

Moving to a health centre—the effect on workload and patients

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SUMMARY. A detailed study of the workload of an urban practice was made during a six-month period before and after moving into a health centre to see if the pattern changed after the move. It was found that the services provided enabled a much greater proportion of routine work to be done by the practice nurse so that the doctor could spend more time with the patients seen by him.

A survey of the opinion of patients showed that the great majority was pleased with the services offered in the new premises and did not feel that they had lost contact with their own doctor.

Introduction

On opening the second health centre in Exeter in 1973 we took the opportunity to find what changes in workload might happen in the practice. The patients were interviewed to allow them to express their opinions.

The Practice

For 70 years the practice had worked from a terraced town-house where car parking was restricted. In addition to the partners, the practice employed four part-time secretaries/receptionists (two whole-time equivalents) and a part-time practice nurse working during the mornings. Consulting rooms were available for the partners, but the nurse had to fit into any spare room available. Space in the waiting room was also limited.

An appointment system was used, but it was flexible enough to accommodate an additional small number of patients. The practice list of the three partners totalled 6,256 at the beginning of the study.

The health centre was built 400 yards away with ample space for car parking. One other practice shared the centre, but the organisation remained separate and there were no problems of space and, in particular, a treatment room was available. The ancillary staff was augmented by a telephonist and another part-time practice nurse working seven hours daily and the appointment system was unchanged. At the end of the study of 18 months, the practice list had grown to 6,439.

Method

Work in the practice was examined during two 24-week periods, the first beginning 16 October 1972 and the second on 15 October 1973. As the health centre opened in May 1973, these two periods allowed a six-month gap between the beginning of work at the health centre and the second survey and we also tried to avoid any seasonal variation in workload.

The number of patients from the practice attending the health centre was recorded and doctors noted referrals to the accident department, emergency admissions, and requests for x-ray or electrocardiograms. All outpatient referrals were recorded and the practice nurse kept a record of the patients seen by her and the kind of service required. Home visits were also noted.

The attitudes of patients were obtained by means of a sample survey of one in 20 patients carried out in the same way as MacDonald *et al.* (1974). Patients were interviewed in their homes during October 1972 and October 1973. On each occasion less than one per cent of those contacted refused to take part.

Results

(a) Composition of practice sample interviewed

The composition of the samples interviewed in 1972 and 1973 were comparable in age, sex (table 1), and social class. The social-class composition in 1972 was as follows: classes 1 and 2: 28.1 per cent, class 3: 49.6 per cent, classes 4 and 5: 13.2 per cent and others 9.2 per cent.

TABLE 1
AGE AND SEX COMPOSITION OF PRACTICE SAMPLE (1972)

| Age (years) | 18-44 | 45-64 | 65-74 | 75 and over | Total |
|------------------|-------|-------|-------|----------------|-------|
| Number of men | 144 | 87 | 26 | 16 | 273 |
| Men (per cent) | 52.7 | 31.9 | 9.5 | 5.9 | 100 |
| Number of women | 139 | 89 | 37 | 28 | 293 |
| Women (per cent) | 47.4 | 30.4 | 12.6 | 9.6 | 100 |
| Total number | 283 | 176 | 63 | 44 | 566 |
| Total (per cent) | 50 | 31.1 | 11.1 | 7.8 | 100 |

(b) Workload

The total surgery consultations during six months (table 2) dropped from 8,553 to 8,043 after the move to the health centre. Although a little over half the fall was accounted for by one four-week period, which was an exceptionally quiet February, four out of the five remaining four-weekly intervals also showed falls. If the results are extrapolated for a full year, the mean consultation rate in 1972 was 2,734 per 1,000 patients compared with 2,498/1,000 patients in 1973.

TABLE 2
SURGERY CONSULTATIONS AND HOME VISITS

| Weeks | Seen in old premises | Seen in health centre | Visited from old premises | Visited from health centre |
|-------|-------------------------|--------------------------|------------------------------|-------------------------------|
| 1-4 | 1,343 | 1,282 | 276 | 246 |
| 5-8 | 1,434 | 1,345 | 375 | 262 |
| 9-12 | 1,286 | 1,244 | 418 | 329 |
| 13-16 | 1,444 | 1,488 | 430 | 322 |
| 17-20 | 1,510 | 1,234 | 330 | 303 |
| 21-24 | 1,536 | 1,450 | 344 | 339 |
| Total | 8,553 | 8,043 | 2,173 | 1,801 |

Home visits (table 2) were reduced by an average of 100 a month from 2,173 to 1,801 or from 695/1,000 patients a year to 559/1,000 patients.

Hospital referrals (table 3) including requests for consultant opinion and for open referral investigations (x-ray and ECG), increased by seven per cent due almost entirely to an increasing demand for x-ray examinations. Requests for outpatient consultations fell by 6.4 per cent. Laboratory tests remained almost constant at a rate of about 40 a week.

TABLE 3
HOSPITAL REFERRALS
(Outpatient, inpatient, emergencies and open referral services)

| <i>Weeks</i> | <i>Referred from old premises</i> | <i>Referred from health centre</i> |
|--------------|-----------------------------------|------------------------------------|
| 1-4 | 97 | 91 |
| 5-8 | 78 | 111 |
| 9-12 | 68 | 70 |
| 13-16 | 112 | 127 |
| 17-20 | 97 | 101 |
| 21-24 | 115 | 107 |
| Total | 567 | 607 |

There was a marked change in the workload of the practice nurse—1,860 patients were seen in the old premises compared with 2,816 cases in the health centre (table 4). The increase was observed in each of the four weekly periods. The employment of an extra nurse increased the time available by 40 per cent, while the number of cases seen increased by over 50 per cent. The proportion of cases referred on, or back to the doctor was 11·4 per cent in 1972 and 13·9 per cent in 1973.

TABLE 4
WORK OF THE PRACTICE NURSE—NUMBER OF PATIENTS SEEN

| <i>Weeks</i> | <i>Old premises</i> | <i>Health centre</i> |
|--------------|---------------------|----------------------|
| 1-4 | 340 | 503 |
| 5-8 | 319 | 443 |
| 9-12 | 218 | 349 |
| 13-16 | 380 | 541 |
| 17-20 | 331 | 426 |
| 21-24 | 272 | 554 |
| Total | 1,860 | 2,816 |

(c) *Patients and their opinions*

Five hundred and sixty-six patients were interviewed in 1972, of whom 364 (64·3 per cent) had attended the surgery premises in the previous six months. In 1973, 520 patients were interviewed of whom 358 (68·9 per cent) had been to the health centre.

In 1972, 28 patients had suffered from an illness of some kind in the previous six months, but had not attended the surgery nor received a home visit. In 1973, the corresponding figure was 16 patients. Most of the illnesses were considered too trivial, although five patients interviewed in 1973 said a factor had been the distance from their homes to the health centre. No patients gave this reason in 1972.

In 1972, 84 people had had doctors visiting their homes, of whom 14 (16·7 per cent) said they would have gone to the surgery if transport had been provided. In 1973, of the 96 home visits, 14 patients (14·6 per cent) would have gone to the surgery if transport had been provided.

There was a marked drop at the health centre in the number going to collect a prescription and increases in all other classes of use (table 5). Of patients who had attended to see their doctor within the previous 12 months, 286 out of 326 (87.7 per cent) had seen their own doctor at the surgery and 89.7 per cent at the health centre.

TABLE 5
REASONS GIVEN BY PATIENTS FOR ATTENDING SURGERY OR HEALTH CENTRE OTHER THAN CONSULTING A DOCTOR

| | <i>Surgery</i> | | <i>Health centre</i> | |
|---------------------------|----------------|-----------------|----------------------|-----------------|
| | <i>Number</i> | <i>Per cent</i> | <i>Number</i> | <i>Per cent</i> |
| To collect a prescription | 238 | 66.7 | 161 | 47.6 |
| To see health visitor | 4 | 1.1 | 9 | 2.7 |
| To see nurse | 70 | 19.6 | 93 | 27.5 |
| To attend a clinic | 10 | 2.8 | 18 | 5.3 |
| Other | 35 | 9.8 | 57 | 16.9 |
| Total | 357 | 100.0 | 338 | 100.0 |

The main advantages apparent to the patients using the health centre were the amount of waiting space and comfort. Before the transfer patients were asked how they thought a health centre might compare with other systems of general-practice surgery. Of those giving an opinion, 39.8 per cent thought health centres better, 19.9 per cent thought services were about the same, and 40.2 per cent thought they were not so good. When the same question was asked six months after opening the centre, 67.1 per cent now felt that health centres provided better services, 26 per cent felt they were about the same while only 6.8 per cent felt that they provided poorer services. A favourable reply was given by a higher proportion of those who had attended compared with those who had not been to the centre.

Discussion

Moving a practice into a health centre implies that services will be improved and better contacts will be evolved with health authority staff. Two of the biggest assets in this particular move have been the acquisition of a large treatment room and a big car park beside the centre.

We think that these have encouraged attendances at the health centre as opposed to home visits. However, Fry (1971) has recorded a considerable fall in home visiting rates and this trend seems to be widespread in general practice (Royal College of General Practitioners, 1973).

Work records showed that the items of service defined as consultations and home visits, specimens taken for laboratory tests, and practice nurse consultations were practically unchanged in number; 13,901 items were given in the surgery and 13,898 at the health centre.

Although the same number of hours were kept for consultations with the doctor fewer patients were seen. As the time was not devoted to any other purpose it follows that on average a longer time was spent with each patient. During the same period, a greater number of items of service were provided by the practice nurse.

Kuenssberg (1971) found that after a reorganisation of his practice allowing more participation by the nurse, there was an increase of longer consultations lasting ten minutes or more. He considered that this was possibly another index of greater effectiveness for the patient.

The move into the centre was paralleled by a change in policy which allowed the nurse to screen those patients arriving without an appointment or requesting a same-day consultation when no appointment vacancy was available. Additionally, she had her own appointment list and dealt with cases referred by the doctors. There was no wish to make the receptionist or nurse an absolute barrier between doctor and patient.

As expected, the pattern of work involved more time being spent by the nurse with the patients. The partners think that the changed distribution of work, giving more time for consultation with a doctor, has some relationship with the fall in requests for outpatient appointments and a greater use of x-ray and ECG services.

There was no real evidence that people who had suffered from an illness of any kind had been discouraged from seeking care at the health centre. Most patients in both surveys visited the centre with the intention of consulting a doctor, but other reasons for attending, such as seeing a nurse, or health visitor, rose after the move to a health centre. The proportion of people collecting a prescription did, however, fall. This may have been due to several factors including changes in policy and an increased number of posted prescriptions.

In view of the increased parking space, it was of interest that almost ten per cent more patients used cars to reach the centre with a decline in those walking or using public transport.

The opening of the centre was followed by a marked change in the patients' general attitudes to health centres. The number of those who thought they provided better services and facilities rose by over a quarter.

It is not easy to make detailed comparisons with workload estimates from other practices because of differences in the demography of practice population, and differing organisation of practice work. It is of interest however, that Dixon (1971) found a similar shift in the workload to nurses in the treatment room when health-centre premises had been provided. Marsh and McNay (1974) suggest that under ideal conditions, with a team of readily available paramedical workers, the average list of size of 2,400 patients will rapidly become too small to occupy the time of established general practitioners. In our study, no objective judgement can be made, but it appeared that any extra time made available to the doctors by a greater use of resources, such as the skills of a well-trained practice nurse, could still be spent profitably on the smaller number of patients seen by them.

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