Consultation patterns in a general practice

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SUMMARY. A study from the Oxford Community Health Project is reported on the effects on consultation rates in general practice of patients' age, sex, date of registration, address, and usual doctor. The impact on consultation rates of accessibility of surgeries and availability of doctors is examined when the variables are controlled, and the importance of these factors is discussed in relation to planning primary medical care.

Introduction

This paper reports a study of consultation patterns of patients in a mixed urban and rural practice of over 11,000 patients and four doctors in relation to patients' age, sex, date of registration with the practice, address, and usual doctor. The locality is of special interest as it is largely within the development area for the new city of Milton Keynes.

At the end of the study only 206 (1.7 per cent) of the practice patients had moved into houses built by the Development Corporation, a number which hardly changed during the relevant weeks, mainly because of a building strike. The results provide a baseline against which to measure changes in consultation patterns as the new city emerges.

Method

The practice participates in the Oxford Community Health Project, which maintains an age, sex, and address register from which current analyses can be obtained of the five variables used (Baldwin, 1972; Perry, 1972). Four weeks were selected during four months which were free from distortions caused by the absence of any doctor. The following information was recorded in all consultations:

1. At which of the surgeries (the main or one of the five branch surgeries) the consultation took place,
2. Which doctor was consulted,
3. If at the main surgery (a) which patients made appointments after the appointment slips had been placed on the doctors' desks, (b) how many free appointments a doctor had before these last-minute appointments were made.

For completeness a record was kept also of all home visits made during two weeks, including a note whether they were initiated by doctor or patient. Clinics for preventive medicine (immunisation, cervical cytology, and antenatal care) were excluded. Attendances for repeat prescriptions at branch surgeries entail seeing the doctor and a simple count was kept of these. Attendances for repeat prescriptions at the main surgery and the main branch surgery were dealt with by receptionists and these were not recorded.

Results

At the end of the study there were 11,810 patients registered with the practice and this figure varied little during the study. During the four separate weeks there were in all 2,343 surgery consultations and 88 attendances at the four minor branch surgeries for repeat prescriptions. A total of 468 home visits were recorded in the two-week period. Except where otherwise stated, results are presented as consultation rates (e.g. annual surgery consultations per patient were 13 times the number of surgery consultations recorded divided by the number of patients
in the practice at the end of the study). Thus the total consultation rate (surgery consultations plus home visits) was 3·6 per patient per year.

**Age and sex**

Sex and age-specific consultation rates are shown in figures 1 and 2. As expected from previous studies (Office of Population Censuses and Surveys, 1974) female rates exceeded male except at ages 0-4, 60-64, and 75 and over. The lowest total rate was at ages 10-14 in each sex, and rose progressively after the age of 45. After the age of 65 there was a progressive fall in the surgery consultation rate, presumably caused by increasing difficulty in getting to a surgery because of illness or restricted mobility, and far the greater part of the rise in total consultation rate from this age upward was accounted for by doctor-initiated visits. There was the expected marked rise in surgery and total rates in women aged 15 to 34 (mainly for gynaecological and contraceptive consultations), but there was also a peak in these rates among men aged 20-24. The rate for children under five was raised mainly by visits initiated by patients. In men the highest surgery consultation rate was obtained at ages 60-64, the years preceding retirement. The volume of consultations was about one third higher in females than in males. Patients aged 65 and over accounted for over one fifth of total consultations, and nearly half the home visits.

The change in the age-specific total consultation rate over the age of 45 suggested the possibility of curve fitting. Using the method of least squares it was found that the increase in rate with age could be expressed:

\[ \text{Consultation rate} = 0·003\text{age}^3 - 0·2\text{age} + 8 \]

Under age 45 no formula was possible, but when the increased rates in children and young adults were treated as distortions, a hypothetical straight line relationship was obtained from:

\[ \text{Consultation rate} = 0·018\text{age} + 2·2 \]

**Date of registration**

In this practice patients who were not born in the area have tended to come from far afield for housing and employment. Most of the villages and towns served by the practice have an owner-occupied estate built in the last 15 years. The area was defined as that within 15 miles of the central surgery, this being the extent of most of the natural boundaries on local movement.

Patients were classified in five groups depending on when they registered with the practice (table 1). The age-sex characteristics of the groups varied greatly so that the expected surgery consultation rate, based on the age/sex-specific surgery consultation rates for the practice as a whole, was different for each group. Comparing actual and expected surgery consultation rates, the most recently registered consulted more frequently than expected. The surgery consultation rate fell well below expectation when patients had been registered for eight to 12 years, and returned nearly to the expected value in patients who were born in the area or had lived in it for more than 17 years, this group constituting more than half the practice.

**Table 1**

<table>
<thead>
<tr>
<th>Date of registration</th>
<th>Patients</th>
<th>Surgery consultations</th>
<th>Surgery consultation rate (Actual)</th>
<th>Expected</th>
<th>Per cent difference from expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1955</td>
<td>6708</td>
<td>1301</td>
<td>2·51</td>
<td>2·50</td>
<td>+0·04</td>
</tr>
<tr>
<td>1955-1959</td>
<td>632</td>
<td>118</td>
<td>2·43</td>
<td>2·71</td>
<td>−10·3</td>
</tr>
<tr>
<td>1960-1964</td>
<td>531</td>
<td>82</td>
<td>2·01</td>
<td>2·51</td>
<td>−19·9</td>
</tr>
<tr>
<td>1965-1969</td>
<td>1336</td>
<td>255</td>
<td>2·48</td>
<td>2·38</td>
<td>+4·2</td>
</tr>
<tr>
<td>1970-1972</td>
<td>2603</td>
<td>587</td>
<td>2·93</td>
<td>2·79</td>
<td>+5·0</td>
</tr>
</tbody>
</table>

Expected values based on sex and age.

These total rates conceal marked age and sex differences. Comparing patients who registered between 1955 and 1964 with those who came in the two years after 1970, men were subject to greater changes in surgery consultation rate than women (table 2). Comparison between age
groups was limited by the small number of patients over 60 among the new arrivals and the small number of young children among the 1955–1964 group. The two registration groups aged 15–60 are compared in table 3. Among recent registrations young men consulted twice as often as young men in the practice as a whole, probably because fit young men very often do not register
when moving into an area until they require medical attention. There were only 376 men in
the age group 15–29 who registered in 1970–72, whereas there were 658 women in the same group.

**TABLE 2**

**SEX DIFFERENCES IN SURGERY CONSULTATION RATE IN TWO REGISTRATION GROUPS**

<table>
<thead>
<tr>
<th>Registration group</th>
<th>Patients</th>
<th>Surgery consultations</th>
<th>Surgery consultation rate</th>
<th>Per cent difference from expected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Actual</td>
<td>Expected</td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1955–1964</td>
<td>602</td>
<td>90</td>
<td>1.90</td>
<td>2.38</td>
</tr>
<tr>
<td>1970–1972</td>
<td>1194</td>
<td>230</td>
<td>2.51</td>
<td>2.32</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1955–1964</td>
<td>561</td>
<td>115</td>
<td>2.68</td>
<td>2.94</td>
</tr>
<tr>
<td>1970–1972</td>
<td>1409</td>
<td>355</td>
<td>3.29</td>
<td>3.29</td>
</tr>
</tbody>
</table>

Expected values based on sex and age.

**Access to a surgery**

The area served by the practice is shown diagramatically in figure 3. The relative positions of all the surgeries are indicated, with weekly numbers of consulting sessions. The approximate proportionate area distribution of the practice population is shown, with the main and only important bus route.

**TABLE 3**

**AGE DIFFERENCES IN SURGERY CONSULTATION RATE IN TWO REGISTRATION GROUPS**

<table>
<thead>
<tr>
<th></th>
<th>Period of registration</th>
<th>Patients</th>
<th>Surgery consultations</th>
<th>Surgery consultations rate</th>
<th>Per cent difference from expected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Actual</td>
<td>Expected</td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15–29</td>
<td>1955–1964</td>
<td>130</td>
<td>14</td>
<td>1.40</td>
<td>1.61</td>
</tr>
<tr>
<td></td>
<td>1970–1972</td>
<td>376</td>
<td>104</td>
<td>3.53</td>
<td>2.25</td>
</tr>
<tr>
<td>30–44</td>
<td>1955–1964</td>
<td>148</td>
<td>24</td>
<td>2.11</td>
<td>2.95</td>
</tr>
<tr>
<td></td>
<td>1970–1972</td>
<td>251</td>
<td>57</td>
<td>2.51</td>
<td>2.75</td>
</tr>
<tr>
<td>45–60</td>
<td>1955–1964</td>
<td>145</td>
<td>28</td>
<td>1.64</td>
<td>4.18</td>
</tr>
<tr>
<td></td>
<td>1970–1972</td>
<td>95</td>
<td>12</td>
<td>3.40</td>
<td>3.40</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15–29</td>
<td>1955–1964</td>
<td>112</td>
<td>39</td>
<td>3.40</td>
<td>3.40</td>
</tr>
<tr>
<td></td>
<td>1970–1972</td>
<td>658</td>
<td>212</td>
<td>4.18</td>
<td>4.18</td>
</tr>
<tr>
<td>30–44</td>
<td>1955–1964</td>
<td>162</td>
<td>34</td>
<td>2.74</td>
<td>2.95</td>
</tr>
<tr>
<td></td>
<td>1970–1972</td>
<td>190</td>
<td>49</td>
<td>3.35</td>
<td>3.35</td>
</tr>
<tr>
<td>45–60</td>
<td>1955–1964</td>
<td>129</td>
<td>21</td>
<td>2.12</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td>1970–1972</td>
<td>94</td>
<td>17</td>
<td>2.34</td>
<td>2.34</td>
</tr>
</tbody>
</table>

Expected values based on sex and age.
The ease with which patients can see a doctor at a surgery depends partly on their mobility and their distance from it. There was some overlap in the means of access available to patients in each part of the area, and it was not known which patients had the use of a car. Nevertheless, 9,093 (77 per cent) patients could be placed in one of four groups:

1. Living less than a mile from the main surgery, i.e. within reasonable walking distance,
2. Living on a good bus route. Included in this group were small numbers of patients in a village, who were seen at a branch surgery there,
3. Having access to a branch surgery in their own village. Patients in the village with a branch surgery with three sessions a week formed this group,
4. Having none of the above methods of access of the other groups, and therefore living in an "inaccessible village". Patients in this group were scattered throughout the practice area.

Many patients were excluded from the classification because their means of access were too complex, notably patients served by the main and two minor branch surgeries.

Table 4 gives actual and expected surgery consultation rates for each group, standardised for sex, age, and date of registration. The most striking feature is the low surgery consultation rate among patients in the "inaccessible villages", that for villages with branch surgeries being 25 per cent higher. Indeed, patients in villages with branch surgeries were even more favourably placed since attendance for repeat prescriptions entailed seeing the doctor. Inclusion of these attendances raised the rate for this group 22.1 per cent above expectation, and 50 per cent above the surgery consultation rate for the "inaccessible villages".

Figure 4 shows surgery consultation rates by age in the central town, the villages served by the minor branch surgeries, and the "inaccessible villages", attendances for repeat prescriptions excluded. Patients in all groups except those aged 20-30 consulted less if they lived in an "inaccessible village". Patients in the second half of life tended to consult more if they had access to a branch surgery. This tendency for the older patients to use branch surgeries when one is available is shown also in table 5.
TABLE 4
Surgery consultation rate by method of access to surgery

<table>
<thead>
<tr>
<th>Method of Access to Surgery</th>
<th>Within 1 mile of surgery</th>
<th>On a bus route</th>
<th>Village with branch surgery</th>
<th>‘Inaccessible villages’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation rate observed</td>
<td>2.56</td>
<td>2.71</td>
<td>2.57 (2.99)*</td>
<td>2.00</td>
</tr>
<tr>
<td>Expected consultation rate</td>
<td>2.60</td>
<td>2.54</td>
<td>2.53</td>
<td>2.57</td>
</tr>
<tr>
<td>Per cent difference from expected</td>
<td>−1.5</td>
<td>+6.7</td>
<td>+1.5 (+22.1)*</td>
<td>−22.1</td>
</tr>
</tbody>
</table>

Expected values based on sex, age and period of registration.
*Including attendances for repeat prescriptions.

TABLE 5
Proportion of surgery consultations at minor branch surgeries by age and sex in villages served by branch surgeries

<table>
<thead>
<tr>
<th>Age</th>
<th>0-9</th>
<th>10-19</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male %</td>
<td>53</td>
<td>38</td>
<td>22</td>
<td>24</td>
<td>33</td>
<td>44</td>
<td>35</td>
<td>86</td>
</tr>
<tr>
<td>Female %</td>
<td>51</td>
<td>56</td>
<td>30</td>
<td>39</td>
<td>44</td>
<td>74</td>
<td>53</td>
<td>82</td>
</tr>
</tbody>
</table>

Access to branch surgery ————
Within 1 mile of main surgery ————
Inaccessible village ————

Figure 4
Annual surgery consultation rate by age in three types of area

Doctors, their patients, and the administration
The age-sex register contains a note of the doctor each patient usually sees. This was often different from the doctor with whom they were registered by the National Health Service Executive Council (now Family Practitioner Committee). In group practice patients often will not see their usual doctor, particularly in an emergency.
### TABLE 6
Consultation rates by patients' usual doctor

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Observed</td>
<td>Expected</td>
<td>Observed</td>
<td>Expected</td>
<td></td>
</tr>
<tr>
<td><strong>Total surgery rate</strong></td>
<td>2.54</td>
<td>2.52</td>
<td>2.76</td>
<td>2.60</td>
<td>2.55</td>
</tr>
<tr>
<td>Patient-initiated visits</td>
<td>0.15</td>
<td>1.23</td>
<td>1.05</td>
<td>0.43</td>
<td>0.66</td>
</tr>
<tr>
<td>Doctor-initiated visits</td>
<td>0.72</td>
<td>0.55</td>
<td>1.29</td>
<td>0.86</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.77</td>
<td>3.57</td>
<td>4.05</td>
<td>3.70</td>
<td>3.21</td>
</tr>
</tbody>
</table>

Usual doctors in order of list size
Consultation rates varied considerably between the patients of the four doctors (table 6). The highest rate was 26 per cent greater than the lowest. Both absolutely and in relation to expected values, patients of two doctors had high rates and two lower rates, broadly corresponding to list size. Most of the variation was accounted for by differences in home visiting rates, which ranged from a fifth to a third of the total consultation rate, and most of this variation was in doctor-initiated visits. Surgery consultation rates varied relatively little, though patients of the doctor with the highest rate had the highest rates for both home visits and surgery consultations.

The difference in the consulting rates between the doctors varied from 8·5 per cent at the main surgery with a rigid appointments system, 21·0 per cent at the main branch surgery with an open-ended appointments system and 38·9 per cent in the village with three branch surgeries a week and no appointments system.

Last-minute bookings at the main surgery have to be fitted into a fairly rigid appointments system. There was a linear relationship between the number of free appointments a doctor had and the number of last-minute bookings he saw—the more free appointments he had the more last-minute patients he saw. Not surprisingly, a patient requesting a last-minute appointment had less chance of seeing his own doctor the fewer spare appointments that doctor had available. Further, regardless of which doctor they saw, fewer patients of a given doctor were seen by last-minute appointments the smaller the number of spare appointments their own doctor had. There must have been a number of patients who needed to see, or insisted on being seen, at once by any available doctor, and in this context these might be termed emergencies. The proportion of these is likely to be less than the 9·8 per cent of the doctor with the lowest mean number of free appointments.

Taken as a whole, including last-minute bookings, patients in the practice normally saw their own doctor. At the main surgery where all four doctors had at least one session every day, 80 per cent saw their usual doctor. At the main branch surgery, where all patients living in the township in which it is situated were seen and three doctors had two sessions a week and a fourth one a week, the proportion was 70 per cent, showing the effect of doctor availability. Where patients had access to more than one surgery, there was a better chance of their seeing their usual doctor. In the village with a minor branch surgery, where three sessions a week were held by two doctors but 54 per cent of patients were seen at the main surgery, 77 per cent of all patients saw their own doctor.

The doctors with larger lists and higher total consultation rates tended to see a higher proportion of their own patients, and a lower proportion of the patients they saw were those of other doctors. Nevertheless, three of the four doctors saw similar numbers of other doctors' patients. There was some evidence of pairing between doctors, such that a doctor saw relatively more patients of one than of the other two partners, perhaps associated with their surgery times, but each doctor saw some patients of every other.

Discussion

The determinants of consultation patterns are complex. The patient's physical, mental, or social state normally will be the main factors initiating the demand for a consultation at a given moment. These are heavily influenced in turn by the sex, age and other characteristics of the patient. Who is consulted and where the consultation takes place are subject to a number of other variables. This study is concerned with the influence on the rate of consultation of the length of time the patient has been registered, the accessibility of the doctor in time and place, his list size (that is, the number of patients who regard him as their usual doctor), and the administrative and clinical policies affecting his availability. Since patients' sex and age are closely related to patterns of morbidity and thus to consultation patterns actual consultation rates of any group must be compared with those expected if its sex and age structure does not differ from that of the practice population as a whole. Since period of registration with the practice affected consultation rates, this variable was controlled also in examining the effects of differences in accessibility and availability.
Consultation rates vary widely between practices (Royal College of General Practitioners, 1973). The rate of surgery consultations found in this study was in the middle of the range and close to that in the survey of the Office of Population Studies and the Royal College of General Practitioners (1974). The visiting rate was high, as was the proportion of patient-initiated visits, indicating that in this practice patients called their doctor unusually often.

Sex and age

In common with most previous studies, higher consultation rates were obtained in women, the aged, and children (Marsh and McNay, 1974). Rates rose after the age of 45 in both sexes, though in old age the total rate was heavily affected by the policy on doctor-initiated home visiting. Under the age of 45, deviation from level consultation rates occurred in children and young adults. Increased rates in children may be caused partly by higher infection rates, but it seems likely that parental anxiety about minor trauma as well as infection caused further inflation. As Elder has observed, "children are often brought to the doctor for the most trivial mishaps which would certainly not lead an adult to seek medical help". Young adults tend to consult more often shortly before and after marriage, and women particularly for gynaecological conditions and contraceptive advice. The slight rise in the rate for young men is likely to reflect differential registration by those who are ill and may not indicate a real increase, as discussed below.

Period of registration

Although an increased incidence of neurosis has been found in new towns (Martin, et al., 1957), the evidence from actual consultation rates is conflicting for they are not always raised (Brotherston and Chave, 1956; Bain, 1973; Taylor and Chave, 1964). It has been reported that recently registered patients, specially women, consult more than patients who have been registered for some years (Marsh and McNay, 1974; Whitfield, 1972). It has been suggested that there is a group of high users of general-practitioner services, members of which move frequently from one area to another, causing a high consultation rate among new arrivals (Higgins, 1972).

In areas of high population mobility, recent registration may be associated with in-migration, but in groups subject to low morbidity rates such as the young, a spuriously raised consultation rate may be caused by under-registration of the fit. It was not possible in this study to discriminate fully between these effects. Although the Milton Keynes area had not entered the planned period of high growth rate at the time of the study, there had been some recent settlement.

Young women, even though themselves fit, are more likely to register at or soon after marriage in order to obtain contraceptive advice, for antenatal care, and in association with their young children. There is no reason to suppose that more young women than young men were entering the area, yet there were twice as many recently registered young women as young men in the practice. Similar considerations have to be taken into account in interpreting the small increase in consultation rates of recently registered patients of both sexes in the age group 30–44, though there is no evidence of a sex difference in registration pattern. The lower than expected consultation rates of recently registered patients aged 45–60 are noteworthy contrast. It may be that there is differential entry of fitter people into the older mobile population.

It seems unlikely that patients registered for eight or more years are unrepresentative of the indigenous population resulting from earlier migration into the area. The low consultation rates among both men and women who registered between 1955 and 1964, particularly the middle-aged, may indicate lower morbidity among this earlier group of migrants also, or may be merely the outcome of differential out-migration of the less fit. That the consultation rate for patients registered before 1955 is the same as expected is likely to be a weighting effect since they constituted over half the practice.

Accessibility

Patients who live at a distance from a surgery consult their doctor there less than if they live close to one (Hopkins et al., 1968; Binnie, 1970). The accessibility of specialist psychiatric services also has been shown to have a marked effect on their referral rates (Baldwin, 1971). Taking the service to the patient is an essential component of planning improved delivery of community health care. A low consultation rate was found in this study among patients who lived more than a mile from a surgery, were not on a good bus route, and had no access to a branch surgery.
Branch surgeries were used more by the elderly, presumably because travel is more difficult for them, though the informality and less hurried character of these surgeries, coupled with the expectation of seeing the doctor even for repeat prescriptions, may have had some effect. Branch surgeries usually have individualistic histories so that it is difficult to formulate general policies about their number and siting. For the most part doctors want to close them down, whereas patients would like to have more opened. Despite their grave clinical limitations, their popularity among patients is not easy to ignore and it may be that the lower consultation rate among patients in inaccessible villages in this study points to an unmet need for primary medical care.

Availability

Patients generally prefer to see their usual doctor, and in this study nearly four out of five did so. The proportion was higher at the main surgery where all the doctors were available each day, than at branch surgeries where the availability of individual doctors was restricted. To some extent therefore, there was an exchange between availability of the patient's usual doctor at the main surgery and accessibility to doctor services at a branch surgery.

Each doctor had the same number of appointments available at the main surgery. Patients whose usual doctors had larger lists tended also to have higher consultation rates, yet were more likely to be seen by their own doctor. Not surprisingly, therefore, the doctors with larger lists tended to have fewer appointments available for last-minute bookings. Fewer patients of these doctors were seen in this way, perhaps because some of their patients preferred to defer a consultation for which there was a degree of urgency in order to see their own doctor, rather than accept a more immediate appointment with one of his partners.

Other studies have shown that practices with larger lists tend to have lower consultation rates (Richardson et al., 1973; Royal College of General Practitioners, 1973) whereas in this study individual doctors with larger lists tended to have higher rates. The differences in consultation rates between doctors were more marked at the branch surgeries which did not have an appointment system, suggesting that an effect of the administrative system was to minimise them.

The effect of the doctor's clinical policy on the consultation rates of his patients was clearly important. The doctors with larger lists and higher rates had higher than expected home visiting rates for their list structures, and those with smaller lists had lower than expected rates. Most of the variation in these rates was accounted for by doctor-initiated visits. It was not practical to obtain data on return surgery consultation rates, but it seems likely that differences in policy on return consultations could easily have accounted for the smaller variations in surgery consultation rates between doctors.

One variable which was not examined is the effect of cost on the kind of service the doctor provides. The capitation fee system is complicated by additional payments for patients recognised as incurring added costs, particularly in doctor time, such as the elderly and rural patients. It would be useful to study how far such payments are an incentive to make special arrangements for those who are at a disadvantage by reason of sex, age, residential mobility, or living in an inaccessible place. Groups with high consultation rates such as the elderly and women must be financially disadvantageous for the doctor unless additional payments are sufficient to offset his increased costs.

Practical application

With the object of improving both the service to patients and economy for the doctors, some well-defined changes in the organisation of the practice were made on the basis of the results of the study. It should be noted that in the absence of the computer-assisted practice register it is doubtful if either the means or the motivation to carry out either the study or the consequent changes would have been found.

The study showed that the cover for outlying villages was being provided by several doctors. Using lists of patients sorted by village, exchanges were made between doctors within a limited area so that all the patients were looked after by one, or at most two, doctors. The result was a saving of doctor time and mileage and increased doctor availability and was well appreciated by the patients.

The arrangements for branch surgeries were altered to discourage unnecessary use so that a better service could be provided for the limited numbers of aged, disabled, and mothers
with small children who needed them. One was closed where another practice had its main premises closer than our main premises. The timing of branch surgeries was made deliberately inconvenient for the working population, and pressure was put on patients not to use them unless they were in one of the groups for whom they are specially important. By these means the numbers of attendances were reduced and in the two areas where more than one weekly session was held, the total number of sessions was reduced from ten to seven a week. Improvements in the services at branch surgeries are now possible by making patients’ notes available and by providing basic facilities.

The most important exercise in practice management was to organise the surgeries so that the correct number were provided per week, at the right site, and staffed by the doctor most in demand. Each surgery was calculated to require 20 appointments and to be nearly fully booked by the end of the surgery. Account was taken of the anticipated growth of the practice and the behaviour of patients when their own doctor was not available. Despite an increase in average list size this reorganisation enabled release of doctors to take up sessions in special aspects of community care—an important part of planning policy for the provision of medical care in Milton Keynes.

Nevertheless, predictable but serious snags have arisen. Although the consultation rates based on the characteristics of patients were helpful, variables such as doctor’s holidays and seasonal fluctuations in morbidity were not taken enough into account. Consequently, in contrast to the pre-existing situation with an uneconomic excess of appointments, the result was often a shortage of appointments and a less satisfactory service for the patients. It may be that, with a more extensive study taking account of the additional variables, an appropriate level of provision can be achieved, though it might be desirable to have the capability of making special calculations to meet unusual situations.

The general conclusion from these observations is that variations between doctors in availability, both because of their habits of practice and because of the influence of practice administration, and in accessibility through dispersal of services about the practice catchment area, have important and in some ways profound effects upon consultation patterns which are distinguishable from, though not independent of, the sex, age, and residential stability of their patients. The ways patients seek care are influenced by the arrangements made by practitioners to provide it. It is for consideration whether such factors have any important bearing on the adequacy and effectiveness of primary medical care.

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References