# An evaluation of health centre practice

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STATUTORY health centres are rapidly increasing in number (Curwen and Brookes 1969), and many descriptions of the design and operation of individual health centres have been published. In contrast there have been few attempts at formal evaluation, which has been defined as the process of relating the achievements of a programme to its objectives (Warren 1969). The objectives of health centre practice include the economic and effective provision of a comprehensive range of services designed to care for the total health of the patient in the community from the stage of prevention through early diagnosis and the treatment of disease to rehabilitation or terminal care (Wofinden 1967, Gibson 1970). Ignorance or antipathy on the part of the consumer will render the achievement of these overall objectives difficult or impossible, and assessment of the patient's attitudes to and opinions of health centre practice and his knowledge and use of available services are clearly relevant to evaluation. Such an assessment is the subject of this paper, which reports on some changes in demand for general medical services, in knowledge of the availability of health services, and in opinions of health centre practice which were associated with the transfer of a practice from separate premises into a new health centre.

## Background

The fourth of Bristol's six health centres was opened at Southmead in August 1969 in the centre of a large housing estate. It houses eight general practitioners, all of whom also practice from other premises, and a wide range of local authority services including health visitors and attached home nurses, dentistry, chiropody, speech therapy, ophthalmology, and dietetics. A local authority medical officer provides child health services, and a weekly session is held by the Family Planning Association. A treatment room is staffed by state-registered nurses for the 12 hours a day during which the centre is open. Prior to the opening of the health centre, local authority services were provided at a clinic about three quarters of a mile away on the edge of the housing estate.

Four of the doctors practising from the health centre are in partnership. They care for a total of about 10,000 patients, approximately two thirds of whom live on the Southmead estate. Most of the remaining one third live on a separate housing estate about one mile away where the practice has a branch surgery. Before August 1969 the practice was based on over-crowded premises about 200 yards from the site of the health centre. Within the limitations imposed by this inadequate accommodation the practice was well organized with appropriate secretarial and receptionist help and, since early in 1968, a full appointments system. It did not employ a surgery nurse.

## Method

A count was made of all consultations at the Southmead surgery or health centre and of all requests for first visits received during the mornings for the whole practice in the two nine-month periods of October 1968 to June 1969 and October 1969 to June 1970. The period which included the move into the health centre was thus excluded.

In May 1969 a systematic 5 per cent sample was taken from the family register of the Southmead part of the practice. Those living off the Southmead estate were eliminated, and during the next three months the remaining 78 families who lived on the estate

were visited. Where possible, one member of the household who was registered with the partnership was asked to submit to a short, structured interview which included questions designed to elicit opinions of and attitudes to the forthcoming health centre and knowledge of methods of access to various services. In September 1970 a further sample of families was taken, this time one in 15, and from this were eliminated those living off the estate and also those who had been visited in the course of the 1969 interviews. A similar questionnaire with appropriate alterations in wording was administered by one of a team of 23 health visitor students to a member of the household of all those of the 121 families remaining in the sample who could be contacted and who were willing.

## Results

*Demand for services*

Total figures rather than rates are given in this part of the report, because accurate figures for the distribution of patients between the two parts of the practice are not available for the whole period of the study. The total practice population during the period from October 1968 to June 1969 was on average 10,020, and during the period from October 1969 to June 1970 it was 10,165.

In the nine months from October 1968 to June 1969 there were 13,841 attendances for consultation at the Southmead surgery, and in the corresponding period one year later there were 13,659 attendances at the health centre. There is little difference between the patterns of attendance during the two periods (figure 1).

In contrast, there are interesting differences between the frequencies with which first requests for home visits were made during the two nine-month periods before and after

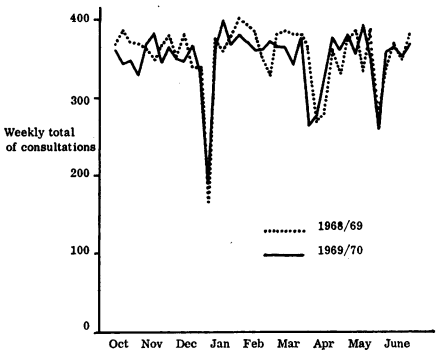


Figure 1
Consultations at Southmead Surgery, 1968/69, and Southmead Health Centre, 1969/70

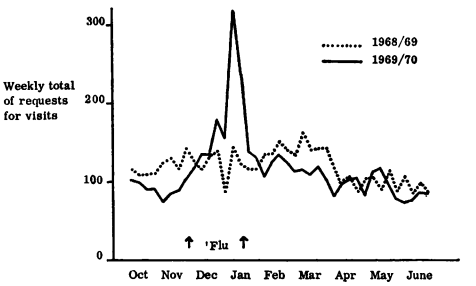


Figure 2
Requests for home visits received during the mornings for the whole practice

the opening of the health centre. Figure 2 shows the total requests for visits received during the mornings for the practice as a whole. The most striking feature is the effect of the influenza epidemic in 1969, but for most of the remainder of the two nine-month periods it can be seen that the number of visits requested in the second period was less than in the first period. In figure 3 requests for visits are divided into those made by residents on the Southmead estate and its immediate environs and those made by residents in that part of the practice area around the branch surgery. With the exception of the epidemic period, it can be seen that there is virtually no difference between the two periods in the requests for visits by residents in the branch surgery area, and that the fall in requests for visits evident in figure 2 during much of the second period is almost entirely contributed by those resident round the Southmead health centre. If the seven weeks covering the influenza epidemic are excluded, in only five of the remaining 32

weeks did the requests by Southmead residents for visits in the second period exceed those for the corresponding week in the first period, and the fall in requests for visits amounts to 19 per cent (table I).

TABLE I
REQUESTS FOR HOME VISITS RECEIVED DURING THE MORNINGS

| | *October to June* | | *October to June, excluding the seven weeks corresponding to the influenza epidemic* | |
|---|---|---|---|---|
| | *1968/69* | *1969/70* | *1968/69* | *1969/70* |
| Residents in Southmead area .. .. | 3,252 | 2,933 | 2,621 | 2,127 |
| Residents in branch surgery area .. | 1,372 | 1,615 | 1,143 | 1,140 |

*Knowledge, attitudes and opinions*

The number of completed questionnaires was 49 in the first survey which finished a month before the opening of the health centre, and 99 in the survey carried out when the health centre had been in use for about 14 months. These totals represent overall response rates of 63 per cent and 82 per cent, but this difference results almost entirely from the large proportion of the first sample who had moved away or died or were not registered with the partnership (table II). If this group is removed from both surveys, the response rates become 86 per cent and 88 per cent. Comparison of the two survey groups (table III) shows no significant differences between the mean household size, social class distribution, or the proportions of households which included children or persons aged 65 years and over.

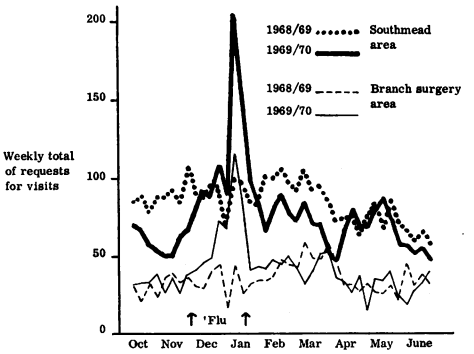


Figure 3
Requests for home visits received during the mornings, Southmead area and branch surgery area

TABLE II
OUTCOME OF INTERVIEW ATTEMPTS

| | *First survey, May–July 1969* | | *Second survey, October 1970* | |
|---|---|---|---|---|
| | | per cent | | per cent |
| Moved house, died, not registered with partnership .. .. .. .. | 21 | | 8 | |
| Not contacted after repeated visits .. | 6 | | 6 | |
| Refused .. .. .. .. .. | 2 | | 8 | |
| Interviewed .. .. .. .. | 49 | *63* | 99 | *82* |
| TOTAL IN SAMPLE .. .. .. | 78 | | 121 | |

Table IV summarizes the responses to five questions which were designed to elicit information on where respondents would go to seek particular services. The exact wording of the questions is given in the Appendix. There is a significant shift in orientation towards the health centre as the source of services other than help with a behaviour problem.

Of the 87 respondents in the second survey who were able to make the comparison, 41 (47 per cent) said they had found it harder to see their doctor since he had moved into

the health centre. This group contained a significantly high proportion of respondents from social class V, those from households with four or more members, and those from households which included children, but these three factors are all related and the

TABLE III
SOME CHARACTERISTICS OF THE HOUSEHOLDS INTERVIEWED

| | *First survey, 1969* | *Second survey, 1970* |
|---|---|---|
| Total interviewed | 49 per cent | 99 per cent |
| Mean household size | 4·39 | 4·58 |
| Households including children | *56* | *66* |
| Households including people aged 65 years or over | *8* | *8* |
| Social class I & II | *10* | *4* |
| Social class III | *53* | *45* |
| Social class IV & V | *34* | *41* |

TABLE IV
KNOWLEDGE OF METHODS OF OBTAINING CERTAIN SERVICES

| *Problem*+ | *Solution* | *Percentage selecting particular solutions* | | P |
|---|---|---|---|---|
| | | *1969* | *1970* | |
| Contact health visitor (asked only in households which included pre-school children) | Through clinic or health centre | *33* | *71* | <0·05 |
| | Through general practitioner | *25* | *2* | |
| | †Other appropriate method | *0* | *7* | |
| | †Inappropriate method, don't know | *42* | *20* | |
| Contact home nurse | Through clinic or health centre | *12* | *31* | <0·05 |
| | Through general practitioner | *63* | *42* | |
| | Other appropriate method | *2* | *4* | |
| | Inappropriate method, don't know | *22* | *22* | |
| Contact home help | Through clinic or health centre | *2* | *28* | <0·001 |
| | Through general practitioner | *45* | *29* | |
| | Other appropriate method | *16* | *15* | |
| | Inappropriate method, don't know | *36* | *27* | |
| Behaviour problem (asked only in households which included school children) | Help from clinic or health centre | *0* | *0* | — |
| | General practitioner | *32* | *9* | |
| | Other (mostly teacher) | *68* | *91* | |
| Lacerated hand on a week-day | Clinic or health centre | *0* | *39* | <0·0001 |
| | Hospital casualty department | *94* | *52* | |
| | General practitioner | *4* | *3* | |
| | Other, don't know | *2* | *6* | |

P=probability of the observed difference between the proportions of respondents who would look to the clinic and the health centre having occurred by chance.

†=an appropriate method is one which would at least result in precise information on where to obtain the service, while an inappropriate method would be either fruitless or result in only imprecise information.

+=the exact wording of the questions is given in the Appendix.

numbers are insufficient to determine which, if any, is of particular importance. Once the perceived barrier to seeing the doctor had been surmounted, there was no impairment of the doctor–patient relationship. Although 16 per cent said their doctor had less time to

talk since moving into the health centre, 19 per cent thought he had more time. Only 3 per cent said that their doctor had not seemed to be as friendly since the move, while 8 per cent thought he was more friendly.

When asked if, on moving to another part of the country, they would choose a doctor practising from a health centre or one practising from a traditional surgery, 45 (56 per cent) of the 80 respondents who expressed a preference chose the health centre doctor and 35 (44 per cent) chose the doctor practising from his own surgery.

A final question asked for suggestions for improving the services provided at the health centre. Forty-eight respondents made no comments or expressed themselves as satisfied, but 43 made critical comments concerning the appointments system or its application.

## Discussion

A deficiency of the study of demand for general medical services is that requests for home visits which were received at times other than weekday mornings were not recorded. There is, however, no evidence that there was any increased demand for late calls, and it is likely that the observed fall in requests for visits by Southmead residents is a real one. Furthermore, as it is not seen in the branch surgery area, it is likely that this fall in requests is associated with the move into the health centre, and is not simply an example of the trend towards decreased home visiting (Royal College of General Practitioners 1970). There was no corresponding increase in consultations, but it must not be forgotten that the treatment room in the health centre provides an additional source of primary care. A separate study of treatment room attendances shows that in the period from 6 April to 30 June 1970 there were 281 first attendances by patients of the practice which did not at any stage involve the general practitioner (Dixon, P. N. and Morris, A. F., in preparation). The probable explanation of the fall in requests for visits is that there has been a shift in work-load from home visits to health centre consultations to primary care by nurses in the treatment room. If this has been achieved without any deterioration in the quality of care, then one of the objectives of health centre practice, that resources should be used economically by ensuring that scarce skills and experience are not expended on work which can be done by others, has to some extent been achieved.

No services were provided at the health centre which had not been previously available either at the surgery or at the local authority clinic. Bringing these services together in one building has led to some improvement in knowledge of the availability of some of them. In particular, the general practitioner is less likely to be approached by those who feel they need the services of a health visitor, a home nurse, or a home help. However, a year after the health centre opened there remained an unacceptable level of ignorance of the availability of services, and a high proportion of individuals would still take their lacerated hands to the hospital casualty department. Health centres are surely appropriate places for the treatment of minor trauma, if adequate equipment and sufficient time are available.

A disquieting feature of the 1970 survey is that nearly half of the respondents would choose not to attend a health centre if they moved to another part of the country. In considering this finding it is important to remember that the relevant question was asked after a number of others which had clearly suggested that there might be some disadvantages to health centre practice, and which had reminded many patients of the difficulties they were experiencing with the appointments system. These difficulties were often voiced during the 1969 survey, and undoubtedly many hoped that the advent of the health centre would in some way solve this particular problem. Their inevitable disappointment has led to dissatisfaction, expressed as a preference for surgery rather than health centre practice and as an opinion that it is now harder to see their doctor

despite a substantial increase in the time available for consultation. Those who responded in this way and who specifically criticized the appointments system or its operation include a significantly high proportion of social class V families with several children. Patients in this group may well be demanding, frustrated, and unskilled in the arts of using the telephone and of communicating with those who may appear to be in positions of authority, and it is important to understand their difficulties and those of the receptionists who are their first points of contact (Freeling 1970). All those who work in the practice, both doctors and ancillary workers, have all along been well aware of these difficulties, and are continually seeking methods of improving the situation. Since this study took place health visitors have been attached to the practice, and this change has already had a pronounced effect. As well as providing a certain amount of primary care for those families with problems, the health visitors are helping them to cope with the medical care system. It is likely that a repeat of the population survey would now give different results.

Apart from those who had problems with the appointments system, there was a high degree of approval and satisfaction with the health centre and its organization. When this is added to the evidence that resources are being used more efficiently and that there is increased knowledge of the availability of and appropriate means of access to certain health services, it is clear that the objectives of health centre practice which were the subject of this investigation have to a considerable extent been achieved.

## Summary

This study includes a comparison of patients' demand for general medical services in two nine-month periods before and after a practice moved into a new health centre. There was no change in the pattern of consultations, but the move into the health centre was associated with a reduction of about 19 per cent in the number of requests for domiciliary visits made during the mornings. It is suggested that there was a shift of work from home visiting to health centre consultations to primary care by members of the nursing staff.

Patients' knowledge of the availability of health services improved after the move into the health centre. There was considerable dissatisfaction with the operation of the appointments system, but in all other respects the great majority of respondents in the sample questioned were satisfied with the health centre and its organization.

**Acknowledgements**

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## APPENDIX

*Some questions asked in the 1970 survey*

If you wanted to ask the health visitor about something fairly urgently, what would you do first to get in touch with her? (Asked only in households which included children under the age of five years).

If a relative or a person staying with you were ill in bed and you felt you needed some help from the district nurse, what would you do?

If you wanted a home help, what would you do?

If you cut your hand badly at home at 3 o'clock on a Tuesday afternoon and, although the bleeding soon stopped, you thought it would need seeing to by someone, what would you do?

If you had charge of a school child who you knew was stealing or playing truant from school and you wanted help with this problem, whom would you go to first for advice? (Asked only in households which included children aged between 5 and 15 years).

Since your doctor has moved into the health centre, have you found it easier to see him than it was before, or has it been harder to see him, or has there been no difference?

Since your doctor has moved into the health centre, has he more time to talk to you when you go to see him or has he less time to talk to you, or is there no difference?

Since your doctor has moved into the health centre, has he seemed more friendly than before, or has he seemed less friendly, or is there no difference?

If you were moving to another part of the country and you were living midway between a doctor who practised from a health centre and one who practised from his own surgery, which one would you choose?

Are there any ways we could improve the health centre and what it does?

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**Sore throat in children: It's causation and incidence.** P. W. Ross, S. M. K. Chisty, J. D. E. Knox. *British Medical Journal*, 1971, **2**, 624.

"Beta-haemolytic streptococci were isolated from 35 per cent of 525 children who presented to their family doctor with sore throat. The first 306 were investigated bacteriologically and virologically and beta-haemolytic streptococci were isolated from 30 per cent and viruses from 14·7 per cent. The ages which had the highest incidence of sore throat, for both sexes, were 7, then 6, 8, and 5. Those with tonsils had a higher incidence of beta-haemolytic streptococci than those without, but the presence or absence of tonsils made no difference to the degree of growth of the streptococci.

Viruses were isolated predominantly during the winter months, but streptococci, though mostly isolated in winter, were isolated throughout the rest of the year".

(Author's summary).

**Drug-taking habits among school children in Ireland.** C. W. M. Wilson, P. J. Byrne. *Journal of the Irish Medical Association*, 1971, **64**, 367.

A survey by questionnaire of over 3,000 schoolchildren in and around Dublin, over the age of 14, showed that about three per cent claimed to have used drugs of addiction. 14 per cent said that they would like to use such drugs, over 20 per cent knew someone who was taking drugs and one third of the children felt that they knew where to obtain them. Drug taking in Dublin schools appears to have reached much the same level as that reported in America in 1964, and there is danger of further escalation on the American pattern.