the PACT system may help doctors to improve patient care. The same cannot be said with confidence of the indicative prescribing budgets, which seem to impose a positive disincentive on doctors to find cases needing drug treatment, for example undiagnosed hypertensive or hyperlipidaemic patients. Indeed, the concentration on cost is something of a paradox. Cost is but one element of rational prescribing and there is some evidence that high cost practices provide better care¹⁰ (interestingly rational prescribing is not mentioned in the working paper on indicative prescribing budgets). In any case the cost of drugs is controlled by the Department of Health through the pharmaceutical price regulation scheme. By some quirk of history the Department of Health is responsible for both the cost-effective use of drugs in the National Health Service and the welfare of the British drug industry. Many would argue that these represent conflicting aims. 19 In particular it is likely that any downward pressure on expenditure

produced by changes in doctors' prescribing will immediately be counteracted by price increases agreed with the drug companies through the price regulation scheme. Research into changes in costs will therefore need to be based on stable drug prices.

Whatever the limitations of the PACT system and the doubts about prescribing budgets, the onus is on general practitioners to demonstrate the process of rational prescribing and the outcome of better clinical care. For these purposes much may be gained by the production of agreed local formularies, which should include drugs selected for their efficacy, safety record and economy. The development of general practice formularies has been one of the major themes in prescribing research in recent years. Formularies have been produced by individual practices, ^{20,21} by local College faculties (Northern Ireland faculty of the Royal College of General Practitioners, practice formulary 1988-90), by a large and diverse group of doctors,²² and as a by-product of repeat prescribing control.²³ The impact of a formulary on cost has been evaluated, 16 and doctors' compliance with a formulary has been measured. 20,22 The process of developing a formulary offers opportunities for education, selfaudit and peer review. It has been argued that compliance with a formulary could provide a convenient and reliable index of rational prescribing.8 If so, the future lies in the development of such local formularies supported by an appropriately adjusted PACT information feedback system, in which formulary compliance would be a major feature. Hitherto, formularies have been developed as a means of improving care, with reducing costs as a secondary aim.²⁴ Long may such altruism last. The College's new information folder on producing a formulary is timely and most welcome.

The net effects of the PACT system, indicative prescribing budgets and local formularies are difficult to predict and the area is ripe for research. The range of drugs used by general practitioners may decrease. Products may be withdrawn from the market, only to reappear as over-the-counter items. The drug companies may be inhibited from investing in research and development. The incidence of drug side-effects and the frequency of yellow card reports may change. Family practitioner committees may purchase generic drugs in bulk at discounted prices on behalf of their community pharmacists and dispensing doctors. Doctors may generally be more reluctant to prescribe, and patients with undetected hypertension and hyperlipidaemia may continue to go untreated. Patients' expectations may change. But will outcome in terms of clinical care or cost be affected in any way?

Prescribing is a central feature of general practice. In the present political climate the cost of prescribed drugs has assumed an importance out of all proportion. Research on prescribing in the future should concentrate on the development of ways of promoting and evaluating the rational use of drug therapy, and not simply on ways of reducing costs. The best hope of achieving this lies in the production of agreed local formularies, with their implied promise of standard management protocols. These could be audited with appropriately adjusted information feedback systems.²⁵

J.A. SPENCER

General practitioner and lecturer,

Division of Primary Health Care, University of Newcastle

T.D. VAN ZWANENBERG General practitioner and senior lecturer, Division of Primary Health Care, University of Newcastle

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MRCGP Examination

The dates for the next two examinations for Membership of the College are as follows:

October/December 1989

October/December 1989
Written papers: Tuesday 31 October 1989 at centres in London, Manchester, Edinburgh, Newcastle, Cardiff, Belfast, Dublin, Liverpool, Ripon, Birmingham and Exeter. Oral examinations: in Edinburgh on Monday 11 and Tuesday 12 December and in London from Wednesday 13 to Saturday 16 December inclusive. The closing date for applications is Friday 8 September 1989.

May/July 1990

Written papers: Tuesday 8 May 1990. Oral examinations: in Edinburgh from Monday 25 to Wednesday 27 June inclusive and in London from Thursday 28 June of Saturday 7 July inclusive. The closing date for applications is Friday 23 February

Further details and an application form can be obtained from the Examination Department, Royal College of General Practitioners, 14 Princes Gate, London SW7 1PU.

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Original articles should normally be no longer than 3000 words, arranged in the usual order of summary, introduction, method, results, discussion and references. Letters to the Editor should be brief - 400 words maximum - and should be typed in double

Illustrations of all kinds, including photographs, are welcomed. Graphs and other line drawings need not be submitted as finished artwork - rough drawings are sufficient, provided they are clear and adequately annotated.

Metric units, SI units and the 24-hour clock are preferred. Numerals up to 10 should be spelt, 10 and over as figures. Use the approved names of drugs, though proprietary names may follow in brackets. Avoid abbreviations.

References should be in the Vancouver style as used in the Journal. Their accuracy must be checked before submission. The title page, figures, tables, legends and references should all be on separate sheets of paper.

Three copies of each article should be submitted, with a stamped addressed envelope, and the author should keep a copy. One copy will be returned if the paper is rejected.

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