

# An agenda for change in referral — consensus from general practice

ELAINE MCCOLL

JOHN NEWTON

ALLEN HUTCHINSON

## SUMMARY

**Background.** *Wide variations in rates of referral from primary to secondary care have been a matter of concern for many years. Effective strategies for optimizing referral depend on doctors being able to understand what the influences on their referral behaviour are, as well as having the ability to identify priority areas for action and to develop strategies for pushing through effective measures.*

**Aim.** *This study set out to ascertain general practitioners' priorities for change with respect to the referral process, and to set an agenda for change to be tackled by general practitioners, providers, policy makers and educationalists.*

**Method.** *Through the use of the Delphi technique and focused interviews, general practitioners throughout Northumberland contributed to the consensus view.*

**Results.** *The main themes to emerge related to hospital waiting lists, open access, flow of information between secondary and primary care and general practitioners' knowledge and training. Ideas for implementing change included the production of directories of hospital services and the development of guidelines for the use of the term 'urgent' in referral letters.*

**Conclusion.** *All of the proposed changes are manageable and share the burden between general practice and other professionals with an interest in the referral process.*

**Keywords:** *referral analysis; referral patterns; GP hospital relationship; hospital services.*

## Introduction

WIDE variations in referral rates from primary to secondary care have been a matter of concern for many years.<sup>1,2</sup> Their existence has led to suggestions that some doctors may be over-referring, while others are felt to be failing to refer patients who might benefit from specialist input. To date, much of the research on referral patterns has focused on seeking explanations for these observed variations. Levels of morbidity, age structure and relative deprivation of practice populations<sup>3,4</sup> as well as the experience of general practitioners<sup>5,6</sup> and the availability of secondary care facilities<sup>7</sup> have been shown to have some influence on referral behaviour; however these factors are unable to explain much of the observed variation.

Despite an incomplete understanding of sources of variation, strategies for maximizing benefit have to be developed if resource use in referral to hospital is to be optimized. Metcalfe

E McColl, BA, MSc, senior research associate; J Newton, BA, MSc, visiting research fellow; and A Hutchinson, FRCGP, MFPHM, programme director, Centre for Health Services Research, University of Newcastle upon Tyne.

Submitted: 17 February 1993; accepted: 19 July 1993.

© *British Journal of General Practice*, 1994, **44**, 157-162.

suggests that 'personal and educational factors are not amenable to administrative influence' and that 'crude administrative measures are unlikely to achieve the desired result.'<sup>8</sup> Instead, he recommends an approach based on self- and peer-review. Stocking supports the view that the implementation of change is most likely to succeed if those who will be ultimately responsible for the process of change are also involved in setting the agenda.<sup>9</sup>

With the implementation of the new contract for general practitioners,<sup>10</sup> there has been increased interest in effective referral practices. Northumberland Family Health Services Authority has already arranged to feed back referral data to practices as part of this process.<sup>11</sup> The principal aim of this study, commissioned by Northumberland Medical Audit Advisory Group, was to establish general practitioners' own agenda for change with respect to the referral process. The project formed part of a local initiative, focusing on an informed review of current referral practice.

## Method

### *The Delphi technique*

The establishment of a consensus view of priorities for change was addressed using the Delphi technique, a recognized method for establishing a consensus view on a chosen topic which was developed at the Rand Corporation in the late 1940s.<sup>12</sup> Early applications were in forecasting technological events, but it has been increasingly applied in other fields, including health services.<sup>13-15</sup>

In the Delphi approach, the knowledge or opinions of a group of 'experts' are combined to quantify variables 'which are either intangible or shrouded in uncertainty';<sup>16</sup> an expert may be any individual competent to make a relevant input. The technique involves a series of self-completion questionnaires, thereby guaranteeing anonymity for the individual respondents. The first questionnaire generally presents a series of statements and asks the chosen experts to make a judgement or express an opinion on each.<sup>17</sup> The results are then analysed and fed back to the experts; the second and any subsequent rounds provide the opportunity for respondents to refine their views until a consensus is reached.

In this study, two postal questionnaires were used to identify a number of areas of potential change in referral practice and to elicit suggestions for strategies for change. The ideas put forward were then discussed in depth with a random selection of practices across the county. The findings provide a list of topics which could form the basis for a referrals action plan.

### *First round*

The first Delphi questionnaire contained a list of 27 factors known to or held to influence referral behaviour, based on the findings of previous research.<sup>6,18</sup> These included doctor characteristics, patient characteristics and structural factors. Doctors were asked to rate each factor, on five-point scales, in terms of both perceived amenability to change and keenness for change. For amenability, a score of one indicated 'not at all amenable to change', while a score of five indicated 'amenable to change without any difficulty'. On the keenness dimension, a score of one indicated 'not at all keen to change' while a score of five denoted 'very keen to change'.

Since every general practitioner is involved in the referral process, all were considered as potential experts. Accordingly, in April 1992, the questionnaire was sent to all 178 general practitioners then on Northumberland Family Health Services Authority's list. The questionnaire was accompanied by a letter explaining the nature and purpose of the study and inviting doctors to contribute to the consensus process. A reminder, enclosing a second copy of the questionnaire, was sent to all those who had not responded after three weeks. The chi square test<sup>19</sup> was used to examine whether there was any association between response and practice referral rate, location, practice list size, fundholding status and vocational training status.

Data from the completed questionnaires were analysed using the *SPSSX* package.<sup>20</sup> For each of the 27 statements and for each of the dimensions of amenability and keenness, a mean score was computed across all respondents, higher mean scores indicating greater amenability to change and a greater desire for change.

It was hypothesized that perceptions of amenability to change and desirability of change might vary with practice referral rate. The 27 statements were ranked according to mean score on each of the two dimensions and Kendall's coefficient of concordance<sup>21</sup> (*W*) was used to test the null hypothesis that rankings across the three categories (low, medium and high referral rates) were unrelated to each other. The same approach was used to test for agreement across doctors practising in rural, mixed and urban locations.

Where the aim is to generate a local agenda for change by voluntary action, success in bringing about change is most likely for those factors perceived as relatively easy to alter and where there is a strong desire for change. In setting the agenda for change, such factors should be accorded high priority. By contrast, those factors which are perceived as difficult to alter and about which doctors are indifferent or opposed to change should be regarded as lower priority. To determine overall priorities for change it was therefore necessary to synthesize responses across the two dimensions. To do this, the overall mean scores across all 27 factors for amenability to change and keenness for change were calculated. The mean scores for the 27 individual factors were then plotted in a 2 x 2 matrix defined by these two values. Factors with a mean score for amenability of greater than or equal to the overall mean were classed as high amenability, while those with a lower mean score were classed as low amenability; on the keenness dimension those with a mean score greater than or equal to the overall mean were classed as high keenness while those with a lower mean score were classed as low keenness.

### Second round

From the responses to the first round Delphi questionnaire, 10 priority areas for change were identified. As is customary in the Delphi approach, the respondents to the first round Delphi questionnaire formed the panel for the second round. The 10 target areas for action and change were fed back to this panel in the second questionnaire, sent out at the beginning of July 1992. Again, a single reminder with a second copy of the questionnaire was sent to all those who had not responded after three weeks. As before, the chi square test was used to examine if there was any association between response and practice characteristics.

In the second questionnaire, respondents were asked to identify their personal priorities for change by allocating a total of 100 points among the 10 factors. They were also asked to suggest strategies for change for their top three priorities under the headings: what kind of change do you envisage; who should be involved in the change process; how might change be achieved; what are the potential forces in favour of change; and what are the potential barriers to change?

The aim of the second questionnaire was to reach a consensus on the top five priorities. To this end, three criteria were considered: the total number of respondents allocating points to each factor; the total number of points allocated to each factor; and the number of times that the factor was ranked first or joint first.

A scoring system was derived which allowed the information provided by each criterion to be combined. In this system, the 10 factors were ranked separately on each of the three criteria. Ten marks were then allocated for first place, nine for second and so on. These marks were summed across all three criteria and the five factors with the highest totals (18 or more) were selected for further consideration. Suggestions for strategies for change for the five factors selected in this way were coded and synthesized to provide a basis for discussion in the indepth interviews.

### Interviews

Participation in the questionnaire phase was not a prerequisite for inclusion in the interview phase. All 51 Northumberland practices were stratified by list size (large, medium, small) and referral rates (high, medium, low); two samples were randomly selected from the strata; the second to act as a reserve.

Selected practices were approached in July and August 1992. Where a practice declined to participate, the appropriate reserve was contacted. Meetings were arranged to take place at the practices between mid-September and early October and two researchers attended each meeting. On each occasion, one researcher introduced the meeting by outlining the purpose of the project as a whole and the current phase in particular. There followed a short presentation of the results of the first two phases, concentrating on the five priorities for change identified in the second questionnaire. At the beginning of the discussion, general practitioners were asked how the general findings affected them, that is, whether the suggested changes would influence their referral patterns in any way. After that the conversation followed no pre-determined plan, except to ensure that each of the main areas of potential change was covered at some point. The other researcher recorded notes of the general points raised in the discussion.

## Results

### First round

In total, 116 usable questionnaires were returned, representing 86.3% of Northumberland practices. Some respondents experienced conceptual difficulties in completing the questionnaire, as evidenced by their comments. The participation rate of 65.2% was satisfactory for this type of study. Decision to participate was not associated with practice referral rate, location, list size or fundholding status. However, doctors from vocational training practices were more likely to respond (75.9% of 108 doctors) than their colleagues from non-training practices (48.6% of 70 doctors).

Mean scores for each of the 27 factors on each of the two dimensions are shown in Table 1. Factors relating to practice structure and to attributes of individual doctors were seen as most amenable to change: the mean score for 'the degree to which I can call on the expertise of partners or colleagues within the practice' was 4.0, equivalent to 'without much difficulty'. By contrast, factors relating to patient characteristics were seen as less amenable to change: the mean score for 'patients' social and economic circumstances' was 2.0, indicating that doctors considered that these could be altered only with great difficulty. Practice referral rates, categorized as high, medium and low, did not significantly affect doctors' overall views on amenability to change (Kendall's *W* = 0.93, *P* < 0.001). Consensus on the rank-

**Table 1.** Mean scores of factors influencing referral behaviour rated by 116 doctors for amenability to change and keenness for change.

Factor	Mean score	
	Amenability to change <sup>a</sup>	Keeness for change <sup>b</sup>
The degree to which I can call on the expertise of partners or colleagues within the practice	4.0	3.3
Referral policy in this practice	3.9	3.0
What my partners may think of my referral rate	3.8	3.2
My knowledge of and relationship with consultants	3.6	3.8
My medical knowledge and training	3.5	4.0
My perception of the benefits of what is available in secondary care	3.5	3.7
My sense of clinical autonomy	3.4	2.8
The range of open access services available to me	3.4	3.8
The range of specialist care available to me	3.4	4.0
What the FHSA may think of my referral rate	3.4	3.0
My estimation of clinical probabilities	3.3	3.6
My freedom to refer to the hospital of my choice	3.2	3.6
My tolerance of uncertainty	3.2	3.4
What consultants may think of my referral rate	3.2	3.3
My need for reassurance	3.1	3.1
The pressure my patients put on me	3.0	3.4
The cost of the referral to the NHS	2.9	3.4
The length of hospital waiting lists	2.9	4.7
Concern about possible legal action by a patient	2.8	3.6
Patients' expectations of referral	2.8	3.5
Patients' need for reassurance	2.8	3.5
The financial implications to patients of being referred	2.7	3.4
The pressure of work in this practice	2.7	3.9
The distance patients live from specialist care	2.3	3.4
The personal characteristics of patients I see in this practice	2.2	2.8
The type of cases and conditions I see in this practice	2.2	2.9
Patients' social and economic circumstances	2.0	3.8
Overall	3.1	3.5

FHSA = family health services authority. <sup>a</sup>Higher mean score indicates greater amenability to change. <sup>b</sup>Higher mean score indicates greater keenness for change.

ing of the factors was also achieved across rural, mixed and urban settings ( $W = 0.86, P < 0.001$ ).

Doctors were most keen to change factors relating to the provision of secondary care services and to their relationship with consultants (Table 1). Almost all doctors expressed a desire for a reduction in the length of hospital waiting lists, with 71.9% declaring that they were very keen for change. External opinion appeared to be comparatively unimportant; the mean scores for 'what my partners may think of my referral rate' and 'what the family health services authority may think of my referral rate' were 3.2 and 3.0, respectively. These scores are attributable

mainly to a high endorsement of the 'indifferent' category for these items (66.1% of 109 and 68.2% of 110, respectively). Doctors were largely indifferent or even actively opposed to changing the mix of patients they cared for (57.0% of 114 being indifferent and 26.3% of 114 being either not very or not keen at all to change 'the type of cases and conditions I see in this practice'). They also appeared to guard their sense of clinical autonomy; 34.2% of 114 respondents said that they were not very keen or not at all keen for change with respect to this factor. Overall, the ranking of the 27 factors on the basis of mean scores for keenness indicated close agreement between doctors from practices with high, medium and low referral rates (Kendall's  $W = 0.91, P < 0.001$ ). A high degree of consensus was also achieved across rural, mixed and urban settings ( $W = 0.92, P < 0.001$ ).

Combining scores on amenability and keenness showed that seven factors were rated as highly amenable to change and highly desirable to change (Table 2). Five of these related to the availability of secondary services and to the provision of information on such services and the remaining two were related to general practitioners' own skills. Those factors which were accorded low ratings on both dimensions related mainly to patient characteristics, case mix and economic factors. The 10 priority areas identified for change included the seven factors categorized as high amenability-high keenness, the factor which doctors were keenest of all to change, but perceived as potentially difficult to

**Table 2.** Results of the synthesis of responses across the two dimensions.

High amenability/ High keenness <sup>a</sup>	Low amenability/ high keenness <sup>b</sup>
● The range of specialist care available to me	● The length of hospital waiting lists
● My perception of the benefits of what is available in secondary care	The pressure of work in this practice
● My medical knowledge and training	Patients' need for reassurance
● My knowledge of and relationship with consultants	Patients' social and economic circumstances
● My estimation of clinical probabilities	Concern about possible legal action by a patient
● My freedom to refer to the hospital of my choice	
● The range of open access services available to me	
High amenability/ low keenness <sup>c</sup>	Low amenability/ low keenness <sup>d</sup>
My tolerance of uncertainty	● The pressure my patients put on me
My sense of clinical autonomy	The personal characteristics of patients I see in this practice
● Referral policy in this practice	The type of cases and conditions I see in this practice
What my partners may think of my referral rate	Patients' expectations of referral
My need for reassurance	The cost of the referral to the NHS
What consultants may think of my referral rate	The distance patients live from specialist care
What the FHSA may think of my referral rate	The financial implications to patients of being referred
The degree to which I can call on the expertise of partners or colleagues within the practice	

<sup>a</sup>Mean amenability score 3.1+, mean keenness score 3.5+. <sup>b</sup>Mean amenability score <3.1, mean keenness score 3.5+. <sup>c</sup>Mean amenability score 3.1+, mean keenness score <3.5. <sup>d</sup>Mean amenability score <3.1, mean keenness score <3.5. ● denotes the 10 identified priority areas for change.

alter — ‘the length of hospital waiting lists’ — as well as ‘referral policy in this practice’, which respondents perceived as reasonably amenable to change, but about which they were relatively indifferent. Finally, ‘the pressure my patients put on me’ had a mean score on both dimensions which fell close to the high threshold and this was also included.

*Second round*

From the panel of 116 first round respondents, 72 replies were obtained; 64.7% of all Northumberland practices were represented. The participation rate of 62.1% of the panel provided a substantive panel of expert replies from which to synthesize a consensus. There was no significant difference in participation rates across the range of practice settings or among doctors from practices with different referral rates. Practice list size, fundholding and vocational training status had no significant effect on participation.

By all three criteria, the highest priority for change was ‘the length of hospital waiting lists’, where waiting times for orthopaedics and ophthalmology were seen as particularly problematical. ‘The range of open access services available to me’ was the second priority area; the emphasis was on increased direct access to investigative procedures, especially endoscopy. ‘My medical knowledge and training’ was identified as the third priority, closely followed by ‘My perception of the benefits of what is available in secondary care’. The latter, and the fifth priority, ‘My knowledge of and relationship with consultants’, reflected concerns about the flow of information from the secondary to the primary sector. This determination of the top five priorities was highly consistent with a choice based on any individual criterion and this high degree of stability demonstrates that the factors identified represent a consensus view.

Suggestions for strategies for change varied considerably, both in content and level of detail. Some reflected respondents’ unique experiences of the referral process. However, it was possible to draw out some general themes (Table 3). The two main parties to change were seen to be general practitioners and con-

sultants, though it was not always clear who should take the initiative.

Increased resources, both in terms of consultant numbers and in the number of outpatient sessions provided, were seen as the major key to reducing hospital waiting lists. However, it was also recognized that unnecessary referrals might be reduced, perhaps by the agreement of guidelines on when a referral to secondary care was appropriate. Other suggested strategies included a decrease in hospital follow up, with earlier discharge to general practice. The range of open access services currently available depended on the location of the practice; it was felt that increased access might be negotiated locally, while recognizing that some controls might need to be imposed to avoid overuse or abuse. Time to attend courses and for keeping abreast of the medical literature was seen as a key factor in improving medical knowledge. Some respondents expressed an interest in courses and seminars, while others indicated a preference for hands-on training, perhaps by sitting in on a consultant’s clinic. Improved communication and more detailed and timely information were identified as means of increasing awareness of the benefits of what was available in secondary care and of fostering a good relationship with consultants.

Not surprisingly, general practitioners’ attitudes were frequently cited as a force for change, particularly their demand for shorter waiting lists and increased open access, and their desire to increase their own knowledge and expertise. It was also suggested that increased open access might be more cost effective. National Health Service reforms were mentioned as a potential factor in favour of improved communication and information flow.

The most frequently cited barriers to change were resource constraints. Time, money and shortage of consultants were mentioned as problems with respect to waiting list reductions. Money was also identified as a barrier to increased direct access to services, while time was seen as the major barrier to general practitioners and consultants coming together more frequently for educational initiatives or information exchange. Inertia — also expressed as ‘lack of will’ and ‘easier to maintain *status quo*’ —

**Table 3.** Priority areas identified and strategies for change.

	Priority areas				
	Length of hospital waiting lists	Range of open access services	Medical knowledge and training	Perception of benefits of secondary care	Knowledge of and relationship with consultants
What change is needed?	Shorter lists especially for orthopaedics and ophthalmology	Increase access especially to endoscopy	Increase in knowledge and expertise	Better information about services available	More direct and personal contact with consultants
Who should be involved?	Consultants GPs Hospital managers	GPs Consultants Service providers	GPs Educationalists	Consultants GPs	Consultants GPs
How should it be done?	Increase resources Referral protocols Decrease hospital follow up	Consultation/ negotiation over appropriate access	Protected study time Courses/meetings Hands-on training	Meetings Improved communication Referral protocols	Meetings Outreach clinics Guides to services
Forces in favour of change	Patient pressure GP pressure	Financial arguments GP demand	GP motivation	GP attitudes	NHS reforms including fundholding, trust status hospitals, contracting
Barriers to change	Resources Inertia	Consultant attitudes Money	Time	Time Inertia	Time GP attitudes Consultant attitudes

was also seen as a potential problem; possibly this relates to the lack of consensus over who should initiate change.

### Interviews

Only one of the original nine practices selected declined to participate in the interviews; the appropriate reserve was contacted and agree to participate. The chi square test showed participating practices to be representative of all Northumberland practices with respect to fundholding and vocational training status; they also represented a good geographical spread across the county. Attendance at the meetings was high; out of a total of 30 principals in the nine practices, 23 attended the meetings.

It was generally felt that long waiting lists in some specialties did affect referral behaviour. General practitioners sometimes referred to hospitals with shorter waiting lists, so long as this was acceptable to the patient. They might also refer patients at the earliest signs of a condition (for example, cataracts), knowing that the wait would probably coincide with the time taken for the condition to develop. A minority of doctors felt that long waiting lists created pressures to advise patients about private referrals, but recognized that this might further deplete the availability of consultants for NHS work. Three other strategies for coping with long waiting lists were identified. First, using the term 'urgent' on a referral letter was common practice but was seen as a device with uncertain outcomes. If it were to be used more effectively there would have to be a greater degree of consensus among clinicians about its meaning and the appropriate circumstances for its use. Secondly, telephoning consultants to arrange an earlier appointment was seen as a possible ploy but depended on knowing the consultant and was self-disapprovingly seen as 'playing the system'. Thirdly, more use could be made of waiting list data supplied by the regional health authority. Only a minority of practices currently made active use of this information and several comments were made about its perceived lack of accuracy and timeliness.

In contrast to the results from the questionnaire phase, general practitioners in the practices visited were less keen for open access facilities to be extended; they were satisfied with the existing arrangements both for open access and access to facilities only available through an outpatient appointment. A view mentioned more than once was that unregulated access could result in a large number of inappropriate referrals. Respondents felt that any increase in open access facilities ought to be prefaced by some form of joint guideline development.

General practitioners saw continuing education as essential to their practice and expressed support for gaining hands-on experience of clinical procedures by sitting in at consultant clinics. Such sessions might not necessarily result in general practitioners doing this work themselves but it would give them insights into new techniques and developments. Small multidisciplinary group discussions were also mentioned. What was lacking, it was felt, was someone to take the lead.

Normally general practitioners acquired their knowledge of what was available in secondary care through routine referrals and through circulars distributed at the time of new consultant appointments. Telephoning to enquire about service availability was possible but could be a time consuming process. A much more efficient way of increasing awareness, it was suggested, were local directories of services, of which there was already one example.

Most of those interviewed agreed that a close working relationship was productive of shared understandings about what to refer, when, and how but felt that there were a number of barriers — especially time and attitudes — which made it difficult to foster such relationships where none existed at the moment.

Fundholding was seen as a force for positive change, and the likelihood of more interdisciplinary work on protocols and guidelines might bring consultants and general practitioners together. A number of practices were interested in being involved in the development of protocols, albeit with certain reservations about their use.

### Discussion

The timing of the first questionnaire inadvertently coincided with a major survey by the district health authority of general practitioners' views on health service commissioning; this probably had a detrimental effect on participation rates. The size of a practice, its proximity to provider units, and its population did not appear to influence attitudes to change. In this respect general practitioners seemed to speak with one voice. They regarded referrals as their business and any initiative designed to change the volume, timing or destination of referrals, would be commonly interpreted as interference. An important barrier to change, therefore, is the strong sense of professional autonomy among doctors.

Other attitudinal barriers were identified in the second questionnaire. For the most part these attitudes were described as 'apathy', 'inertia', or 'conservatism' without further explanation or elaboration. Where explanations for given attitudes were offered, they most commonly referred to inter-professional rivalries and antagonisms stemming from the long-standing division of primary and secondary care.

Even so, there were areas where everyone wanted change, for example, there was enthusiasm to be involved with hospital colleagues in training and educational initiatives. Three key areas, which could form the starting points for a referrals action plan were identified. First, there was general support for the production of directories of hospital services. These could include basic data about the services available, staffs' special interests and procedures for referrals, admissions and domiciliary visits. Participants in determining the form and content of the directories could include hospital consultants, general practitioners and representatives of the family health services authority, district health authority and provider unit management. Secondly, general practitioners expressed a desire for an opportunity to take part in a defined programme of observation in selected hospital clinics. There is a clear role for the postgraduate education service in facilitating these opportunities. Thirdly, the use of the term urgent in referral communications is a fruitful topic for audit and educational activities. A multidisciplinary task group might usefully develop an agreed set of guidelines for the general (or specific) use of the term and how consultants act upon its use.

The main problem with all these professionally-based initiatives is establishing who should take the lead. As well as vigorously asserting its independence, the medical profession has traditionally operated according to an espoused norm of equality. While this may insulate colleagues from the type of performance evaluation found in more hierarchical structures (such as business organizations) it produces difficulty in bringing about change. Even where general practices do operate in an hierarchical fashion (that is, by way of seniority) this tends to work against innovation and change.

Nonetheless, none of the obstacles identified in this study is insurmountable. The level of keenness displayed over a wide range of topics provides a solid foundation for change in spite of the attitudinal barriers discussed. The topics identified provide a useful basis for a referrals action plan, whereby general practitioners and consultants could come together to review critically their current referral practice and to seek to identify potential for

change for the better. The strategies for change are all of a manageable scale and share the burden between general practitioners and other professionals with an interest in the referral process. The findings have been fed back to the local medical audit advisory group who will take them into account in developing the local quality initiative. The ultimate impact on referral behaviour remains to be evaluated.

## References

1. Acheson D. Variation in hospital referrals. In: Smith GT (ed). *Health, education and general practice*. London: Office of Health Economics, 1985.
2. National Audit Office. *NHS outpatient services*. London: HMSO, 1991.
3. Wilkin D, Smith AG. Variation in general practitioners' referral rates to consultants. *J R Coll Gen Pract* 1987; **37**: 350-353.
4. Wilkin D, Smith A. Explaining variation in general practitioners' referral to hospital. *Fam Pract* 1987; **4**: 160-169.
5. Reynolds GA, Chitnis JG, Roland MO. General practitioner outpatient referrals: do good doctors refer more patients to hospital? *BMJ* 1991; **302**: 1250-1252.
6. Newton J, Hayes J, Hutchinson A. Factors influencing general practitioners' referral decisions. *Fam Pract* 1991; **8**: 308-313.
7. Noone A, Goldacre M, Coulter A, Seagroatt V. Do referral rates vary widely between practices and does supply of services affect demand? A study in Milton Keynes and the Oxford region. *J R Coll Gen Pract* 1989; **39**: 404-407.
8. Metcalfe D. Referrals: could we do better? *Update* 1991; **42**: 1093-1096.
9. Stocking B. Promoting change in clinical care. *Qual Health Care* 1992; **1**: 56-60.
10. Department of Health and the Welsh Office. *General practice in the National Health Service: a new contract*. London: HMSO, 1989.
11. Northumberland Family Health. *GP annual reports 1990-1992. Hospital referral data*. Morpeth: Northumberland Family Health, 1992.
12. Quade ES. *Cost effectiveness: some trends in analysis*. Santa Monica, CA: Rand Corporation, 1967.
13. Bond S, Bond J. A Delphi survey of clinical nursing research priorities. *J Adv Nurs* 1982; **7**: 565-575.
14. Burns TJ, Batavia AI, Smith QW, De Jong G. Primary care needs of persons with physical disabilities: what are the research and service priorities? *Arch Phys Med Rehabil* 1990; **71**: 138-143.
15. Hutchinson A, Fowler P. Outcome measures for primary health care: what are the research priorities? *Br J Gen Pract* 1992; **42**: 227-231.
16. Pill J. The Delphi method: substance, context, a critique and an annotated bibliography. *Socio-Economic Planning Sci* 1971; **5**: 57-71.
17. Duffield C. The Delphi technique. *Australian J Adv Nurs* 1988-1989; **6**: 41-45.
18. Healey A, Ryan M. *Factors influencing general practitioners' decision to refer: a preliminary step towards explaining variation in general practitioners' referrals. Discussion document 06/92*. Aberdeen: Health Economics Research Unit, 1992.
19. Bland M. *An introduction to medical statistics*. Oxford University Press, 1987.
20. SPSS Inc. *SPSS reference guide*. Chicago, IL: SPSS Inc, 1990.
21. Siegel S, Castellan NJ (Jnr). *Nonparametric statistics for the behavioural sciences*. New York, NY: McGraw-Hill, 1988.

## Acknowledgements

The authors thank Northumberland Medical Audit Advisory Group for funding and supporting this study, Drs Michael McKendrick, Alan Dove and Peter Mitford for their advice and constructive criticism, the participating general practitioners, Helen Wright and Keith Meadows for their help in conducting and recording the interviews, Jill Younger for compiling details of practices and doctors, Drs Steve Blades and Martin Eccles, and the three anonymous referees for their helpful comments on earlier drafts. We are indebted to Sylvia Hudson for producing the questionnaires and in providing administrative support for the study.

## Address for correspondence

Ms E McColl, Centre for Health Services Research, University of Newcastle upon Tyne, 21 Claremont Place, Newcastle upon Tyne NE2 4AA.

# RCGP

Quality  
Network



## MACMILLAN PALLIATIVE CARE ADVISERS IN PRIMARY CARE

### THE ROYAL COLLEGE OF GENERAL PRACTITIONERS AND CANCER RELIEF MACMILLAN FUND

Following the very successful cooperation between Cancer Relief Macmillan Fund, the Department of Health, the Scottish Home and Health Department and the Royal College of General Practitioners in implementing the Palliative Care Facilitators Project, Macmillan and the RCGP wish to move forward into the next phase of the development of a primary care contribution to palliative care in the community.

The very success of the Facilitators Project in developing the educational needs in palliative care of general practitioners and primary health care teams has highlighted deficiencies in the ability of purchasers and providers to comprehend the place of primary health care teams in palliative care in the community.

To redress this imbalance Macmillan have generously provided funding for two general practitioners with experience of palliative medicine and an involvement in the structures and functions of the current health services as they relate to primary care to be appointed as **Palliative Care Advisers** in two regions, **Scotland and Inner London**.

Each appointment will be for four sessions per week over three years and is due to commence in July 1994. Funds are available for remuneration at consultant grade with provision for setup expenses and service support. Interested applicants should be Members or Fellows of the RCGP and should contact Fiona van Zwanenberg, Administrator to the Quality Network, RCGP, 14 Princes Gate, London SW7 1PU for further details. The closing date for applications will be April 30th 1994.