Social indicators of health needs for general practice: a simpler approach

J L HOPTON

J G R HOWIE

A M D PORTER

SUMMARY. The ability of different measures of socioeconomic position to predict distress in a sample of general practice attenders has been examined. Perceived distress was measured using the Nottingham health profile. The measures of socioeconomic position included: social class, Jarman scores of patients' areas of residence, whether or not patients owned their own home, whether or not patients owned a car, whether or not they had been unemployed during the previous year and whether or not they had had further education. Social class data were only available for 84% of the 1075 respondents completing the Nottingham health profile. Those respondents for whom social class data were not available were significantly more likely to score positively on the social isolation, sleep and physical mobility dimensions of the Nottingham health profile. Not owning one's own home emerged as the measure of socioeconomic status that best predicted distress. The other measures of socioeconomic status that were significantly predictive of distress were not having had further education and having been unemployed during the last year. Different measures of socioeconomic position significantly predicted positive scores on different dimension of the Nottingham health profile. Although the Jarman score significantly predicted a positive score on the sleep dimension, it did not predict distress well when compared with the direct measures of

There are simple, more direct measures of socioeconomic position than social class that could be collected routinely by practices which would form a better basis for the evaluation of services required to target those needs created by persisting social inequalities in health. Further research is needed to examine the generalizability of the indicators presented here and the possibility of using other relevant indicators.

Keywords: inequalities in health; socioeconomic factors; patient needs; health status.

Introduction

ATTEMPTS to take account of inequalities in health for social and health service planning have led to the development of several multiple indices of deprivation based on aggregate census data to be used for comparing areas. ¹⁻³ The Jarman index was developed specifically for use in primary care³ and it contains eight census variables, weighted according

to general practitioners' estimations of the effect of these on workload. Although the construction, validation and application have been criticized, ⁴⁸ it has been selected as the basis for the allocation of the deprivation allowance to general practices.⁹ From 1 April 1990, the allowance is available for all patients residing in areas with a Jarman score greater than 30, although Jarman has recommended a cut off point of 16.⁶ In Scotland, Jarman scores are available directly for postcode districts so that individuals can be attributed a Jarman score on the basis of their area of residence.

The difference in health experience among groups with differing socioeconomic status is robust and persistent. The Black report¹⁰ summarized differentials according to social class, housing tenure, region and ethnicity and there is evidence that these differentials are increasing. ¹¹ There has been further supporting evidence using self-reported morbidity from a national sample ¹² and community based surveys using standardized measures of perceived health. ^{13,14}

The basis for much of this work has been the registrar general's social class grouping on the basis of occupation. Being based upon economic activity, it is difficult to apply to sections of society not in formal employment such as retired or unemployed people and many women who are not working in the formal sector. It has been found that intra-class variation in income is greater than inter-class variation. ^{15,16} The combination of these shortcomings suggests that use of social class may not ideally expose the extent of social inequality in health. Other indicators of socioeconomic position such as home ownership, car ownership and educational level have been shown to predict mortality partially and independently of each other and of social class. ^{11,17} These are easier to collect and do not need to be coded.

Unemployment has both social and material consequences and the detrimental effects of unemployment on physical and mental health have recently been given renewed attention. 18-20 There are similar consequences for health during unstable employment. 21 Low paid and unskilled workers are particularly susceptible to periods of unemployment. 22

The Nottingham health profile, a well validated measure of perceived distress,²³ has been shown to discriminate among socioeconomic groups and to predict use of primary health care services.¹³ Although there remains debate about the nature of its six subscales²⁴ there is little doubt that it broadly indicates both psychosocial and functional distress.^{25,26}

As part of a large study of working patterns in general practice, an attempt was made to relate perceived distress, as measured by the Nottingham health profile, to social class and Jarman score and four measures of socioeconomic disadvantage: not owning one's own home, not owning a car, not having had further education and having had a period of recent unemployment.

Method

A group of 1987 general practice attenders who had agreed to be contacted were sent a postal questionnaire four weeks after a consultation in the surgery with their doctor. The details of the larger study have been reported elsewhere. ²⁷ The patients in this part of the study were volunteers from 3109 patients aged over 16 years visiting 46 doctors in 23 practices in the Lothian region. Data were collected between June and November 1988.

J L Hopton, MA research psychologist; J G R Howie, MD professor; and A M D Porter, MPhil, senior lecturer, Department of General Practice, University of Edinburgh.

Submitted: 24 April 1991; accepted: 7 October 1991.

[©] British Journal of General Practice, 1992, 42, 236-240.

The patients' questionnaire included five measures of socioeconomic status: questions about occupation, from which the social class of the respondent could be determined according to the registrar general's classification of occupations, whether the respondent owned his or her own home, owned a car, had had any further education and whether the respondent had been unemployed during the last year. The questionnaire also incorporated the Nottingham health profile which contains items weighted on six subscales: energy, emotional reaction, social isolation, sleep, pain and physical mobility.

Note was taken of the respondent's age, sex and postcode. Postcode information was converted into Jarman scores during the coding of the data. Information about whether the patient had a long term physical health problem was collected from the doctor immediately after the consultation and this was also used.

Because the distribution of scores on the Nottingham health profile on all dimensions is always highly skewed, ^{24,26} scores on each of the six subscales were dichotomized as zero versus positive. The ability of each of the measures of socioeconomic status to predict positive scores on each of six Nottingham health profile dimensions was analysed using logistic regression analysis via the probit function of the *SPSSX* statistical package.²⁸ All univariate statistics presented are based on the chi square test.

Results

Questionnaires were returned by 1420 (71%) patients. The Nottingham health profile was not fully completed by 345 patients so they were excluded from the analysis. Data on social class were only available for 84% of the 1075 respondents fully completing the Nottingham health profile.

Characteristics of respondents

Table 1 compares respondents for whom social class data were available with those for whom data were not, on the basis of age and sex and of four of the other indices of socioeconomic position. Respondents for whom social class data were missing were significantly less likely to have had further education, to be a home owner, or to own their own car and were more likely to be aged 65 years and over. There were no significant differences between the two groups in terms of the percentage of respondents who had been unemployed during the last year and the percentage of women.

Table 2 shows the percentage of respondents scoring positively on each Nottingham health profile dimension according to whether social class data were available. Respondents for whom social class data were not available were more likely to score positively on all six of the Nottingham health profile dimensions although the differences were only significant for social isolation, sleep and physical mobility.

Measures of socioeconomic position and perceived distress

People for whom no social class data were available were excluded from further analysis. Jarman scores for the remaining 903 respondents ranged from -27 to +33 and 5% of the sample came from areas with a Jarman score greater than 16. Ten per cent of respondents were in social classes 4 and 5. Fifteen per cent of the sample did not own their own home, and had had no further education and did not own a car. Two per cent of the sample had had no further education, owned neither their own home or a car and had been unemployed during the last year. Thirty percent of the sample had a long term illness.

Age and presence of long term illness were strongly associated, with 53% of those aged over 65 years having a long term

Table 1. Socioeconomic and demographic characteristics of respondents according to whether or not social class data were available.

	% of res		
	Social class data available	Social class data not available	χ ² signifi- cance
Women $(n = 903/172)$	61	65	NS
Aged $65 + \text{yr} (n = 903/172)$ Having had further education	15	39	<i>P</i> <0.001
(n = 888/165)	63	40	<i>P</i> <0.001
Owning own home		-	
(n = 891/166)	<i>56</i>	<i>32</i>	<i>P</i> <0.001
Owning a car $(n = 894/164)$	64	42	<i>P</i> <0.001
Having been unemployed during past year			
(n = 894/161)	10	8	NS

n= total number of respondents for whom social class data available/not available.

Table 2. Percentage of respondents scoring positively^a on each Nottingham health profile (NHP) dimension according to whether or not social class data were available.

NHP dimension	% of res scoring p		
	Social class data available (n = 903)	Social class data not available (n = 172)	χ ² signifi- cance
Energy	33	38	NS
Emotional reaction	37	39	NS
Social isolation	18	25	<i>P</i> <0.05
Sleep	43	<i>52</i>	<i>P</i> <0.05
Pain	25	30	NS
Physical mobility	26	<i>38</i>	<i>P</i> <0.01

^a Positive scores indicate greater distress. n = total number of respondents.

illness compared with 38% of those aged between 45 and 64 years (P<0.001). There was no correlation between age or presence of long term illness and social class, housing tenure, having had further education or Jarman score.

Logistic linear regression analysis was used to assess whether the following were predictors of positive scores on each of the six Nottingham health profile dimensions for 830 respondents: being a woman, increasing age, presence of a long term illness, not having had further education, not owning one's home, not owning a car, having been unemployed during the past year, increasing Jarman score or lower social class. Table 3 shows the variables which significantly predicted positive scores independently of other variables. Sex, social class and car ownership were not significant predictors.

Increasing age was significantly associated with a positive score on the energy, sleep, pain and physical mobility scales. Age was not associated with positive scores on the social isolation or emotional reaction scales. The doctor's recording of the patient having a long term illness was significantly related to positive scores on all the dimensions of the Nottingham health profile.

Not being a home owner, having been unemployed during the last year and not having had further education all significantly predicted positive scores on one or more subscales of the Nottingham health profile when adjusted for age and presence of

Table 3. Demographic and social status characteristics of 830 respondents significantly predicting scores on each Nottingham health profile (NHP) dimension.^b

Characteristic	Ratio of regression coefficient to standard error for positive score on NHP for:c					
	Energy	Emotional reaction	Social isolation	Sleep	Pain	Physical mobility
Increasing age	2.33*	_	_	4.29***	4.21***	4.81***
Having a long term illness	4.42***	3.78***	3.19**	3.09***	4.01 ***	4.91***
Not having had further education ^d	_	_	_	2.22**	_	_
Not owning own homed	_	_	2.43**	2.17*	2.99**	3.36***
Having been unemployed during last yeard		2.08*	2.09*	_	· <u> </u>	
Increasing Jarman scored	-	_	_	2.10*	_	_

^{*} P<0.05. ** P<0.01. *** P<0.001. ** P<0.001. ** Cases with any missing data on independent variables excluded from analysis. b Positive scores Indicate greater distress. The higher the ratio of regression coefficient to its standard error, the greater the predictive ability. dAfter adjustment for age and presence of long term illness.

long term illness. There were differences in the ability of these three measures to predict scores on each of the six Nottingham health profile subscales. Having been unemployed during the last year was the measure of socioeconomic position that best predicted positive scores on the emotional reaction scale; not being a home owner best predicted positive scores on the social isolation, pain and physical mobility scales; not having had further education best predicted positive scores on the sleep scale. Jarman score only predicted positive scores significantly on the sleep scale.

Discussion

Although caution must be exercised in drawing conclusions from this study, the approach taken serves to illustrate several important issues in the assessment of population deprivation when planning primary health care.

The analysis used an existing data set and was based on a small sample of all patients attending their general practitioner. Although the age and sex distribution of the sample of respondents was similar to that of all attenders at the practices during the study period,²⁶ no information was available on the socioeconomic position or perceived health status of nonresponders. Data were available only for practice consulters and this will inevitably bias the findings towards frequent attenders and against patients requiring home visits. Since no data were available for non-consulters there is no indication of the extent to which consulters and non-consulters differed in socioeconomic status. Therefore, the sample is not representative of the practice population, and the conclusions do not assume that these results are generalizable outwith our sample. However, it is the approach which is of importance rather than the particular findings.

As Smith⁵ and Carr-Hill and Sheldon⁷ have commented, there is some confusion about the meaning of measures of deprivation in the current primary care planning debate. Our discussion is based on measures of deprivation as indicators of need for health services, rather than as indicators of workload or necessity for incentives for health professionals. The measure of distress used, the Nottingham health profile, has been validated as an indicator of use of health services and, by implication, of need. ^{13,14,29}

The findings add to the evidence that social class is a problematic measure of socioeconomic position. Information on social class was available for only 84% of respondents fully completing the Nottingham health profile. This may have been either because respondents provided no information to the question or because coders were unable to assign a value to the information provided. The respondents for whom social class data were not available were of lower socioeconomic status according to

the other measures of socioeconomic position and were more likely to report experiencing distress on all Nottingham health profile dimensions.

Social class was not significantly associated with any measure of perceived distress. Four of the alternative measures of socioeconomic position were simpler to collect and predicted distress as measured by the Nottingham health profile better than social class.

Of the four measures of socioeconomic position significantly predicting distress on one or more of the six Nottingham health profile dimensions (not having had further education, not owning one's own home, having been unemployed during the last year and increasing Jarman score), not owning one's home emerged as the best measure.

Smith has reviewed the many complex relationships which exist between housing and health.³⁰ A comprehensive discussion of this is beyond the scope of the paper, but in simple terms, housing tenure broadly represents income and financial resources as well as security and general standards of housing and neighbourhood environment.³¹

Townsend has argued that although housing tenure is important as a measure of socioeconomic position, its use may obscure health differentials within different types of tenure which are due to the quality of housing. There is growing evidence of the direct effects of housing problems such as cold and damp on health. 32-35 These housing problems are reliably reported by respondents, 32,33 and thus there would be little practical difficulty in collecting the information. Such information may be more relevant than the information currently available on lack of amenities and overcrowding. 3.8

There were differences in the nature of the distress predicted by the measures of socioeconomic position. The association between emotional reaction and unemployment during the past year was particularly clear. This is of interest since the emotional reaction subscale has been shown to correlate well with the general health questionnaire.²⁵ Other differences among the subscales must be interpreted with caution.²⁶ The finding that a positive score on the sleep scale was associated with social disadvantage on three measures (not having had further education, not owning one's own home and increasing Jarman score) is interesting in light of previous work using social class which showed that problems on the sleep scale were more prevalent among those in social classes 4 and 5.¹³

Car ownership has previously been used as an indicator of material wealth to predict mortality on both an individual¹⁷ and aggregated basis.³⁶ In this study, not owning a car was not significantly associated with any of the measures of distress and its omission is surprising. The most obvious explanation is that this is a feature peculiar to the sample.

The relative inability of the Jarman score to predict distress may have been the result of comparing aggregated data with information provided at an individual level; Carstairs has advised caution when interpreting the results of this method. Main and Main,³⁷ specifically analysing the use of the Jarman score in general practice policy, have described how use of aggregate data can lead to 'forgotten areas of deprivation'. Foy and colleagues, 38 looking at the usefulness of census data for general practice, have described the problems of expense and time involved in applying data collected at the ward or enumeration district level to general practice populations. Chase and colleagues³⁹ used data from the variables composing the Jarman score elicited from new patients registering at their practice. They concluded that information collected by the practice would form a better basis for health service planning and demonstrated that this was indeed feasible. Unfortunately they did not relate this to need or service use, nor did they take the opportunity offered by this 'practice based' approach to reexamine the concepts of deprivation⁸ which are inherent in the Jarman index.

Conclusion

This study has demonstrated that social inequalities in perceived distress exist and these can be predicted using measures of socioeconomic position that are dichotomous, easy to collect and do not need to be recorded or require computation. The much-used registrar general's classification of social class has been shown to have an inherent problem of completion and to underestimate these differentials.

Metcalfe⁴⁰ has suggested that it is crucial that a measure of socioeconomic mix of patients is available in evaluating existing services. Several variables used in this study may be useful, particularly housing tenure. Simple measures of housing quality could also be included to further differentiate health status of social groups. The multidimensional measure of perceived distress, the Nottingham health profile, has shown differences in the experience of morbidity associated with different aspects of disadvantage.

The clear implication must be that practices should collect their own data as part of audit or screening procedures to be held alongside an age—sex register. Attention has been drawn to the opportunities that computerization of family practitioner committee registers provide. I Further research must establish the generalizability of the associations found and examine the relevance of these and other indicators to social inequalities and health. The debate would remain as to whether any single variable or a number of variables could be used for allocation of resources or whether it would be necessary to derive an index based on a number of variables. Act as Resolution of this issue is in part dependent upon clarification of policy objectives. The Practice based information would offer much more flexibility and the need to rely on existing costly and inadequate aggregate data would thus be avoided.

Along with data on service use, this information could provide a better basis for the allocation of resources to general practice and could begin a more detailed examination of the nature of the association of morbidity with various aspects of disadvantage. Main and Main³⁷ have pointed out that there are no guidelines on how a deprivation allowance awarded to a practice should be used: collection of information suggested here may guide the allocation of resources within a practice.

The effects of socioeconomic differences on use of health services could be measured using practice based information and the costs of health resources estimated to weight against the costs of implementing policy aimed directly at correcting material and social inequity.

References

- Carstairs V. Multiple deprivation and health state. Community Med 1981; 3: 4-13.
- Townsend P, Phillimore P, Beattie A. Health and deprivation
 — inequality in the north. London: Croom Helm, 1988.
- Jarman B. Identification of underprivileged areas. BMJ 1983; 286: 1705-1709.
- Scott-Samuel A. Identification of underprivileged areas (letter). BMJ 1983; 287: 130.
- Smith GD. Second thoughts on the Jarman index. BMJ 1991; 302: 359-360.
- Talbot RJ. Underprivileged areas and health care planning: implications of the use of Jarman indicators of urban deprivation. BMJ 1991; 302: 383-386.
- Carr-Hill RA, Sheldon T. Designing a payment for general practitioners: the UPA (8) wonderland. BMJ 1991; 302: 393-396.
- Townsend P. Deprivation. J Social Policy 1987; 16: 125-146.
 Secretaries of State for Health, Wales, Northern Ireland and Scotland. Working for patients (Cm 555). London: HMSO,
- Townsend P, Davidson N. Inequalities in health: the Black report. Harmondsworth: Penguin Books, 1988.
- Smith GD, Bartley M, Blane D. The Black report on socioeconomic inequalities in health 10 years on. BMJ 1990; 301: 373-377.
- 12. Blaxter M. Evidence on inequality in health from a national
- survey. Lancet 1987; 1: 30-33.

 13. Bucquet D, Curtis S. Sociodemographic variation in perceived illness and the use of primary care: the value of community survey data for primary care service planning. Soc Sci Med 1986; 23: 737-744.
- Hunt SM, McEwen J, McKenna S. Social inequalities and perceived health. Effective Health Care 1985; 2: 151-160.
- Office of Population Censuses and Surveys. Occupational mortality, decennial supplement 1970-72. London: HMSO, 1978.
- Bentham G. Socio-tenurial polarization in the United Kingdom, 1953-83: the income evidence. *Urban Studies* 1986; 23: 157-161.
- Smith GD, Shipley MJ, Rose G. Magnitude and causes of socioeconomic differentials in mortality: further evidence from the Whitehall study. BMJ 1990; 44: 265-270.
- Beale N, Nethercott S. The nature of unemployment morbidity.
 Recognition. J R Coll Gen Pract 1988; 38: 197-199.
- Beale N, Nethercott S. The nature of unemployment morbidity.
 Description. J R Coll Gen Pract 1988; 38: 200-202.
- Fryer D. The experience of unemployment in social context. In: Fisher S, Reason J (eds.) Life stress, cognition and health. Chichester: John Wiley, 1988.
- Chichester: John Wiley, 1988.
 21. Schwefel D, Svensson PG, Zollner H (eds). Unemployment, social vulnerability and health in Europe. Berlin: Springer-Verlag, 1987.
- Arber S. Social class, non-employment, and chronic illness: continuing the inequalities in health debate. BMJ 1987; 294: 1069-1073.
- Hunt SM, McEwen J, McKenna S. Measuring health status. London: Croom Helm, 1986.
- 24. Kind P, Carr-Hill R. The Nottingham health profile: a useful tool for epidemiologists. Soc Sci Med 1987; 25: 905-910.
- McKenna SP, Payne RL. Comparison of the general health questionnaire and the Nottingham health profile in a study of unemployed and re-employed men. Fam Pract 1989; 6: 3-8.
- Hopton JL, Porter AMD, Howie JGR. A measure of perceived health in evaluating general practice: the Nottingham health profile. Fam Pract 1991; 8: 253-259.
- Howie JGR, Porter AMD, Forbes JF. Quality and use of time in general practice: widening the discussion. BMJ 1989; 298: 1008-1010.
- 28. SPSS. SPSS-X user's guide. New York: McGraw-Hill, 1983.
- Curtis S. Assessment of link between morbidity and neighbourhood deprivation. J Epidemiol Community Health 1990; 44: 62-68.
- 1990; 44: 62-68.30. Smith SJ. Health status and the housing system. Soc Sci Med 1990; 31: 753-762.
- 31. Blaxter M. Health and lifestyles. London: Routledge, 1990.
- 32. Platt S, Martin CJ, Hunt SM, Lewis CW. Damp housing, mould growth and symptomatic health state. *BMJ* 1989; 298: 1673-1678.
- 33. Martin CJ, Platt S, Hunt SM. Housing conditions and ill health. *BMJ* 1987; 294: 1125-1127.

- Hunt SM. Bad housing and emotional distress. Health Hygiene 1990; 11: 72-79.
- 35. Right To Warmth. Unhealthy homes: a guide to research findings on the relationships between housing conditions and ill health. Glasgow: Right to Warmth, 1990.
- Carstairs V, Morris R. Deprivation: explaining differences in mortality between Scotland and England and Wales. BMJ 1989; 289: 886-889.
- 37. Main JA, Main PGN. Jarman index. BMJ 1991; 302: 850.
- Foy C, Hutchinson A, Smyth J. Providing census data for general practice. 1. Feasibility. J R Coll Gen Pract 1987; 37: 448-450.
- 39. Chase HD, Davies PRT. Calculation of the underprivileged area socre for a practice in inner London. *Br J Gen Pract* 1991; 41: 63-66.
- Metcalfe DHH. Audit in general practice. BMJ 1989; 299: 1293-1294.

- 41. Fleming DM. The case for differential capitation fees based on age in British general practice. BMJ 1988; 297: 966-968.
- Carr-Hill R. Allocating resources to health care: is the QALY a technical solution to a political problem? *Int J Hlth Serv* 1991; 21: 351-363.
- 43. Carr-Hill R, Sheldon T. Jarman index (letter). BMJ 1991; 302: 850.

Acknowledgements

The authors thank Dr Elton for statistical advice, Eileen Allen, Pat Davie, John Forbes, Alison Lochead and Fiona Paxton for their work on the survey and Dr Hunt for comments and advice.

Address for correspondence

Ms J L Hopton, Department of General Practice, University of Edinburgh, 20 West Richmond Street, Edinburgh EH8 9DX.

College Publications

EDUCATION FOR GENERAL PRACTICE

VOCATIONAL TRAINING

The Future General Practitioner — Learning and Teaching

One of the RCGP's all-time best sellers. 'This stimulating and provocative book has been written by six outstanding general practitioners. It deserves to be read not only by teachers in general practice, but also by teachers in other fields of medicine'— British Medical Journal.

£9.50 (£10.50 non-members)

£9.50 (£10.50 non-membe

A System of Training for General Practice (Occasional Paper 4)

Pereira Gray's 'best seller' describes the philosophy and aims of one department of general practice and outlines a practical method of organizing training for general practice.

The Influence of Trainers on Trainees in General Practice (Occasional Paper 21)

Reports a study in the north of England comparing two groups of trainees with the characteristics of their trainers. Useful for all involved in training. £3.25

Clinical Knowledge and Education for General Practitioners (Occasional Paper 27)

Reports a study comparing the actions of groups of GPs and specialists faced with seven common clinical conditions. Useful for education and research in general practice.

Priority Objectives for General Practice Vocational Training (Occasional Paper 30)

Sets out the Oxford region's priority objectives for training: primary care, communication, organization, professional values and personal and professional growth. £3.50

Course Organizers in General Practice (Occasional Paper 34)

This report of a major national survey of course organizers provides the most comprehensive and up-to-date information available on the subject. £4.50

Towards a Curriculum for General Practice Training (Occasional Paper 44)

Examines several topical issues, including educational assessment, and does not shirk from tackling some of the major problems about current systems.

£6.00

A College Plan (Occasional Paper 49)

Comprises three statements approved by the Council of the College during 1989/90: An Academic Plan for General Practice, An Educational Strategy for General Practice for the 1990s, and the Faculties — the Future of the College.

CONTINUING EDUCATION

Section 63 Activities (Occasional Paper 11)

Tackles controversial topics, such as the effectiveness of activities provided under Section 63 and what the doctors responsible for them think.£3.75

Continuing Education for General Practitioners (Occasional Paper 38)

This investigation of the patterns of attendance at continuing education meetings compares the characteristics of general practitioners who attend regularly with those who attend occasionally or not at all. £5.00

UNDERGRADUATE EDUCATION

Undergraduate Medical Education in General Practice (Occasional Paper 28)

An AUTGP working group analyses the GMC recommendations on undergraduate medical education and the contribution which general practice can make.

The Contribution of Academic General Practice to Undergraduate Medical Education (Occasional Paper 42)

The result of a questionnaire sent to all academic departments of general practice in the British Isles. Gives information on curricula, assessment procedures, staff training and teaching methods.

£6.50

ASSESSMENT

What Sort of Doctor? (Report 23)

Describes the most radical system so far published on the assessment of performance review by GPs in their own practices. £5.00

Practice Assessment and Quality of Care (Occasional Paper 39)

An extensive review of the literature of assessment and quality in general practice with special reference to practice visiting. £5.00

Rating Scales for Vocational Training in General Practice 1988 (Occasional Paper 40)

A new set of 23 rating scales, with subscales, produced by the Department of General Practice at Manchester to enable trainers to monitor progress of vocational trainees during their general practice year.

Practice Activity Analysis (Occasional Paper 41)

Describes the results of practice activity analysis undertaken by the RCGP Birmingham Research Unit over a number of years and discusses its role as a practical approach to audit and assessment of quality. £6.50

Examination for Membership of the Royal College of General Practitioners (MRCGP) (Occasional Paper 46)

Provides a comprehensive overview of the College's examination, describing its development, current state and future trends. Includes sample questions and answers. £6.50

Fellowship by Assessment (Occasional Paper 50)

Reports a new route to Fellowship of the College by peer review. Describes the history of its development, gives current criteria, and includes the research evidence and College policies which relate to these. £7.50

All the above can be obtained from the Sales Office, Royal College of General Practitioners, 14 Princes Gate, London SW7 1PU (Enquiries, Tel: 071-823 9698). Prices include postage. Cheques should be made payable to RCGP Enterprises Ltd. Access and Visa welcome (Tel: 071-225 3048, 24 hours).