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Appointment Systems in General Practice

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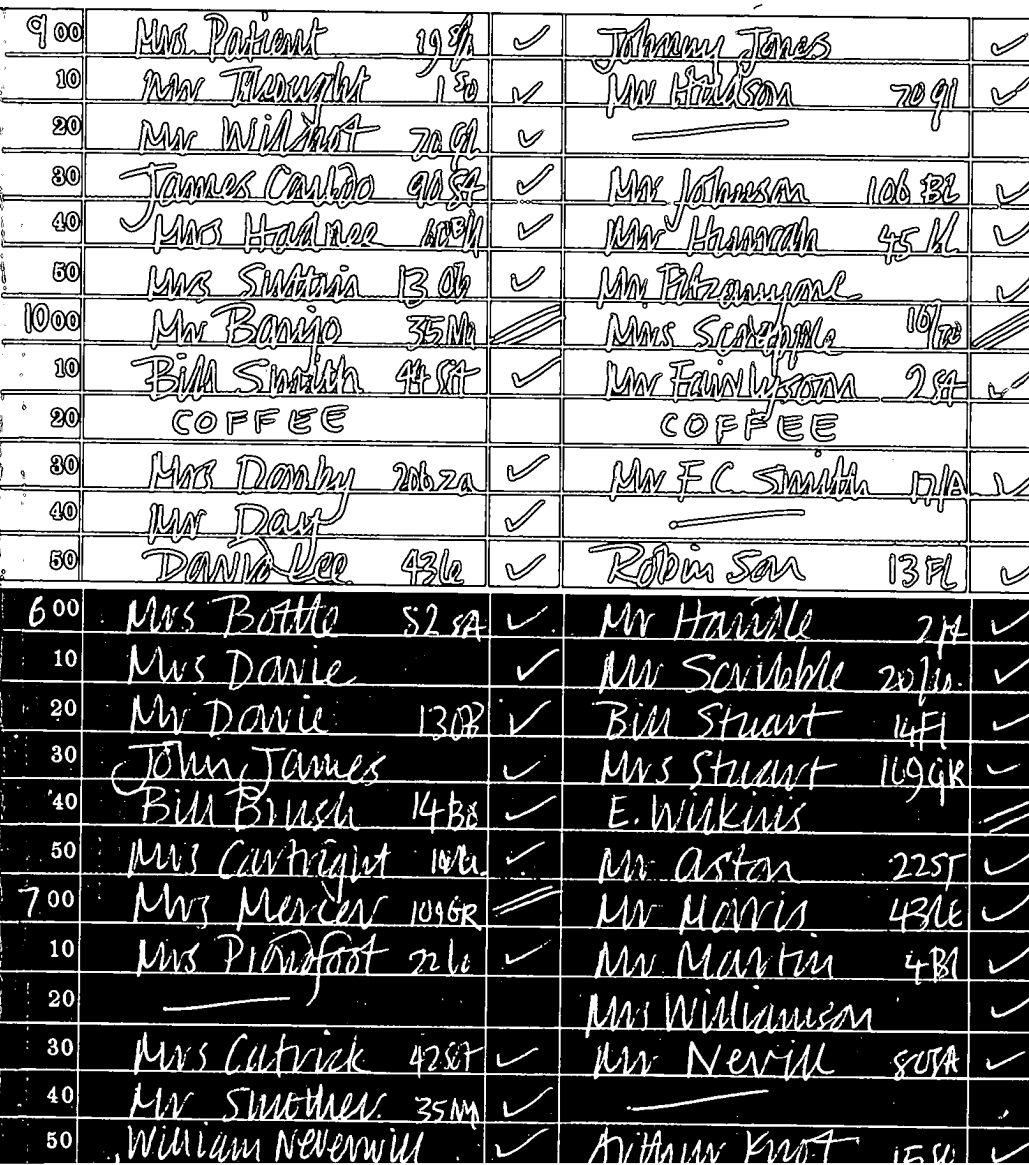

Preface

BY BRUCE CARDEW

DURING the past two decades there has been much talk about the proper role of the general practitioner in the world of modern medicine. Not only here, but in many countries, arguments have raged about the scope of his work and his relationship to the hospitals and health and welfare services; about his undergraduate and postgraduate training and about the physical environment and circumstances in which he should practice. Even the Communist countries with their total financial and centralized power have been unable finally to decide what part their front-line doctors should play in the state health services.

Happily, as far as this country is concerned, the need for the general practitioner or personal doctor is now scarcely questioned. The problem is now rather how to give him the financial and clinical satisfactions which will keep him here. And this demands attention to details.

Already some solid work has been undertaken towards defining the general practitoner's clinical role. To members of the College of General Practitioners must go much of the credit for this. Records carefully kept over the years and subsequently analysed have revealed the range of the general practitioner's work and of the work-load, what he needs in the way of ancillary help, and the type of diagnostic aids which he can most profitably use.

As his role becomes more clearly defined, so does the possibility of reorganizing his undergraduate and postgraduate training. A revised curriculum is now generally seen to be imperative and its scope has been well described by a WHO Committee under the guidance of Professor Richard Scott. We must now await the findings of the Royal Commission on Medical Education before action can be taken in that field.

The environmental needs of the general practitioner are also beginning to be better understood. Again much credit lies with doctors who

have tried out and tested ideas in their own practices and published the results in the medical press for the benefit of their colleagues. A more sustained and organized study has been undertaken over the last three years by Dr. George Adams, Medical Director of the General Practice Advisory Service and by Mr. Brian Brooks, his architectural colleague. Gradually, standards are being laid down for space requirements and their organization, lighting, heating, record-keeping, and many other matters.

And now I must come to this study on appointment systems in General Practice and interject a personal note. I have presumably been asked to write this Preface because of my long interest in the subject. When I was editor of *Medical World*, I persuaded my colleagues to allow me to make a discussion film about appointment systems and later with seven experienced general practitioners to prepare a handbook of advice to those contemplating the introduction of such systems. Both projects were financed by Lloyd-Hamol Limited who later showed the good sense and generosity to provide doctors with the diaries needed to work the system.

To begin with, my advocacy had been based solely on a hunch that an appointment system was likely to make the doctor's lot easier and to please the patient. By 1962, I had tangible evidence in the form of scores of appreciative letters from general practitioners who had benefited from the introduction of the system *Medical World* had recommended.

So far, so good. But still there had been no objective study to justify the advice which we had so precipitously offered. Many questions needed to be answered. Could appointment systems be applied in rural as well as urban areas? Would working-class patients welcome a change in their habits? Would the elderly be able to participate? What would be the effect on the doctor's work-load and on the number of home visits he would have to make? These and many other questions could be answered only by what is now called a study in depth. Professor Titmuss advised me to approach the Unit of Biometry of Oxford University which had already shown an interest in socio-medical studies. Dr. N. T. J. Bailey, the then Reader in Biometry, agreed and all that remained was to find the money to finance a long and expensive undertaking. There was no doubt as to whom to approach. The Nuffield Provincial Hospitals Trust who had shown over the years their prime concern for any venture designed to improve standards of general practice agreed at once to finance the study.

It is not my purpose to describe or evaluate the authors' achievement. They set out to discover the impact of an appointment system upon N.H.S. general practice and this they have done in the most scientific and disciplined manner. I am sure that their study will prove of the greatest value to general practitioners, sociologists and to those who claim to speak for the consumers, who in this case are the doctors' patients.

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Acknowledgements

THIS study could not have been carried out nor the report written without a great deal of help from many other people, to all of whom we offer our thanks.

Mention should first be made of the members of the Advisory Committee, Dr. G. S. Adams, Dr. N. T. J. Bailey, Dr. Bruce Cardew, Professor Peter Collison, and Dr. H. N. Levitt. We are particularly grateful to Dr. Cardew who proposed this investigation and has given us much useful advice throughout.

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Finally we wish to record our extreme indebtedness to the staff at the Department of Biomathematics, particularly Mrs. N. C. Amery, Mrs. K. M. Earnshaw, and Mrs. C. E. Webb, and to thank them for carrying out the very considerable secretarial and computational work necessary for the study and this report.

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1 Introduction

It is arguable that if one were planning a general practitioner service *de novo* the question of whether or not appointment systems should be instituted would scarcely arise; in most cases they would be taken for granted. This is not meant to imply that there are no cogent arguments against this course of action or that we are advocating a wholesale switch to appointment systems; any suggestion that these are invariably desirable would obviously be somewhat superficial.

Our primary object is to present findings which will enable doctors to take informed decisions about this question in the light of our results and the special features of their own practices. This report sets out in detail the results of a number of surveys and studies carried out from the Unit of Biometry[1] at Oxford University.

In order to appreciate the nature of the problem of organizing patients' attendances at a general practitioner's surgery it is helpful to consider what is involved in a person's visit to his doctor and in which ways this differs from a visit to, for example, a dentist or solicitor, where calling by appointment is taken for granted.

The most striking feature of a general practitioner's work is the extent of the unpredictability of the load. The patients themselves do not usually know much in advance that it will be necessary for them to visit the doctor, nor do they know how long a consultation will take, or how many other patients will be present at the time they decide to go to the surgery. The doctor might be in a position to give them some information on the two latter points, but since there is normally no prior contact between doctor and patient this is of no practical use. This same lack of communication means that the doctor himself is also unable to predict his load from day to day except in very general terms based on past experience.

1. Now the Department of Biomathematics.

All of this applies essentially to 'new' consultations, i.e. those for newly arising spells of illness. Repeat consultations made at the request of the doctor are partially controllable.

Thus the major difference between the work-load of a general practitioner and that of the other professions mentioned above consists not in its unpredictability *per se* but rather in the fact that (for new consultations) there is no communication between doctor and patient which would reduce it. There is, moreover, an element of urgency, at least from the patient's point of view, in many new consultations. This means that the patient will want to consult the doctor as soon as possible after making the decision to seek medical advice. Accordingly this limits the control, even assuming the necessary communications were available, which a doctor has over the time when a patient may call upon him. It is this rather than the fact that the need for a new consultation arises more or less at random that makes the control of a doctor's work-load more difficult.

In addition the general practitioner has among those who seek his attention a large proportion who are elderly, poor, or ill-educated. And, of course, most of these and other patients calling to see him are feeling unwell.

The implication of all this is that an appointment system will not run as smoothly for the general practitioner as for other professions where clients are seen by appointment. The fact that appointment systems have been relatively uncommon in general practice and that a general practitioner will very often not have the secretarial facilities for running an appointment system also suggests that the introduction of a full[1] system of this kind may be accompanied by some difficulties.

General practitioners with small lists, and their patients, probably find that the surgery work-load presents few problems. Because demand is quite light the time patients wait, the size of queue, and the surgery to surgery variation in numbers attending rarely become troublesome. Generally where time and space are plentiful relative to demand, even the most inefficient use of either matters correspondingly little and crowding is not a problem. But the number of doctors in this happy position is very few. Most have a fairly large work-load and the fact, inherent in the unregulated queueing for consultations, that they cannot plan their time efficiently aggravates the situation.

1. We use the term 'full appointment system' to describe one in which a substantial number of attendances at ordinary surgery sessions are by appointment.

They have often, especially in towns, little space to spare, and the large waiting-room, arranged to accommodate as much as possible of the lengthier queues, can be expensive to maintain.

Over the years there have been various attempts to regulate the arrival of patients at the surgery. The general practitioner gives a number of different services; it is convenient, for some of these, to group the patients requiring a particular service together and devote a special session to them. Hence the development of special sessions for ante-natal work and vaccination, etc. A feature of such sessions is that the patient is not in immediate need of treatment, and coming to a special session, perhaps held only once a week, reflects no hazard, real or imagined, to his health. Patients whom the doctor has asked to call back for a repeat consultation are in the same position as far as urgency is concerned and a possible way of smoothing out the demand for care over the week is to fix, as some doctors do, special sessions for such patients only, or at least to ask them to avoid coming back at the especially crowded sessions. Such strategies as these may spread the load more evenly throughout the week and save doctors and patients from the worst consequences of a variable daily load. For any particular surgery session patients still arrive and queue in the usual way. The patient may still have to face a long wait and the doctor has no control over the exact time at which his patients arrive and may thus, for example, spend much of his time waiting for the next patient until towards the end of the session when there is a heavy influx which keeps him busy for the next hour or so.

Clearly there is a need for some kind of appointment system if one can be devised which will take into account the limitations and pressures of the general practitioner's situation.

Accordingly, notwithstanding the many factors which appear to militate against the use of an appointment system during the ordinary surgery sessions of a general practitioner, a large number of doctors have thought the advantages it might bring to patients and themselves sufficiently worthwhile to give an appointment system a trial. Of these many have found that their appointment system served them well—often indeed better than they had expected—and have continued using it. Others discontinued their appointment systems finding they brought no benefit and perhaps even hindered them in their work.

By 1962 at least a few hundred practices were using appointment systems and a number of articles about them had appeared in the medical press. There was, however, little quantitative information available

on, for instance, their effects on doctors' work-loads or patients' waiting-times. Nor had there been any large-scale systematic investigation to ascertain the types of practice in which an appointment system would be worth introducing.

Dr. Bruce Cardew, then editor of the journal *Medical World*, proposed that a study of these problems should be undertaken, and the Nuffield Provincial Hospitals Trust made a generous grant towards the support of this work, which was based at the Oxford University Unit of Biometry (now the Department of Biomathematics). The bulk of the field-work was concentrated in the period extending from mid 1963 until mid 1965.

Objectives and scope of the study

The main objectives of the study were as follows:

(i) To ascertain the opinions of representative samples of doctors and their patients on the subject of appointment systems.

(ii) To obtain quantitative estimates of the effects of appointment systems on various aspects of a doctor's work and on patient waiting-times.

(iii) To ascertain the types of practice in which the introduction of an appointment system would be worthwhile, the best way of running it and the difficulties likely to be encountered.

The study consisted of a series of surveys and experimental studies in which we collected factual information on the running of an appointment system and also questioned doctors and members of the public about their opinions. The methodology falls into three main parts:

Postal surveys among doctors;

Personal interviews and postal surveys among patients (strictly speaking 'potential patients');

Detailed record collection from a number of practices.

Two separate surveys of random samples of doctors were undertaken simultaneously. The first (actually a sample of *practices*) was confined to doctors who were known, from a preliminary questionnaire, to be running an appointment system themselves. Questions were asked about such matters as their experience in operating the appointment system, their opinions of it, their assessment of patient reactions, and the extra work involved for practice staff. Information

on the type of practice, number of patients, type of area, and so on was also collected. In the second survey doctors *not* running an appointment system were asked various questions about their opinions.

In addition to these sample surveys information of a more anecdotal nature was collected from a number of doctors known to have introduced and subsequently withdrawn an appointment system.

Two types of survey of patient opinions were also carried out. The first consisted of interviews with a large sample of the adult population. The second was a postal survey carried out on random samples of patients from nine practices, four with and five without appointment systems. In each of these surveys questions were asked about opinions on appointment systems, frequency of making appointments, number of visits to doctor, and so on.

The third phase of the study consisted in collecting from a small number of practices detailed records relating to the periods before and after the introduction of the appointment system. These records were of two types: information on waiting and consulting times was obtained for each patient seen at the surgery for a period of a week shortly before the appointment system started, a week soon afterwards, and (usually) a week some time later; in addition records of the numbers of surgery consultations, appointments, and home visits were obtained over a longer period. Records of this latter type were also obtained from a number of practices which were already running appointment systems. These records and the practices from which they were obtained do not constitute a random, or even a truly representative, sample but they do cover a variety of practices and serve to show the sort of results which can be expected from the introduction of an appointment system.

The results of these studies are presented in Chapters 3–6. Other relevant work is reviewed in Chapter 2. The over-all conclusions are summarized in Chapter 7 and a number of practical recommendations made. Technical details concerning methodology, together with the majority of the tables are in the appendices.

2 Previous and Concurrent Work

THE present chapter aims to give a general idea of published work relating to appointment systems in general practice.

Some reference has been made in several broad surveys of general practice to the use of appointment systems in this sphere of medicine. Hadfield in 1951[1] noted that of the 188 doctors whom he visited in the course of his inquiry 2 per cent. saw their patients by appointment only. More than two-thirds, however, gave appointments for occasional consultations. This proportion was much the same for those practising in town and country, but somewhat higher among younger doctors.

An assessment of the findings of a postal inquiry[2] undertaken at the same time revealed a similar state of affairs. It was found, however, that five out of twelve private practitioners questioned made use of a full appointment system. A few doctors in this survey stated that they had tried an appointment system and later discontinued it. Failure on the part of patients to use the system properly was quoted in two cases as the reason for this state of affairs.

Writing at about the same time, 1954, Taylor[3] commended the use of appointment systems to general practitioners. The views and feelings of doctors in three practices situated in widely differing circumstances and running successful appointment systems were quoted and some probable advantages and disadvantages of appointment systems in general practice were listed. On the positive side it was suggested that an appointment system was likely to:

(*a*) Save the patients' time spent in waiting-room;

(*b*) Reduce the dangers of cross-infection;

(*c*) Reduce the amount of waiting space required;

(*d*) Even out the flow of patients within a surgery session;

(*e*) Give the doctor an advance view of the size of the surgery, so that he might regulate his speed of work, etc., appropriately.

Among the disadvantages were the following:

(*a*) Patients have to be taught to use the system and this may take time. (The system should not be declared a failure until after at least a year's trial);

(*b*) The surgery ought to be manned by a receptionist during working hours. If it is manned for less than these hours, the times when appointments could be made would have to be made clear to all patients.

It was pointed out that appointments for a first consultation were rarely made much more than a few hours in advance, whereas an appointment for a repeat consultation could be made at the surgery to suit the convenience of both doctor and patient.

Some warnings were given—in particular that doctors should not expect the system to be perfect or run it too rigidly.

Somewhat earlier than this, Horne[4] reported on his experiences in running an appointment system in his practice. His was a suburban, mixed practice of around 3,300 patients. His surgery and home were combined and near to a shopping centre; the bus service in the area was good. Initially appointments were given for repeat consultations only. He employed a receptionist and this proved of considerable assistance. The appointment system was judged to be a success as the proportion of patients attending by appointment rose from an initial 50 per cent. to 80 per cent. after six months. The waiting-room was almost empty and there were seldom more than three or four people waiting. He observed no sudden influx of patients or crowds pressing to get into the surgery. Consultations were arranged, usually, in advance of the surgery sessions themselves, and the load spread throughout the week by suitable booking arrangements. Mondays, Fridays, and days following public holidays were left free of appointments for repeat attendances to cope with the expected influx of 'new' patients on these days.

The number of home visits made dropped sharply in the year following the introduction of the appointment system. This had not been expected but was possibly due to people being more ready to attend at a surgery if the waiting time there was likely to be short.

Certain disadvantages were perceived in the system. The poor and the aged living at a distance found the expense of a telephone call a

problem. Special arrangements were made for these. For the doctor the disadvantages were that the surgeries were booked up well beyond the scheduled hours and telephone- and door-bells rang more often.

It was felt that special appointments made out of surgery hours for long consultations or people with infectious diseases were particularly useful. Generally, few people failed to keep their appointments and Horne concluded the system would not work so well unless it appealed to the vast majority of patients.

Carr[5] was encouraged by Horne's paper to try an appointment system in his two-man semi-rural practice. Each partner worked from his own premises and Carr's patients numbered 2,250. Public transport to and from his surgery area was fair for certain patients but for others rather poor and to cope with this problem he ran a branch surgery. In the summer he dealt with quite a number of seaside visitors. About 80 per cent. of attendances were by appointment. No patient arriving without an appointment during surgery hours was turned away. If the session was heavily booked they were offered the alternative of a return appointment later in the same session or at a subsequent session. A few patients disliked the system, often apparently because they found the telephone difficult to use, or expensive. A few patients were habitually unpunctual but the receptionist learned to cope with these by telling them that their appointment was 10 minutes earlier than it really was. Otherwise late attendances were treated as unbooked attendances. The appointment system was subjected to the test of an epidemic in which it was very heavily extended. Patients with appointments then often had to wait up to 20 minutes beyond their booked time and unbooked attenders were fitted in whenever time was available. Even so, Carr thought that the appointment system meant that there was less waiting by all patients than there would have been under the old arrangement in similar conditions. He was of the opinion that an appointment system was unworkable without adequate secretarial help and drew attention to the difficulties arising when the receptionist was on holiday.

Grant[6] (1955) described how an appointment system which he had set up in his practice proved to be a failure. He practised single-handed in Workington and had a list of 2,600 patients of whom 500 lived in a village 3½ miles from the surgery. He dispensed for these and also operated a branch surgery in the village. The main surgery was in the town. He had first taken over the practice some few years previously and started booking appointments for the first hour of the 2-hour

session in the evenings. He found that his average consulting time was from 5 to 7 minutes per patient, depending on pressure and decided to book appointments at 10-minute intervals. The appointment system was instituted on 1 August 1954, six weeks notice having been given by large printed cards in the waiting-room and verbally by himself. A secretary/receptionist who also did dispensing was in attendance in a second office opening out of the waiting-room. About a month after the start of the appointment system up to about four patients booked for any one evening and these tended to come in at any time. Gradually the number diminished so that only the occasional very busy person attended by appointment (about three patients per week). There was, during the period that the appointment system was really being used, some resentment at the sight of those with appointments going in ahead of those without among patients without appointments who had been waiting some considerable time. In discussing the reasons for the failure to use the appointment system, Grant pointed out that waiting times were fairly short, usually not more than quarter of an hour and very rarely as long as three-quarters of an hour. It was also his practice to devote anything up to half an hour to a new consultation in order to get to the bottom of the problem and reduce the need for a repeat consultation. The ratio of new to repeat consultations was 1:2.

So far the individual appointment systems described have related to small practices (single-handed, or two-handed partnerships). Mallett,[7] however, told of an appointment system running at the central surgery premises of a partnership of four doctors working in a small country town. At the time of writing the practice served some 10,000 patients. Of the surgery staff two were dispensers and one a secretary. With the advent of the appointment system one dispenser was assigned the task of manning the telephone switchboard, one the dispensary, and the secretary in a separate room made all appointments and supervised the flow of patients. Before the start of the appointment system the usual wait-your-turn method of seeing the doctor had obtained. Mallett listed the disadvantages attending this method of organization mentioning, in addition to those points made by Horne and Carr, the problem when several doctors are consulting in the same premises of confusion as to which patient was next to see which doctor. Having decided to start an appointment system, the partners started keeping a note of their surgery work-load (numbers of patients seen and length of each surgery). The average consulting time seemed to be 5

minutes per patient when very brief consultations were taken into account. The appointment system was organized on this basis though special surgeries with long appointment intervals were provided for expectant mothers. Speaking of the initiation of an appointment system Mallett drew attention to (*a*) increased pressure on telephone arrangements due to the system; (*b*) the necessity of providing suitable appointment books; (*c*) the important point that though 5 minutes was suggested as average for a consultation in his case, this will vary from doctor to doctor and should be borne in mind in arranging appointment intervals. The need for a signalling system to call in patients to doctors in a group practice of this kind was stressed and the procedure adopted for informing patients of the change-over to an appointment system described. Detailed descriptions of the measures adopted by his partnership to deal with the points mentioned above are given by Mallett in his paper. Advantages similar to those quoted by Horne and Carr were listed. Certain disadvantages were noted in addition to those encountered by writers of earlier papers.

(*a*) Appointments were not always made in advance by patients which tended to disrupt work.

(*b*) Some patients did not make an appointment and sometimes caused overcrowding in the waiting-room.

(*c*) A great deal of time was taken up by the staff in making appointments which caused interruption of work in the surgery. Also the time between surgeries was busier for the staff.

A survey over a period of a week revealed that only about a third of patients making appointments did so by telephone and accordingly it was suggested that it might be possible to administer an appointment system without recourse to the telephone (i.e. not allowing appointments to be made by this means). Mallett concluded that the advantages outweighed the disadvantages and that none of the partners after more than four years' experience of the system would wish to stop it.

Baldwin[8] reported on more than three years' experience of an appointment system running in his partnership. The practice, which was a semi-rural one, was in many ways similar to that of Dr. Mallett and colleagues. There were four principals with a combined list of 9,000 patients, two-thirds of whom lived within a mile of the central surgery used by all partners. A very high proportion, more than 90 per cent. of the patients attended by appointment doing so most punctually; below 2 per cent. refused to make appointments. In con-

trast with Mallett, Baldwin observed that there was an increasing tendency for patients to telephone for appointments. One feature of particular interest was an inquiry conducted, by courtesy of the Medical Officer of Health, by two health visitors into the reactions of patients. 142 householders were visited. Of the 130 with children under 10 years of age, 10 felt that the appointment system was unsatisfactory but could suggest no better alternative. None of the others objected to the appointment system. Of the 10 objectors, most lived some way from the surgery and found it difficult to make contact with the staff there by telephone or otherwise. To some extent this inquiry was stimulated by a severe attack on the appointment system by a writer in a local newspaper who was under the misapprehension that persons would only be seen by appointment.

In discussing the advantages and disadvantages of the appointment system, Baldwin took the view that in as far as it permitted patients to see the doctor of their choice there was a tendency for there to be a less even distribution of the work-load between partners. It was also, as a result of the appointment system, found necessary to employ one additional whole-time receptionist. It was felt that neither surgery work nor home visiting had increased. The partners were well satisfied with the system and intended to continue with it.

Levitt,[9] who practised single-handed in the London area with a nearly full list, described the gradual way by which he introduced an appointment system into his practice. Over a period of a year he collected information on the number of attendances at morning and evening surgeries and the age and sex of patients. He timed some procedures such as ear syringing and also various types of examination of patients. He then began a pilot scheme. He talked to all patients visiting the surgery about the appointment system and found that most expressed vague approval. He started asking repeat patients to attend on a given day and those requiring National Health certificates to come in the morning. Mothers with young babies were asked to attend in the morning at the beginning of surgeries and those with older schoolchildren in the evening. Those requiring repeat prescriptions only were asked to attend early in the morning or evening. Over a period of seven months widespread publicity was given to the approaching appointment system and people started asking for appointments. Levitt compiled an age/sex register as the time of the institution of the appointment system approached. As one useful by-product of this exercise it was possible to single out every head of family and unmarried adult

so that these could be circularized. Cards were also placed in the waiting-room. Levitt adopted a scheme of small block bookings—three patients being asked to come every 15 minutes. He also instituted a system of written codes by which he communicated with his secretary concerning the type of repeat appointment required for a given patient. In assessing the result of the appointment system after it had been running some four years Levitt noted that about two-thirds of the patients making appointments did so by telephone, about a third called, and 5 per cent. wrote for an appointment. Ten per cent. failed to keep their appointments without letting anyone at the surgery know. Rarely were more than two patients per surgery seen without an appointment and a half of the appointments were booked more than a day in advance.

Levitt thought that the appointment system was successful although he emphasized that it would have been impossible to run it without the help of a full-time secretary. He observed that the idea of planning proved infectious among his patients and created a discipline that was most noticeable in the most unlikely sort of person. He felt that the elderly and illiterate found no difficulty in making appointments.

The papers concerning doctors' experiences of appointment systems in general practice to which we have so far referred in this chapter were published in and indeed related to the decade 1951–61. It was in the light of such evidence as this that *Medical World* decided to advocate the use of appointment systems in general practice. A film which took the form of a discussion on the use of appointment systems between one doctor in favour and one doctor against the idea of their institution in general practice was shown at a Medical World Conference in October 1960.[10] A general discussion with Dr. Baldwin in the chair followed the showing of the film. Contributors were almost unanimously in favour of appointment systems. A wide variety of practices was represented especially in regard to the type of prior notice of the appointment system given to patients. The time it took speakers to get their appointment systems running smoothly ranged from nought to two years. Emphasis was laid on the necessity of good receptionist help and adequate telephone arrangements. Speakers reported that nearly all patients were punctual in keeping appointments and that requests for visits had decreased as had personal calls at the general practitioner's home. Mention was also made of the reduction of the risk of cross-infection resulting from the reduced numbers in the waiting-room.

During the meeting the publication of the *Medical World* handbook

(on appointment systems) was announced. The handbook laid out concisely the factors which in any practice would be relevant to an examination of the pros and cons of starting an appointment system and the advantages and disadvantages to doctors and patients were summarized. A section was devoted to the introduction of the system. Included with the book were the following: A specimen card introducing an appointment system for distribution among patients, an appointment slip, and a sample diary page. The handbook was prepared under the auspices of a committee of general practitioners and published in association with Lloyd-Hamol Limited. An interesting and, as it turned out, much-used scheme related to the handbook was that whereby Lloyd-Hamol were prepared to provide free of charge to any practitioner running an appointment system a loose-leaf diary containing the necessary blank sheets together with refill sheets as required. By mid 1962 doctors from some 400 practices had requested a copy of the handbook and a large number of these were using the Lloyd-Hamol diary service and presumably therefore running appointment systems. To throw further light on this matter in 1963 Lloyd-Hamol sent a questionnaire to those doctors who had requested appointment diaries to find whether or not they were running appointment systems. It was found as a result of this that 371 practices were running a full-time appointment system, 123 a partial appointment system, and 31 were not using an appointment system or intended to start an appointment system subsequently (some of this group had tried and withdrawn appointment systems). By 1967 some 2,500 firms of doctors were being supplied by Lloyd-Hamol with diaries and refill leaves.

In September 1962 the Operational Research Society[11] supported by the Ministry of Health held a colloquium on appointment systems in hospitals and general practice. Two of the three main contributors spoke on appointment systems in general practice.

Mr. R. R. P. Jackson spoke from the point of view of an operational research specialist. He discussed the different categories of patient which attend the surgery and the way in which appointment systems should be arranged to take account of them. He referred to the desirability of providing adequate telephone arrangements and of giving patients proper warning of the appointment system. Finally he considered the statistical distribution of consultation times obtained from six weeks' observation of his doctor's surgery and mentioned the importance of relating the spacing of appointments to such data.

Dr. John Fry spoke as a general practitioner on his experiences of

introducing and running an appointment system. He listed all the points usually quoted against using an appointment system in general practice. His practice and the steps taken there in preparation for the appointment system were described.

In the initial phase of the appointment system the telephone turned out to be a major problem. It rang continually in surgery hours and overwhelmed the secretary who was on her own. This was remedied by installing an extra telephone (£2 per annum) and employing a part-time telephone answerer (£3 per week). After this adjustment the system worked smoothly. It was found that the staff were busier dealing with appointments. The doctors felt much more relaxed. The work was better planned and the doctors felt prepared for what was coming. Patients liked the appointment system despite a few grumbles at the beginning. It was noted that patients became much less tolerant of waiting 10 minutes or so past the appointment time than they were of waiting an hour before.

Data were given on the waiting times of patients before and after the introduction of the appointment system. This suggested that patients' waiting times decreased a good deal with the coming of the appointment system. The waiting-room was almost empty and part of it was possibly going to be converted to other uses. Numbers making appointments, numbers attending without appointments, and numbers of defaulters during the six months the appointment system had been running were given. The last category remained relatively constant during this time (2–5 per cent. of total attendances) but numbers attending by appointment climbed steadily to more than 80 per cent.

These papers, somewhat extended in content and updated, were subsequently published in the *Operational Research Quarterly*[11] and that of Fry also appeared in the *Lancet*.[12]

The Gillie Report[13] summed up the feelings of the subcommittee on appointment systems, as follows:

> An appointment system to be acceptable must be used with determination in the beginning, until doctors, staff and patients have become accustomed to using it. Its success is dependent upon the co-operation and skill of the receptionist in starting and continuing it. It must be based on careful observation of each doctor's rate of work and breaks down unless reasonable punctuality is maintained in the starting time of each session. It has been found, however, that few doctors who have introduced an appointment system have had to abandon it. A smooth-working appointment system reduces the waiting time

and waiting-room space required, and can secure effective use of premises over more varied times than those (still common) which are inherited from the longer working day of fifty or more years ago. It gives considerable control of the spread of work during the day and even the time-table of the week and can reduce the demand for visits. Selective bookings for a special purpose can extend its effectiveness. Apart from saving the patient's time, the co-operation it requires of him gives him a better understanding of the value of the time spent in consultation, and so emphasises the importance of the doctor's service.

A few years ago a firm of management consultants (P.E. Consultants Limited) carried out studies in three large group practices with a view to improving organization and in two cases advocated the introduction of an appointment system and in a third where one already existed, its retention in a slightly modified form. In the latter instance attention was paid to relating appointment intervals to the participating doctors' consulting times as well as to the tendency for a small proportion of attenders to appear without appointments. The efficiency of the office arrangements for booking appointments and for informing the several doctors involved of the patients due to attend at surgery sessions were also examined and the subject of recommendation.

The question of appointment systems in general practice was aired in the correspondence columns of the *Observer* and *Guardian* in the summer of 1963. Numbers of people, both lay and medical, wrote supporting and opposing the idea. In particular, the Patients' Association, through their Chairman, Mrs. H. S. U. Hodgson, urged a more widespread adoption of appointment systems, though they appreciated the difficulties for the general practitioner involved in instituting them.

Appointment systems were considered briefly in a radio discussion between Dr. Ivor Jones of the B.M.A. and a doctor from the General Practitioners' Association in January 1965, and the radio doctor devoted one of his talks in 1964 to advising patients on how to help their doctor make his appointment system run most effectively.

The local press on several occasions and in different areas pronounced on appointment systems in general practice, sometimes in respect of those proposed by individual practitioners. At least five practices involved in the present study received attention of this sort—one benevolent, the others generally unfavourable. Unfavourable press publicity was cited by one partnership as the major reason for withdrawing their appointment system. Where opposition to appointment systems was manifested in this way, it was usually because it

was felt that the appointment system was introduced to make it more difficult for patients to obtain access to their doctor.

In March 1963 Mensa[14] sent a questionnaire to all its British members concerned with the many aspects of the Health Services in this country.

One question asked was the following:

As a patient of your general practitioner say which of the following would be very important to you, be desirable, would not matter.

Appointment system for surgery attendance.

Medicine to take.

Readiness to listen and discuss health problems.

Modern surgery buildings.

Availability of your own doctor by day as opposed to a partner, assistant, or locum or other substitute.

Ditto at night.

It is interesting to note the relative importance of appointment systems in the eyes of the respondents (the response rate was 34 per cent.).

The increasing importance being attached to appointment systems in general practice organization was evident in a symposium of articles[15] on various aspects of surgery design and organization based on articles contributed originally to the *Practitioner*. It contained three contributions on appointment systems. Mention has already been made of two of these.[7,9] The third, by Carne,[17] reviewed generally the introduction of appointment systems into general practice.

Stevenson[16] conducted a survey among those of his patients attending the surgery in a two-month period following the introduction of

	Very important	Desirable	Would not matter
Appointment system for surgery attendance	29%	55%	16%
Medicine to take	6%	14%	80%
Readiness to listen and discuss health problems	58%	38%	4%
Modern surgery buildings	7%	55%	38%
Availability of your own doctor by day as opposed to a partner, assistant, or locum or other substitute	20%	49%	31%
Ditto at night	8%	43%	49%

a full appointment system in his practice in January 1962. 690 patients participated in the inquiry as they attended at the surgery during the period November–December 1962, filling in a questionnaire in secret in a polling booth.

It was found that men favoured the appointment system more than women but age did not appear to affect respondents' views on this matter. Mothers with children under five did not appear to be more in favour of appointment systems than other people and indeed teenage mothers were less so. People with lower incomes more often tended to want the appointment system to be discontinued or just did not care about its existence than those who were better off. Virtually all those with telephones were in favour of the appointment system. A lower proportion, but still over 80 per cent., of those without were of this opinion.

Of the patients in the survey who attended without appointment, about two-thirds thought they waited longer than they would have done before the introduction of the appointment system. Almost all the patients in the survey felt that, if they were well enough, they would attend at the surgery rather than request a home visit.

During the period of the survey 77 per cent. of the patients attended by appointment and about 7 per cent. of the appointments made were not kept. Just over half the appointments were made by telephone, 30 per cent. were for return consultations, and the remainder made by calling at the surgery (concerning a 'new' illness). The proportion of appointments made by telephone is of interest since only 11 per cent. of patients in the survey were on the phone. Nearly half of the appointments not kept related to return attendances, these constitute below a third of the surgery consultations (appointments were always given verbally).

Stevenson noted that, notwithstanding the impression of patients, the proportion of new home visits tended to increase in relation to surgery consultations. This situation was rectified when his and another practice combined to form a group of four doctors. The latter between them were available for consultations fairly continuously throughout the day. This step involved increasing by a quarter the amount of time the doctors as a whole devoted to consulting (in relation to patients on list).

Carne and Dell[17] (100 patients circulated) and Dean *et al.*[18] (600 patients questioned as they were seen by the doctor) also obtained patients' opinions about their appointment systems and both found the

great majority in favour of the existing situation (i.e. appointment system).

This review of work related to appointment systems in general practice opened with a mention of two surveys among general practitioners which took place when full appointment systems were still exceedingly rare in this field of work. It seems appropriate to conclude with a reference to two recent comparable studies on general practice. The first[19] was sponsored by the College of General Practitioners and conducted by the Institute of Community Studies. It consisted of a survey among a random sample of nearly 200 general practitioners in England and Wales. The object was to interview each of the sample members on a number of aspects of general practice. Some 81 per cent. of the sample were interviewed (though only half of the non-respondents actually refused to be interviewed). On appointment systems the following was reported:

> Ten per cent of the doctors had an appointment system for all surgeries, and another 26 per cent had one for some sessions. A fifth of those with a partial appointment system intended to extend it, while of those without one 7 per cent hoped to introduce one, another 7 per cent were uncertain and 86 per cent were not considering the possibility. The main advantages mentioned by those with a full appointment system were that they could plan their work and so felt more relaxed (two-thirds) and that there was less waiting for their patients (half).
>
> The chief disadvantage, mentioned by a quarter of those with appointment systems and over a third of those without one, was the extra work involved. A quarter of those without a full appointment system felt their patients would find it difficult or would not like it. A fifth maintained it was unnecessary because patients did not have to wait long. The doctors who said this did, in fact, seem to finish their surgeries rather more promptly than the others, but nearly half of them reckoned their surgeries normally went on half an hour or more after they were due to close.
>
> Appointment systems were more common in large partnerships than in single-handed practices or partnerships of two or three doctors. The proportion with one at all surgeries was 3 per cent among single-handed doctors, 10 per cent among partnerships of two or three, and 19 per cent among larger partnerships. Doctors who had an appointment system all had some ancillary help in the practice.

Note that it is possible that there were some differences in definition between the B.M.A.'s survey in 1951 and that of the Institute of Community Studies in 1963 as to what constituted full and partial systems. Thus in the latter a 'partial system' relates to a system used for

some ordinary sessions and does not include systems used for specialized work only which constituted the bulk of the 70 per cent. quoted in this category in the 1951 survey. Likewise in the 1951 survey doctors were asked if they used appointment systems for seeing all patients whereas in the 1963 survey the question related to full appointment systems in which nevertheless a substantial number, say 10 or 20 per cent., might still not attend by appointment.

Accordingly, it is perhaps unwise to read too much into the comparison between 2 per cent. quoted as using an appointment system for all their patients in 1951 and the 10 per cent. running full appointment systems in 1963. Also, the 1963 survey figures (last paragraph) relate to practices and those of 1951 to individual doctors.

Cartwright[20] subsequently examined further both doctors' and patients' feelings about appointment systems in general practice. Of the patients interviewed (about 1,200 in all), 15 per cent. said their doctor ran an appointment system and some three-quarters of these patients preferred their doctor's system to the wait-in-turn alternative. Middle-class people were more appreciative of their doctors' appointment systems than those belonging to the working-class. Social class did not seem to be related to respondents' attitudes towards appointment systems where the doctor did not use one. Patients were asked how long they had waited on their last visit to their doctor. Those whose doctor used an appointment system generally waited little over half as long as those whose doctor did not.

Peoples' attitudes to appointment systems were found to be strongly related to the time they had to wait for a consultation. Where their doctor ran an appointment system, the longer they had to wait the less likely they were to approve the system. Among those whose doctor did not use an appointment system the opposite trend was observed.

Older people were generally less likely to want their doctor to change to an appointment system among those where such a system was not in use. Age did not seem to be related to a person's attitude towards his doctor's appointment system, however.

There was no evidence from patients' responses of the appointment system acting as a barrier between them and their doctor. On the other hand, doctors using appointment systems less often felt that they were consulted about trivial things than those who did not.

The work reviewed has included several papers on successful appointment systems in single-handed and group practices in rural

and urban circumstances. An unsuccessful appointment system has been described and discussed. The views of some patients and members of the public on appointment systems have been collected and the matter has been aired in the press and on the radio. Doctors both with and without appointment systems have given their views on appointment systems. A film has been made on the subject. A firm of management consultants has studied some group practices and recommended the adoption of appointment systems.

It is perhaps true to say that during the period covered by the review of published work and comment on appointment systems in general practice, the attitude towards introducing such an innovation has changed from one of general disbelief that it could work in general practice, to it being considered desirable by a large proportion of lay and medical interested parties.

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3 Surveys among Doctors

Introduction

THE results of two surveys, both conducted mainly by post, are considered.

1. *A survey among practices using appointment systems*

A senior doctor from each of a random sample of practices for which it was known that an appointment system was in operation in at least some of the practice's surgery premises, was questioned at some length on the appointment system and matters relating to it (see Appendix VII). The practices were drawn from most parts of Britain and included practices of various sizes functioning in a wide range of circumstances. The aim of this inquiry was to obtain information on the organization of appointment systems, their effectiveness, and the attitudes taken towards them by all concerned with them whether patients or doctors (all, of course, obtained from the doctors representing the practices).

For each practice approached in the survey the questioning was confined to one set of surgery premises only. The person questioned was the senior doctor practising from that set of premises. As explained in Appendix I, as a preliminary to the survey, brief questionnaires were sent out to a large number of senior partners asking them to state, for each set of premises from which they or their partners (if any) practised, whether or not an appointment system was in operation and to give the name of the senior doctor practising there. A by-product of this arrangement was that it was possible to obtain fairly precise estimates of the proportions of practices of various sizes using appointment systems in the autumn of 1964.

2. *Survey among a random sample of general practitioners*

The main object of this inquiry was to obtain information from general practitioners practising in various circumstances, but not using appointment systems, on their attitudes towards, and knowledge of such systems.

Doctors in the sample who did make use of appointment systems were asked to complete the section on basic details of their practices and return the questionnaire otherwise incomplete. The general nature of practices running appointment systems and the circumstances in which they were situated could thus be compared from the results of this survey with those of practices not running appointment systems.

In order to restrict the questionnaire to a reasonable length, since an interest in appointment systems could not be presumed in the majority of doctors approached, two questionnaires were used. These differed only in the part relating to those not using appointment systems, and each was sent to half of the sample of doctors.

The results in the next section are drawn from both surveys. In the text we shall not specify the origin of any particular statement though by consulting the table on which it is based the source can be determined. Thereafter we shall deal first with information acquired from practices using appointment systems and then with that provided by doctors not using appointment systems as obtained from the survey of a random sample of general practitioners.

3. *Classification of appointment systems*

In this chapter we shall classify appointment systems as follows:

A full appointment system. An appointment system in use at 80 per cent. or more of the surgery sessions held in the premises to which the questionnaire related and such that in those sessions it was intended that people would normally attend by appointment.

A partial appointment system. An appointment system in use for less than 80 per cent. of the surgery sessions held in the relevant premises and such that in those sessions it was intended that patients would normally attend by appointment.

An optional appointment system. An appointment system in which it was *not* intended in sessions in which it was in use that patients would normally attend by appointment—that is, it was left to the patient to decide whether or not he used the appointment system and not made an integral part of the surgery organization.

The dividing point of 80 per cent. between full and partial systems was an arbitrary one which nevertheless served to distinguish those appointment systems which were used for virtually all the normal surgery work and those limited to a few sessions per week.

The nature of practices running appointment systems and the circumstances in which they function (App.II.1–4)[1]

1. *Partnership size*

Fig. 3.1 shows the estimated proportions of single-handed doctors and partnerships of various sizes running appointment systems. The

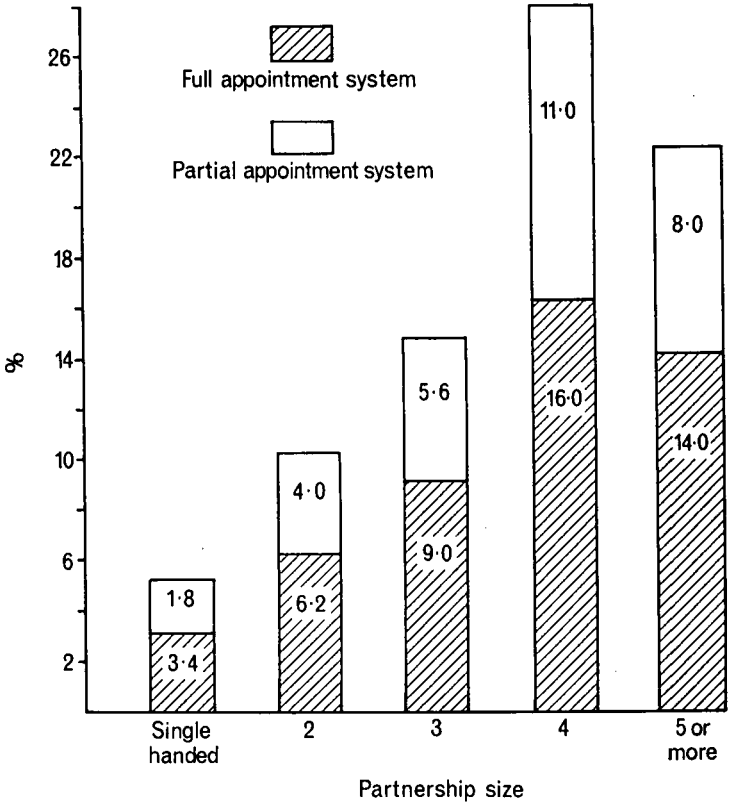


Figure 3.1. *Percentage of partnerships of different size with appointment systems*

1. App.II.1–4 relates to Tables 1–4 in Appendix II.

proportion increases steadily with partnership size (up to four doctors) so that about a quarter of the partnerships of four or more doctors were using some sort of appointment system, compared with one in twenty of the single-handed practices. Over-all, about one in eight of British general practitioners used some kind of appointment system for their ordinary surgery work in the autumn of 1964.

2. *List size*

Single-handed doctors and partnerships of two using appointment systems tended to have smaller lists (per doctor) than such practices not using these systems. In the case of larger partnerships, those with appointment systems more often had lists of average size (2,000–3,000 patients per doctor) than those without. These latter had proportionately more small lists *and* large lists.

3. *Social class of patients*

Single-handed practices and partnerships of two with appointment systems tended less often to have predominantly working-class lists than practices without appointment systems. Among larger partnerships there was little difference between those with and without appointment systems in this respect.

4. *Area in which practice situated* (i.e. whether rural or urban)

The proportion of general practices using appointment systems was much the same in urban and rural districts. However, a rather higher proportion of small practices (one or two doctors) operated appointment systems in the country than was the case in urban areas. Conversely, among larger partnerships appointment systems were much more common in town than in rural situations. Such rural partnerships tended more often to work from several surgery premises as opposed to larger central establishments. This may well account for the latter difference and the fact that use of appointment systems seems less related to partnership size among rural practices.

Results from the survey among practices using appointment systems

1. *A note on the attitude of doctors and patients (as seen by the doctors questioned) to their appointment systems*

We shall consider this matter in rather greater detail later, but before considering the nature of appointment systems in the practices

approached it seems appropriate to give some indication of what doctors and patients concerned thought of them. Over-all, more than 90 per cent. of the doctors were satisfied with their appointment systems and a similar proportion thought their patients were too.

Full appointment systems most often gave satisfaction to the doctors concerned, closely followed by the partial variety, with optional systems satisfying only about two-thirds of those who used them. A similar pattern of response obtained concerning their apparent popularity with patients except that partials in this respect resembled more closely the optional system.

It is important to note that the above proportions of practices in which doctors and patients are satisfied with their appointment systems are based upon the total number of practices at which appointment systems (of the various types defined) *were actually running*. In Chapter 4 it is suggested that at more than 10 per cent. of the practices at which appointment systems had been started they were later withdrawn nearly always because of dissatisfaction on the part of the doctors or patients (or both) involved. If such practices are taken into account (i.e. included with the dissatisfied) the proportion of doctors and patients who were satisfied with their appointment system was somewhat lower (by about 10 per cent. of its former magnitude).

In much of what follows we shall concentrate on full appointment systems as these by definition require that the doctors and staff concerned be fully committed to the idea of surgery attendances by appointment and may thus be expected to have the greatest impact on the organizations and individuals involved. For these in particular it is worth bearing in mind that we are discussing appointment systems nearly all of which appear to give satisfaction to doctors and patients.

2. *Some details relating to the appointment systems used by the practices in the survey* (App.II.5)

(*a*) *Length of time which appointment systems investigated had been running*

About a fifth had started within a year of the survey (mostly conducted in November–December 1964) and a third of the appointment systems had been running for more than four years.

(*b*) *Reasons given for starting appointment system*

All kinds of reasons were given. Most commonly quoted were the following (some respondents gave more than one reason):

To reduce time spent waiting by patients (39 per cent. of all respondents).

To permit better planning of doctors' time (36 per cent. of all respondents).

To eliminate the crowd in the waiting room (26 per cent. of all respondents).

To give a better service generally to patients (21 per cent. of all respondents).

To even out the work load over the week (20 per cent. of all respondents).

These five reasons always remained by far the most popular (usually in the above order of popularity) however the practices were subdivided, whether by area, class of patients, or size of partnership. Other individual reasons were not given by more than 6 per cent. of the doctors answering the questionnaire.

(*c*) *Methods of informing patients of introduction of appointment system*

The main choice lies between circulating patients, or heads of households, about the appointment system and confining publicity to notices and handouts in the surgery or possibly only to verbal warning by doctor and staff as opportunity arises.

Among those running full appointment systems about 40 per cent. circulated patients compared with 20 per cent. among those with the other types of system.[1] More than 80 per cent. both of those with full and other appointment systems displayed a notice.

(*d*) *Amount of ancillary help (excluding wives and medical ancillary staff)*

The availability of adequate help in the form of secretaries, receptionists, telephone-minders, etc., has often been described as crucial to the effective running of an appointment system in general practice, at least in the case of a full system. Fig. 3.2 shows the average amount of help per doctor available in the premises to which the survey related. It is of interest that the level of staffing was much the same, regardless of the type of appointment system used, for partnerships of the same size. The only exception to this rule was that single-handed doctors

1. At the time of the survey doctors usually had to bear the full cost of circulating patients whether done privately or through their Executive Council. At present it is understood that Executive Councils will undertake this task without cost to doctors.

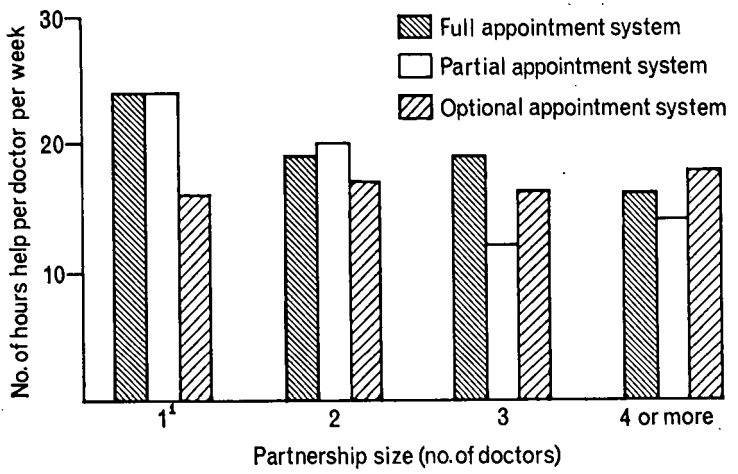


Figure 3.2. *Non-medical ancillary help*

1. Single-handed practices.

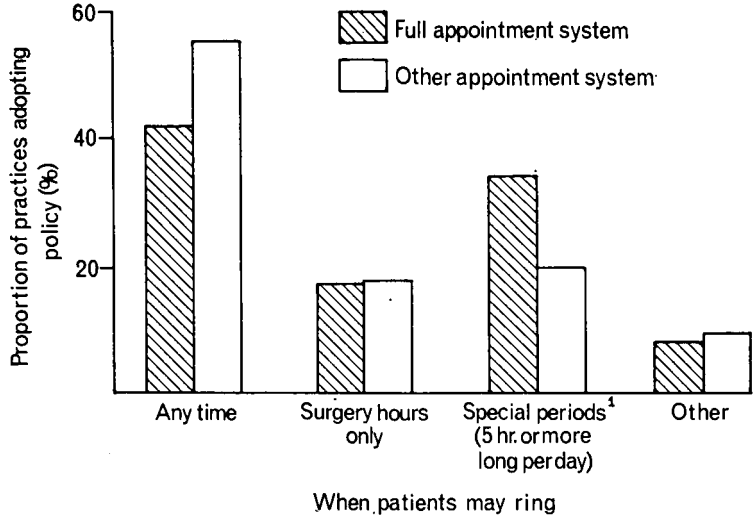


Figure 3.3. *Telephone arrangements for making appointments*

1. These usually include some or all of the times when surgery sessions are in progress but are defined by initial and terminal times independently of surgery hours.

using optional appointment systems did have rather less ancillary help. Among those with partial and full appointment systems the average amount of ancillary help per doctor was a good deal higher for single-handed men, despite the fact that nearly all the practices without help were single-handed (eleven out of the twelve using full appointment systems and two out of four among the others—the other three practices without help belonged to partnerships of two doctors). This reflects the fact, no doubt, that if there is to be a receptionist on duty during surgery hours, she must be on duty as a rule for at least 20 hours a week. The single-handed doctor has to provide the whole of this, whereas in larger practices doctors can share surgery cover. Using the above criterion for full surgery cover, among those with full appointment systems just over half the single-handed respondents had cover of this sort compared with virtually all of the larger practices. A similar position obtained for those with partial systems and, except that the level of staffing was lower for single-handed doctors, for the few practices with optional appointment systems. About 60 per cent. of those with full appointment systems found it necessary to increase ancillary staff or staff time after the appointment system was initiated. Predictably, the corresponding proportion (one-third) was much less for those with other types of appointment system.

(*e*) *Telephone arrangements*

Fig. 3.3 shows the sort of hours during which patients were permitted to telephone for appointments in practices using full and other appointment systems. A distinction is to be drawn between telephoning being permitted at specified hours, however extensive, and telephoning being allowed at any time. The latter in practice, unlike the former, carries no implication that there will be anyone there to answer the telephone, thus we notice that it is a good deal more common for telephoning to be allowed at any time of day among those using partial or optional appointment systems than among those with full appointment systems. Conversely a much higher proportion of those with full appointment systems allow telephone calls for appointments to be made in specified hours covering at least 5 hours of the day.

Fourteen per cent. of those using full appointment systems possessed a special telephone number for appointment-making only. Virtually none of the practices using other types of appointment system adopted this procedure.

(*f*) *Policy concerning patients attending without appointments*

(This section applies to those using full appointment systems only.)

When a (non-emergency) patient presented himself at the surgery without an appointment in virtually all practices one or more of the following courses of action were adopted.

The patient was

(1) given the first free appointment time;

(2) fitted in as soon as a gap in consultations by appointment occurred;

(3) seen as soon as there were no patients with appointments waiting;

(4) seen at the end of the surgery.

Note that either of the alternatives (1) and (2) might lead to the patient without an appointment being seen before patients who had arrived early for their appointments and were waiting in the surgery. The practice of giving the patient attending without an appointment the first free appointment at the surgery session during which he called probably has the effect of publicizing the existence of the appointment system and of acquainting people with the way in which it functions at the surgery. Alternative (3) to some extent and alternative (4) fairly definitely put the patient at a definite disadvantage to those with appointments and (4) in particular was usually only used as a mild deterrent to those who persistently refused to make appointments. No practice used (4) only and most used combinations of two or more of the courses of action specified above using whichever seemed to them to fit the particular person and situation best. Almost no respondent indicated that a patient was offered an appointment at another surgery. In the sequel we shall usually adopt the crude but simple expedient of comparing various results for the total number of practices using each alternative (that is respondents may be counted more than once). This may indicate the broad effects of each alternative though will obviously obscure effects of interactions resulting from combinations of alternatives (without a fairly detailed knowledge of the criteria adopted in deciding which of several alternatives used by a practice would be used for a particular patient or situation more sophisticated analyses might be equally uninformative).

3. *Costs*

Doctors were asked to estimate the costs involved in starting their appointment systems and their running costs in the twelve months

prior to the survey. It was appreciated that this was not an easy task. Many appointment systems were started several years before the survey and costs incurred then would be difficult to recall. Also the business of attributing an appropriate portion of the practice's regular expenditure to the appointment system must present difficulties, even to the professional accountant. The expenditures quoted are in terms of money values relating to late 1964, except for costs involved in introducing appointment systems, which presumably relate to the period when they were started.

(*a*) *Expense involved in introducing appointment system*

Those who circulated their patients spent on average £10–15 on stationery and postage per doctor, as compared with below £2 per doctor for those who did not circulate patients. These figures appear rather low and perhaps reflect the lower cost of postage and stationery in the days when many started their appointment systems—or perhaps that one's recollections of an event grow less painful as time passes. We would estimate the cost per doctor circulating heads of households containing patients to be of the order of £20–25 for a medium-sized list.[1] The cost of installing extra telephones was estimated at (for those who made alterations to their telephone system) an average of £30 for single-handed practices, ranging up to £40–45 for larger practices. It should be noted however that only about 10 per cent. of the single-handed practices made any alterations of this kind. This proportion increased progressively with practice size reaching about half for partnerships of four or more.

(*b*) *Running costs attributable to appointment system in twelve-month period previous to survey*

(If their appointment system had been running less than twelve months, doctors were asked to estimate the current annual running costs.)

For those with full appointment systems the average cost of staff (attributable to appointment system) per doctor was £120 as compared with £55 for those using other appointment systems.

Looking at the cost per doctor[2] among those with full appointment systems in partnerships of different size, we see that single-handed doctors spent an average of £270 per head on staff, which was about double the expenditure of those in partnerships. Again this reflects

1. Remarks on p. 26 to the effect that Executive Councils now circulate free of charge for this purpose.

2. For those who used any staff at all (see Fig. 3.4).

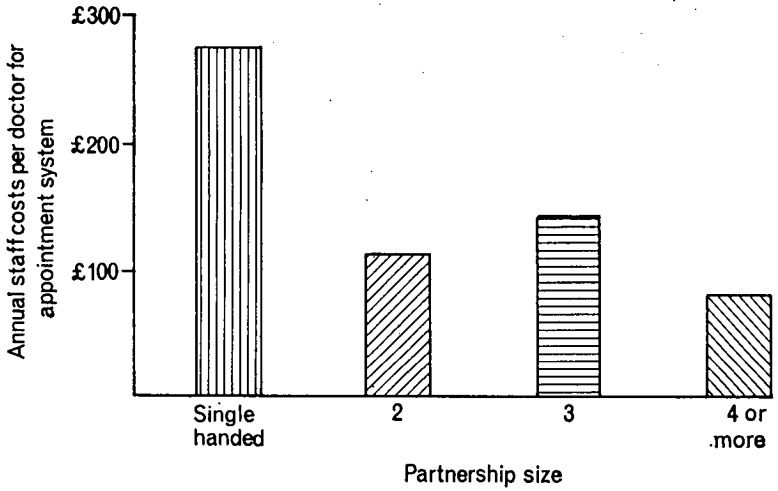


Figure 3.4. *For practices running full appointment systems. Average running costs per year, per doctor*[1] *before tax relief attributable to the appointment system for ancillary staff. (For those who employed ancillary staff at all).*

1. Based on costs of previous twelve months or estimated from total period during which appointment system had been running, if less than twelve months.

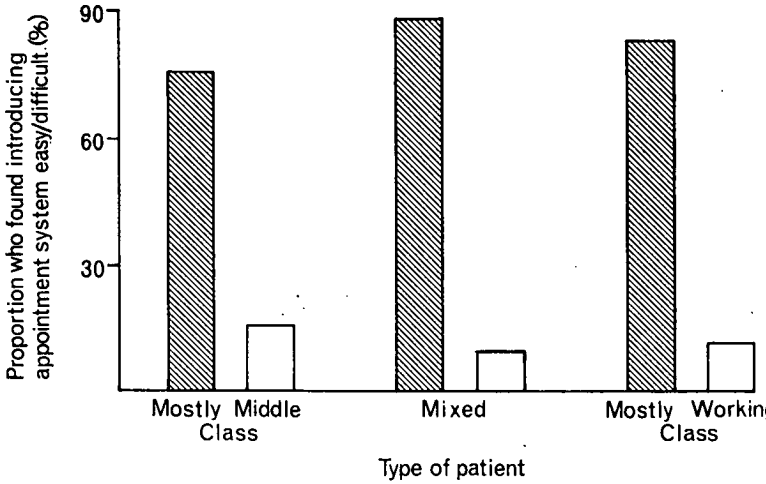


Figure 3.5. *Proportion of practices at which introducing an appointment system was found to be easy* ▨ *and difficult* □—*Social class of practice's patients*

the fact that the burden of maintaining any ancillary help during surgery hours falls entirely on the single-handed doctor whereas partners can share this cover and its costs.

A similar pattern was observed concerning the running costs attributable to stationery and postage. Single-handed doctors averaged over £20 per head as compared with £8–10 per doctor for those in partnerships.

Running costs for the telephone which were attributable to the appointment system (for those who reckoned that the appointment system had caused any expense of this sort) ranged from an average of about £40 for single-handed practices to an average of £60 for larger partnerships (four or more partners). Again, however, nearly 90 per cent. of the single-handed respondents ranging down to nearly a half of those who practised in partnerships of four or more said that the appointment system did not involve any running expenses as far as the telephone was concerned.

4. *Were appointment systems easy or difficult to introduce?* (App.II.6)

Eighty-five per cent. of those questioned found that starting their appointment system was easy. This was the case regardless of whether urban or rural practices were considered. When social class of a practice's patients was considered, however, it appeared that a larger proportion of predominantly middle-class practices experienced difficulty in starting their appointment system than those in which the working-class element was the stronger.

The degree of ease with which an appointment system was started did not appear to have much to do with the amount of ancillary help available. Those without any help at all found least difficulty in starting their appointment systems.[1] Otherwise there was a slight suggestion that the more ancillary help there was available the easier the appointment system was to introduce.

Detailed examination of the figures suggested that the longer a doctor's system had been running at the time of the survey, the more likely he was to say that introducing it was easy!

5. *Use of appointment system (for full type except where otherwise indicated)* (App.II.7,8)

A good index of the degree to which patients are using appointment

1. We did meet one such doctor who ran an appointment system in a medium-sized central urban practice with an effortlessness that was most striking. Possibly only rather well-organized 'unflappable' doctors would contemplate an appointment system without any help and these by their nature find its introduction easy.

systems is the proportion of new attendances (i.e. patient-initiated consultations) which are by appointment. For these consultations it is the patient who has to make the effort necessary to obtain an appointment, whereas in the case of repeat attendances it is the surgery staff and doctor who arrange the appointment. We shall use the words *most new attendances by appointment* to describe the situation in which *more than 60 per cent. of such attendances were by appointment.*

Over-all most new attendances were by appointment in more than two-thirds of the practices using full appointment systems. In larger partnerships and the smaller ones with largish lists this proportion was rather higher (80 per cent.). In single-handed practices and two-handed practices with moderate or small lists proportionately fewer new consultations tended to be by appointment. This might well reflect the fact that surgery attendances were in any event small and waiting-times short.

Table 3.1.

(*a*) *Proportion of new*[1] *attendances by appointment—Type of appointment system*

Proportion of new attendances by appointment	Types of appointment system		
	Full	Partial	Optional
0–30%	11%	54%	90%
31–60%	18%	23%	5%
61% and over	71%	23%	5%
Totals[2]	149 (100%)	65 (100%)	20(100%)

(*b*) *Proportion of all attendances by appointment—Type of appointment system*

Proportion of attendances by appointment	Type of appointment system		
	Full	Partial	Optional
0–30%	5%	52%	100%
31–60%	12%	28%	0
61% and over	82%	20%	0
Totals[2]	154 (100%)	69 (100%)	22 (100%)

1. i.e. a surgery consultation requested by patient rather than doctor.

2. Total number of practices on which percentages in corresponding columns based. See Preface to Appendix II for note on totals.

The proportion of new patients attending by appointment seemed quite unrelated to the class composition of a practice's list. However, respondents from 73 per cent. of urban practices as against 64 per cent. of those in more rural areas stated that most of their patients' new attendances were by appointment.

The practices where patients were circulated about the introduction of the appointment system found that a rather higher proportion of new patients attended by appointment than did those where this step was not taken. Bearing in mind the time which had elapsed since the great majority of appointment systems had been introduced, it may be that the decision to circulate patients was indicative of a general concern that the appointment system should be fully used or that patients should be fully informed about it and it was something such as this rather than the actual activity of circulating which was the origin of the patients' greater use of the appointment system.

Of those who permitted telephone calls for the purpose of making appointments during specified times of the day exceeding 5 hours a day (usually most of morning and afternoon and/or evening) 86 per cent. stated that most of their new attendances were by appointment. Much the same proportion was recorded by the few practices who allowed telephone calls for appointments in surgery hours only. However, among those who allowed telephone calls for appointments at any time of the day and the very few who specified times for the purpose covering only a morning or afternoon (about 2 or 3 hours in duration as a rule), only about 60 per cent. stated that most new patients attended by appointment.

The way in which doctors treated patients attending without appointment might be expected to have some effect on proportions of new attendances by appointment. No very marked effects were, in fact, observed though there was some suggestion that those who fitted in 'casuals' as soon as there was a gap in consultations recorded that fewer patients attended by appointment than did those who involved the patient in the appointment system by giving them the first free appointment time, or in order to encourage them to use the system sometimes made people wait until the end of the surgery.

More or less by definition, the proportion of new patients attending by appointment at practices running partial appointment systems was much lower in general than in those using full systems and was below 30 per cent. in well over half the practices. As for the practices using an optional system, it appeared that still fewer new attendances

were by appointment. Indeed, the majority said that less than 10 per cent. of new consultations were by appointment.

Looking at the proportion of *all* consultations by appointment at practices using appointment systems of different kinds, a very similar pattern occurs to that outlined for new consultations in the last paragraph. Whereas, however, respondents from practices with full appointment systems gave a higher figure for the proportion of all attendances by appointment than for new attendances only (as indeed they should, since all, or virtually all, repeat attendances would be by appointment), the same was not true for those with other appointment systems, suggesting that either the concept of a new attendance, as explained in the questionnaire, was not understood, or that only a small proportion of repeat attendances were by appointment.

6. *What sort of patients seemed unable or unwilling to make appointments?*

Over-all, three categories of person were mentioned with some degree of regularity by respondents:

The elderly, by 20 per cent. of those questioned.

People of low intelligence, by 15 per cent. of those questioned.

Working-class people, by 14 per cent. of those questioned.

Looking at the practices by the class composition of their lists, among the practices where most patients were middle class, relatively few respondents found *anybody* unable to make appointments.

Among respondents from practices in which middle and working classes were both strongly represented (but where the former were in a minority) over a fifth mentioned the elderly and a similar number working-class patients. In practices in which patients were mainly of the working class, working-class patients were mentioned by about 10 per cent. as tending not to make appointments. The elderly, however, were mentioned by respondents from a quarter of them and people of low intelligence by over a fifth. Presumably a doctor will categorize a patient who has these problems by some classification which distinguishes him from the other patients. Thus, in a practice where nearly all patients are working class and most seem to use the appointment system successfully, little is achieved by designating a non-user as working class, if he is also in some other category. Thus the 'problem' patients were designated as elderly or of low intelligence (it being accepted that they were also working class). By contrast, in a practice where there are substantial proportions of both classes, the

fact that an unco-operative patient is of a particular class rather than say that he is of low intelligence may stand out.

In practices situated in largely rural areas, elderly patients were still the most often quoted as unable or unwilling to make appointments though only 16 per cent. of doctors questioned mentioned them, 13 per cent. mentioning working-class people, but only 7 per cent. people of low intelligence. Rather more (10 per cent.) mentioned farming people as not using the appointment system (possibly because of the heavy and unpredictable demands which farming makes upon a farm-worker's time).

On the whole, fewer of the rural doctors specified types of people as unable or unwilling to co-operate. (The urban doctors' answers in this respect resembled those quoted earlier for all respondents, as they, of course, accounted for three-quarters of these.) The difference between rural and urban practices in this respect is not explained by class differences, since the proportion of mainly middle-class practices is about the same in both cases and it will be recalled that the other two class categories discussed were relatively similar in their remarks on patients who did not make appointments.

That those who are elderly and/or of low intelligence might find an appointment system most difficult to understand or uncongenial in practice was to be expected. The fact that the majority of practices did not indicate that such people were generally in difficulties over the appointment system suggests that in many, if not all cases, they can be helped to use the system or their needs otherwise accommodated in some way which does not upset the organization of the practice (see, e.g. Reference 4, Chapter 2). This matter is further discussed in Chapter 5.

7. *Patients' capacity and/or willingness to cope with specific matters arising in connexion with appointment systems—at the time when the systems were started and at the time of the survey*

Doctors questioned were asked whether patients were unco-operative in connexion with appointment systems, whether they misunderstood the system, disliked using the telephone, and whether they were unpunctual. Respondents were asked to give their answers in each case separately for the time immediately following the introduction of the appointment system and the time of the survey (in most cases this meant that the system had been functioning for some time).

Initially in the majority of practices a few patients were unco-

operative, but by the time of the survey four-fifths felt that none or hardly any could be thus described. In a small minority of practices (8 per cent.), many patients were unco-operative initially, but later on only 2 per cent. were in this position.

Somewhat the same pattern of answers obtained as far as patients misunderstanding the system was concerned, except that rather a higher proportion of doctors (about a fifth) felt that many patients were in this position initially. Whilst there was virtually no practice in which this situation persisted, about a third found that a few patients still did not understand the appointment system.

In just over half the practices a few patients disliked using the telephone initially and there was little change in this respect at the time of the survey. The proportion of practices in which many patients disliked using the telephone was very small to start with (7 per cent.) and had declined still further by the time of the survey.

At more than half the practices in the survey a few patients were unpunctual, both initially and at the time of our inquiry, but the number of practices where many patients were unpunctual was only 7 per cent. initially and below 1 per cent. later on.

Thus it would appear that a majority of practices observed that a few patients at first found difficulty in using the system or objected to some of its consequences, but that the number of such patients tended to decline as time went on. The number of practices where many patients found or created any difficulty was small in the initial period of the appointment system's operation and smaller still at the time of the inquiry.

In about 30 per cent. of the practices with full appointment systems a few people were said to resent having to make an appointment (in only 2 per cent. did many feel this way). The question did not, of course, really apply to practices using other types of appointment system.

Telephone arrangements for making appointments did not seem to have a great deal of effect on people's attitude to making appointments. Among practices with full appointment systems which permitted calls for appointments to be made at any time there was the highest proportion (71 per cent.) of those in which no one, or hardly anyone, was said to resent making appointments. On the other hand, all three practices where many patients had this feeling adopted this type of telephone arrangement.

Subdividing practices according to the social class composition of their lists, there was some suggestion that practices whose patients were

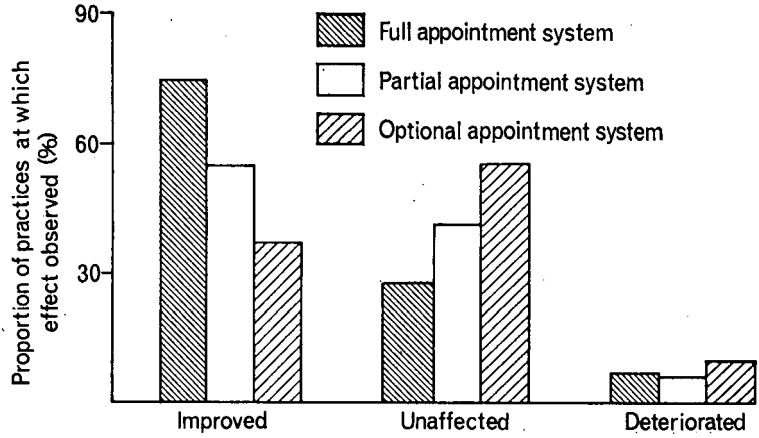
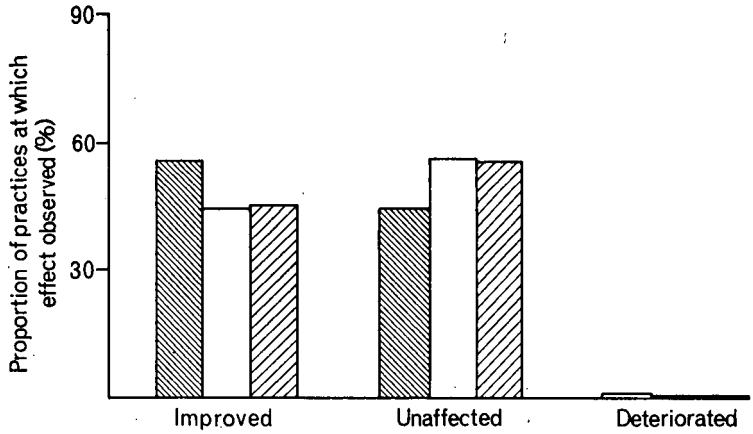


Figure 3.6. *Effects of the different types of appointment system*

(*a*) *Level of strain on doctors*



(*b*) *Doctor–patient relationship*

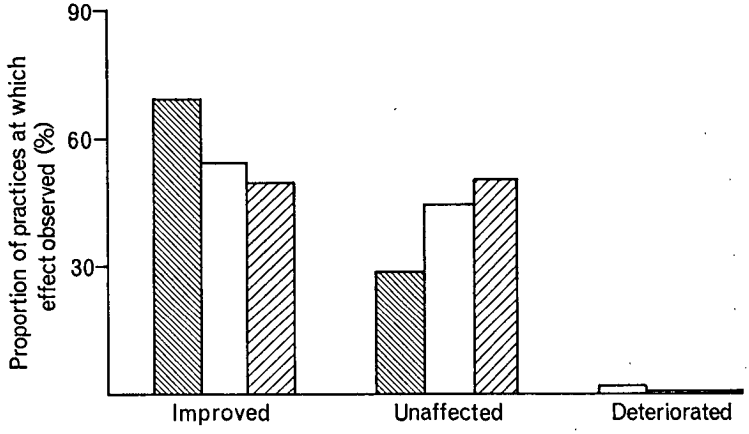
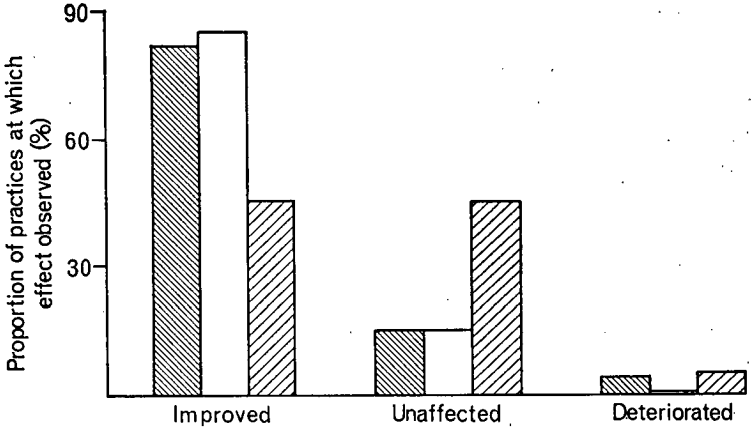


Figure 3.6. (*cont.*)

(*c*) *Quality of doctors' work*



(*d*) *Doctors' capacity to plan time*

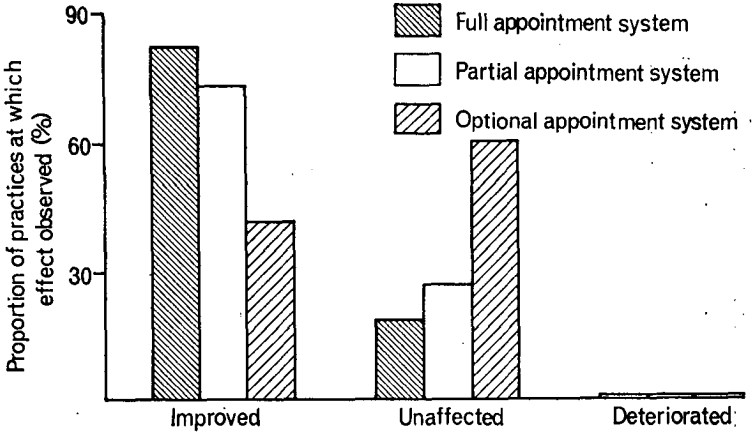


Figure 3.6. (*cont.*)

(*e*) *Distribution of work-load over week*

almost entirely working class encountered more people who resented having to make appointments. The problem did not seem to be a serious one, however; 6 per cent. of such practices found that many patients resented making appointments and well over a half said that they encountered no one (or hardly anyone) who adopted this attitude.

Only one practice found that many patients resented having to deal with the receptionist, though just over a third said that a few felt this way. The social class of patients seemed to be quite unrelated to patients' attitudes to receptionists.

8. *Some results concerning the effects of appointment systems* (App.II.9–11)

More than three-quarters of the doctors questioned thought that their appointment systems made it easier for the doctors in their practices to plan their time. Reasonably enough the proportion was highest for those from practices where most people attended by appointment. Comparing responses from representatives of practices with different kinds of appointment system, most of those with full appointment systems and, less predictably, those with partial appointment systems thought that planning was easier as a result of their systems. As one might expect, the optional appointment system seemed to give least benefit in this respect. It will be recalled that, by definition, a partial appointment system is one in which patients attending at any of a

usually fairly small proportion of sessions were expected to attend by appointment. Because the number of sessions involving the appointment system was limited, this sometimes meant that they were by appointment *only*, so that the doctor had as full a control as possible over his schedule as far as those sessions were concerned.

Among those with full appointment systems single-handed doctors were the most unanimous in their judgement that their appointment systems made it easier for them to plan their time.

The pattern of response to a question concerning the degree to which the appointment system permitted the surgery work-load to be spread evenly over the week was very similar. The vast majority, except for those using optional appointment systems, thought that the system helped to even out the work-load this way. Full appointment systems seemed more often to even out the attendances over the week and, naturally, doctors from practices where most new attendances were by appointment were much more likely to find that their appointment systems evened out the work-load than were those where this was not the case.

Doctors representing partnerships were asked whether the appointment system had any effect in controlling the distribution of the surgery work-load between partners. (This was not always relevant even among partnerships since in some of these it was general policy for partners only to see their own patients.) The majority of those with optional systems felt that their systems had no effect of this sort, but just over half of those with a partial appointment system and rather more of those with full appointment systems did feel that the control of work distribution between doctors in the practice had improved as a result of the appointment system. Among those with full appointment systems, those in large partnerships (four or more partners) most often noted this benefit.

All respondents from practices with full appointment systems thought that patients' waiting-times had improved as a result of the system and over 90 per cent. of those with partial appointment systems thought this was so also, but, as usual, the optional appointment system lagged well behind with less than 60 per cent. feeling that patients' waiting-times had decreased.

We have examined some of the purely organizational consequences of appointment systems. It is appropriate now to consider their effect on more vital aspects of practice life.

Eighty per cent. of the doctors from practices at which most new

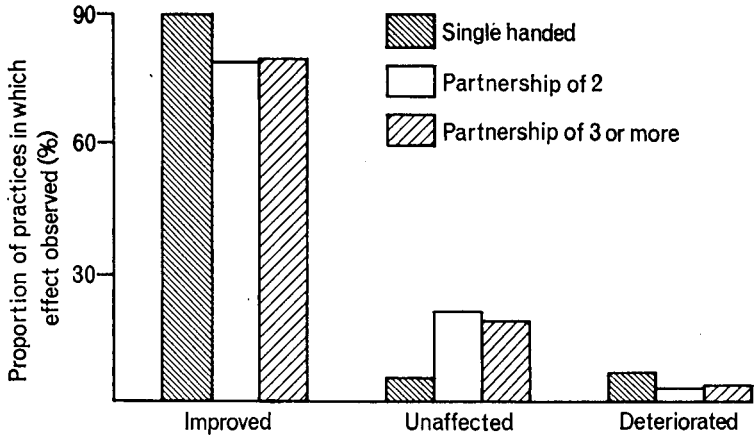
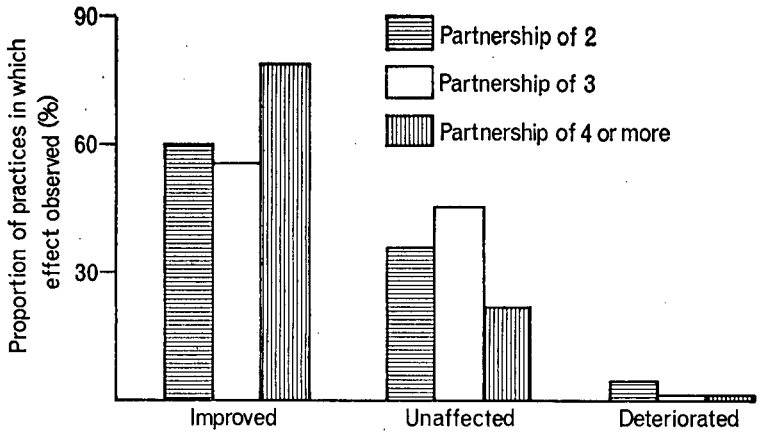


Figure 3.7. *Effects of full appointment system in practices of different sizes*
(a) Doctors' capacity to plan time



(b) Distribution of work-load between doctors in practice

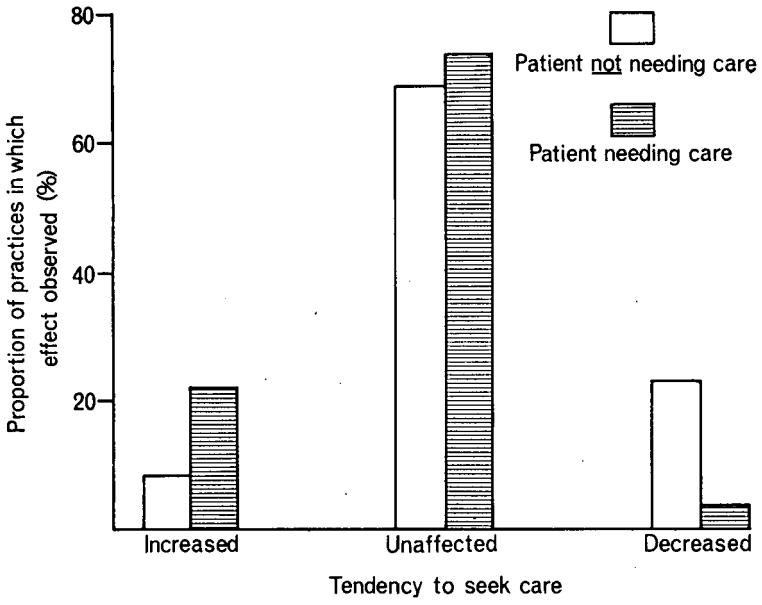


Figure 3.8. *For practices using full appointment systems. Effect of appointment system—patients' tendency to seek care*

attendances were by appointment felt that the appointment system had reduced the level of strain involved in surgery work, and just over half of those where the appointment system was less fully in use felt the same way. Below 10 per cent. thought that the appointment system increased the strain for doctors in their practices.

In this respect as in the others in this section, full appointment systems seemed more often to be beneficial than partial appointment systems which in turn were better spoken of than optional appointment systems.

Among those with full appointment systems, representatives of the larger partnerships more often found that their systems contributed towards reducing the strain on doctors.

Seventy per cent. of doctors from practices running full appointment systems felt that the introduction of their systems had served to improve the quality of work in their practices. Just over half of the representatives of practices using other sorts of appointment system had formed

this impression. Practically no one felt that the appointment system had led to a deterioration in the quality of his practice's work.

Respondents were evenly divided as to whether the appointment system had improved doctor/patient relationships in their practice or left them unchanged. A negligible proportion thought that they had caused the relationship to worsen. Full appointment systems more often were said to have improved doctor/patient relationships than the other types of appointment system. Respondents from practices in which most new attendances were by appointment more often felt that the appointment system improved doctor/patient relationship than those from practices where this was not so. When the length of time appointment systems had been running is taken into account, the longer they had been in existence the more likely were they to be said to have improved doctor/patient relationships.

9. *The effect of the appointment system on the work-load of a practice* (App.II.12,13)

Respondents from practices with full appointment systems were asked whether they thought their appointment system had had any effect on the extent to which those of their patients whom they thought did not really need attention sought treatment. Over-all, about two-thirds thought that the appointment system had no effect and about a quarter that it had served to decrease unnecessary calls for treatment. When the practices were categorized according to the class composition of their lists, it appeared that the substantially middle-class practices were rather more likely to observe some effects (in both directions) than the largely working-class practices. As for patients who *did* need attention, three-quarters of the doctors with full appointment systems again thought that their appointment systems had had little effect, though the other quarter did think that such patients tended more readily to seek treatment.

Most respondents thought that appointment systems had no effect on the number of home visits requested by patients. A substantial minority (38 per cent.), however, of doctors from practices at which most attendances were by appointment felt that such home visits had decreased following the introduction of the appointment system.

Doctors from practices using full appointment systems were asked whether they thought that an appointment system helped to create or remove the feeling of a barrier between doctor and patient, either from the doctor's or the patient's point of view. The great majority

Table 3.2. *Effect of appointment system on number of home visits requested by patients—Proportion of new[1] attendances by appointment*

Number of patients requesting home visits	Practices at which proportions of new[1] attendances by appointment were: 0–30%	31–60%	61% and over	All practices
Increased	6%	10%	3%	5%
Decreased	16%	17%	38%	27%
Unaffected	78%	74%	59%	68%
Totals[2]	69 (100%)	42 (100%)	121 (100%)	242 (100%)

1. i.e. surgery consultations requested by patient rather than doctor.
2. Total number of practices on which percentages in corresponding column based.

(over 80 per cent.) of respondents gave the same answer to both parts of this question (i.e. from doctor's and patient's point of view respectively) and over-all about two-thirds felt that the appointment system had had no effect of this sort, though more thought that it reduced any barrier between doctor and patient than those who felt the opposite. Class composition of practice lists did not seem to have much effect on these answers, though among those from middle-class practices, rather more felt that the appointment system removed the feeling of a barrier between doctor and patient (from both points of view).

10. *General attitude of doctors and patients towards their appointment system (as seen by doctors questioned in the survey)* (App.II.14–18)

As was mentioned earlier in the chapter, among those who used full appointment systems in their practices well over 90 per cent. were satisfied with their system and a similar proportion thought that most of their patients liked it.

An almost equally high percentage of the doctors using partial appointment systems were satisfied with the system, but even among those who were thus satisfied, almost a third thought that a substantial proportion of their patients, if not the majority, disliked the system.

Among those with optional systems, about two-thirds were satisfied with them and a similar proportion thought that most of their patients were too.

There was some suggestion that appointment systems were more often popular with patients in practices run by larger partnerships

but single-handed practices seemed to do almost equally well in this respect. Partnership size seemed not to have much effect on doctors' attitudes to appointment systems.

The number of patients per doctor who would normally attend the premises considered in the survey appeared to be unrelated to the attitude of patient or doctor as did the total number of patients who were potential users of the premises in question. The social class distribution of patients seemed to be related neither to doctors' nor patients' attitudes.

Among doctors practising in the most rural areas, rather fewer

Table 3.3. *For practices using full appointment system. Patients' attitudes towards appointment system—Proportion of new[1] attendances by appointment*

	Practices at which proportion of new[1] attendances by appointment were:		
Patients' attitudes	0–60%	61% and over	All practices
Most like appointment system	79%	98%	93%
Equally divided about appointment system	21%	2%	7%
Most dislike appointment system	0	0	0
Totals[2]	43 (100%)	105 (100%)	148 (100%)

Table 3.4. *For practices using full appointment system. Doctors' attitudes towards appointment system—Proportion of new[1] attendances by appointment*

	Practices at which proportion of new[1] attendances by appointment were:		
Doctors' attitudes	0–60%	61% and over	All practices
Satisfied	93%	99%	97%
Dissatisfied	7%	1%	3%
Totals[2]	43 (100%)	106 (100%)	149 (100%)

1. i.e. a surgery consultation requested by patient rather than doctor.
2. Total number of practices on which percentage in corresponding column based. See Preface to Appendix II for note on totals.

thought that most of their patients liked appointment systems in comparison with doctors in more urban areas. This tendency was not in evidence as far as doctors' attitudes were concerned.

Patients seemed more likely to like appointment systems in practices where they had been circularized about the system at its introduction (see remarks on p. 34) and also when they were permitted to telephone for appointments within specified times of the day (as opposed to surgery hours or 'any time').

The policy adopted by practices towards patients attending without appointments seemed to have no effect on the system's popularity among patients.

The remarks so far apply regardless of whether or not a full appointment system was being operated.

For practices using full appointment systems, patients were much more likely to be generally in favour of appointment systems where most new attendances were by appointment. Curiously enough, in these practices, the proportion of such attendances by appointment did not seem to be so strongly related to satisfaction of the doctor concerned with the system.

Survey of a random sample of general practitioners not using appointment systems concerning their use in general practice (obtained from the survey of a random sample of general practitioners) (App.II.19 onwards)

Doctors questioned in the survey of a random sample of general practitioners could be divided into four categories. Those who already used an appointment system; those who had decided to introduce an appointment system in the near future; those who had given consideration to such a step but decided against it, and, finally, those who had not considered the possibility of introducing an appointment system in their practice. We shall pay particular attention to the third group, those who considered and decided against an appointment system, in this section.

Of those questioned, about two-thirds had considered introducing an appointment system in their practices and of these latter rather more than 10 per cent. had decided fairly definitely to introduce an appointment system in the near future (at the time of the survey).

Those who had not considered running an appointment system tended to belong to the smallest practices (almost half were single-

handed), whereas those who were proposing to introduce appointment systems came from larger partnerships than the group whose members had considered the step but decided against it.

There was little difference between the average list size of those who had decided to run an appointment system and those who after consideration had decided not to. Combining these two categories and comparing them with those who used appointment systems, it appeared that for small practices the former had rather larger lists than the latter, whereas there was a tendency in the reverse direction for larger partnerships.

Among those who had considered starting an appointment system a rather higher proportion of urban doctors, as compared with their rural colleagues, had decided to start appointment systems. Likewise, those describing their patients as mainly working class were a little more likely to decide in favour of an appointment system.

Those who had considered introducing an appointment system were asked how many of their surgery sessions were overcrowded. Predictably, rather more of those with many or most of their sessions overcrowded had decided to start an appointment system than was the case for doctors where overcrowding was not often encountered.

The average time which doctors thought it reasonable to expect a patient to wait before seeing him was about the same—around 25 minutes—for those who had decided for and against introducing appointment systems, but the former tended much more often to say that their patients waited longer than the time they (the doctors) deemed reasonable than did the latter.

1. *Attitude of doctors towards appointment systems in general practice*

Over-all, about half of the doctors questioned thought that an appointment system was desirable in most cases. The proportion ranged from about 40 per cent. among those who worked single-handed to 70 per cent. for those doctors in large partnerships. A higher proportion of those whose patients were mostly working class felt that appointment systems were desirable in most cases than did doctors with largely middle class lists. Rural doctors more often held this view than their urban colleagues. Apart from this last these results showed a similar pattern in terms of general attitudes to that displayed above in relation to the more personal matter of deciding whether or not one should have an appointment system. Indeed, while 60 per cent. of those who had considered an appointment system but decided against it thought

that appointment systems were desirable in most cases, only about 20 per cent. of those who had not given consideration to this matter felt this to be so.

2. *Reasons for deciding against appointment systems*

Those who after consideration had decided against an appointment system were asked to indicate the factors which had influenced them in this decision.

The most commonly quoted reasons were the following (respondents usually gave more than one reason).

The existing receptionist and/or other ancillary staff would be overworked	59%
Patients would dislike having to make appointments	49%
Probable extra load on telephones would be unacceptable	47%
The initial difficulties generally would be too great	44%
The initial expense of instituting an appointment system would not justify the advantages gained	42%
Patients were likely to be unpunctual	42%
The running expenses would not justify the advantages gained	41%
Patients were likely to be unco-operative generally	40%
Existing arrangements are satisfactory	38%
A barrier might be erected between doctor and patient	23%

The reasons given above nearly always attracted comparable support however the respondents concerned were broken down into smaller groups. In particular 'the overworking of existing staff' was almost always the most popular. Those who thought appointment systems were undesirable generally, or that their patients waited less than what they considered to be a reasonable time for consultations, were generally less interested in stating specific reasons. They emphasized in particular that existing arrangements were satisfactory, that existing staff would be overworked and so would the telephone. There was also a tendency to suggest that patients would not like it and would not co-operate.

By contrast, those who felt that an appointment system was desirable in most cases, or that patients definitely waited longer than what they regarded as a reasonable time, gave many more reasons (per head) to justify their decision against having an appointment system in their

practices. In particular, they emphasized organizational and financial difficulties of starting and running an appointment system.

Doctors who had, after consideration, decided against an appointment system were asked whether they had made inquiries among their patients about their views on appointment systems or whether patients had offered comment on this subject. In most cases (65 per cent.) the answer was that no views had been obtained in either way. Just under half of those who had discussed appointment systems with patients felt that many of the latter were unfavourably disposed to appointment systems, the remainder being equally divided between those who obtained the opposite impression and those who found no consensus of opinion. The social class of respondents' patients did not apparently have any effect on their answers to this question.

3. *Reimbursement of part of cost of ancillary help—Effect on doctor's intention towards appointment system*

It will be recalled that the most commonly quoted reason for not starting an appointment system was concerned with the overworking of ancillary staff. Doctors were asked whether the implementation of a proposal under discussion at the time of the survey that the Ministry of Health reimburse directly part of the cost of ancillary staff would influence their decision to introduce an appointment system.

Among those who had not considered starting an appointment system, over 90 per cent. felt that this would *not* make it more likely for them to start an appointment system, regardless of partnership size or the amount of crowding experienced at surgery sessions.

Among those who had considered introducing an appointment system but decided against this step, over-all, 14 per cent. said that if reimbursed for staff they would probably start an appointment system. Over a third of the single-handed doctors felt this way, though relatively few of those who worked in larger partnerships did. Since those single-handed doctors who did run appointment systems seemed to spend much more on staff than their colleagues in partnerships, this seems a reasonable response and suggests that the current small proportion of single-handed practices using appointment systems might conceivably be increased to something comparable with that for larger practices if financial assistance of the stated sort were given (App.II.21). It would be unwise to build too much on this since it is based on smallish numbers, but the same impression did come separately from those receiving both questionnaires in the survey.

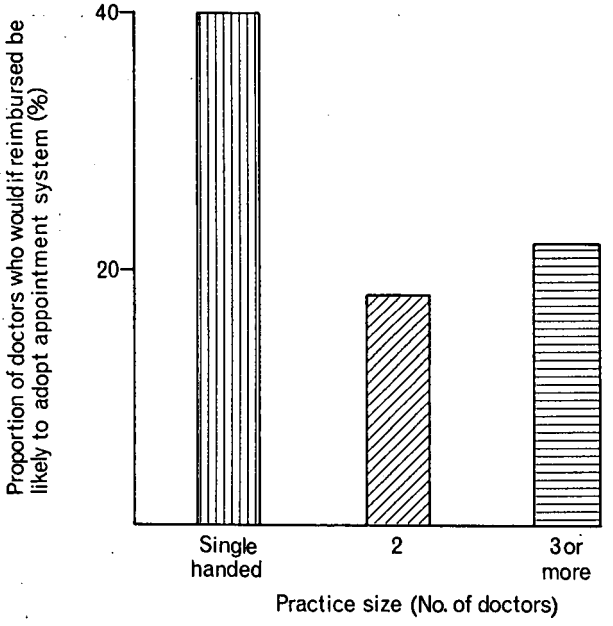


Figure 3.9. *For doctors without appointment systems. Proportion of doctors who had considered starting an appointment system and decided against it, but who would be likely to start an appointment system if reimbursed for ancillary help by Ministry of Health*

Predictably, rather more of those who found that many of their surgery sessions were overcrowded felt that help in bearing cost of staff would influence them towards starting an appointment system than did doctors for whom this problem rarely arose (App.II.22).

Of those who thought an appointment system desirable in most cases about half felt that they would be likely to start an appointment system if some of the cost of staff were reimbursed. Very few of those who thought appointment systems generally undesirable were influenced in this way, as was to be expected.

4. *Consequences*

Doctors were asked whether or not they agreed that certain consequences would follow upon the introduction of an appointment

system. Just over 40 per cent. of those practising single-handed or in partnerships of two thought that an appointment system would result in less strain on doctors compared with over 60 per cent. of those working in larger partnerships. Rather similar proportions from small and large practices respectively believed also that an appointment system would mean that it would be easier to plan a doctor's time and that there would be a more even distribution of work-load over the week.

It will be recalled that among those who used full appointment systems a much higher proportion actually found that these benefits were derived from their system.

5. *Sources from which doctors acquired their information on appointment systems*

Over-all, just under half obtained some of their knowledge from articles in the medical press (which were mainly favourable—see Chapter 2), and nearly three-quarters from conversations and other forms of personal communication with colleagues. About a fifth had obtained some of their knowledge from meetings and a negligible number had previous experience of appointment systems or worked with partners who had. Doctors working in partnership rather more often obtained their information from meetings and conversations with others than did single-handed practitioners.

Among those who thought appointment systems generally undesirable, under a third obtained information from the medical press, compared with over a half of those who thought that appointment systems were usually desirable. Similarly, the former much less often quoted meetings as a source of enlightenment than the latter. By and large, those who were most against appointment systems did generally seem rather less likely to quote sources of information than those more in favour. Personal communication was for the former by far the most frequently cited means of learning about appointment systems.

Concluding remarks

The overwhelming impression received from those who used full appointment systems was that such systems were highly successful in practice in virtually all circumstances.[1] Patients and doctors, at least according to the respondents, were nearly unanimous in their favourable attitude towards them. The social class composition of a practice's

1. Even allowing for the remarks on p. 25 and Chapter 4.

list of patients seems to be unrelated to the success of the appointment system. However, doctors working in 'very rural' circumstances did report that their appointment systems were less fully used and favoured by their patients than did their more urban counterparts. The system we have called optional seemed to be much less satisfactory from all points of view and is accordingly not recommended though the majority of doctors who ran even these were satisfied and a similar number thought their patients were too. Intermediate in effect between the above types of appointment system were the partial systems. The latter, by their nature, demand rather less in the way of ancillary help to organize them and for this reason, if not for others, cost less to run. Accordingly since they appear to satisfy nearly all the doctors who use them and to be generally deemed quite effective within their natural limitations (by definition they can involve only a proportion, often a fairly small one, of the surgery attendances) those who feel they have not the resources to introduce a full appointment system might well consider trying a partial version.

The clear conclusion must, however, be that those who are thinking of trying an appointment system ought to introduce a full version if they possibly can.

The following conclusions concerning the introduction and running of appointment systems also arise from the survey of those using such systems.

Circulating patients before the introduction of an appointment system. Practices which did this more often reported that their systems were subsequently successful than those which did not, both from the point of view of popularity and full utilization by patients.

The effect of an appointment system on the work-load of ancillary staff. A full appointment system almost always increases the volume of work falling upon the ancillary staff. Apart from the task of handling extra telephone calls for appointments, the surgery generally needs to be manned for at least the usual duration of surgery sessions (this will rarely be less than 20 hours per week).

The extent to which the additional work necessitated the provision of extra staff (or paid staff time) depended on how fully the existing staff's time was utilized. Apart from single-handed practices it would appear that those with full appointment systems on average increased their staff time by something of the order of 10–12 hours per week per doctor. For the single-handed doctor the additional ancillary staff time per week ascribable to the appointment system was about double

this figure, probably because its introduction was often instrumental in making him employ staff at all.

This is not to say that some doctors, almost always single-handed, did not run highly successful appointment systems without any ancillary staff. Usually they had a relatively small number of patients on their list, or hidden help, for example, in the form of their wife acting as a more or less full-time receptionist.

Arrangements for the telephoning for appointments. The best policy appeared to have been to provide definite times at which appointments might be made. Practices adopting this course mostly allowed periods totalling five hours or more per day for this purpose especially in larger partnerships.

The approach adopted towards (non-emergency) patients attending at surgery sessions without appointment. There was some evidence to suggest that the best scheme was to give them appointments (usually this would be for the first available times in the session in which they appeared) if only to acquaint them with the mechanism of the appointment system. Additionally this strategy ensured that patients were seen in an equitable order.

Some people were observed to find difficulty in using the appointment system and/or be against it. Some of the elderly and also those who were of low intelligence needed special guidance and perhaps arrangements. Additionally practices rarely seemed to be without a hard core of probably no more than a handful of characters of assorted background who appeared incapable of using the appointment system properly. Where, however, the majority of patients co-operated, and they nearly always did, most of the benefits expected from the appointment system accrued for doctors and patients notwithstanding the minority who did not use the system and the occasional inevitable disruptions to normal routine which beset general practitioners' work.

The majority of general practitioners without appointment systems questioned had considered introducing an appointment system in their practice, but only a small proportion had decided to go ahead. None the less, even among those who had decided against an appointment system, a definite majority held that they were desirable in most cases. The most commonly quoted reason for not starting an appointment system was concerned with ancillary staffing; and cost of running featured prominently too. Yet only half of those who thought appointment systems were generally desirable felt that help

towards cost of ancillary staff from the Ministry of Health would encourage them to start an appointment system. The prospect of this sort of assistance appeared to be much more potent a means of encouraging single-handed doctors to start appointment systems than was the case for those in partnership.

Arguably, among those who regarded appointment systems as generally desirable, but not for them, it is simply reluctance to 'take the plunge' as far as introducing such a system is concerned. If this is so, the information given earlier in this chapter by those with appointment systems and elsewhere by patients and doctors with experience of appointment systems may well encourage them to introduce such a system.

4 Unsuccessful Appointment Systems

In some practices an appointment system has been instituted and later withdrawn or allowed to lapse because it has been judged unsatisfactory. Such practices were encountered at various stages in the study and in this chapter information gathered concerning them is brought together for discussion.

In the survey among a random sample of general practitioners (Chapter 3), all respondents were asked among other things whether an appointment system had been run and withdrawn in their practice. Including the pilot survey, a total of 22 out of 750 replied affirmatively to this question. Of this 22, from other remarks made, it was clear that 6 had not used appointment systems in the sense defined for this study; they had given appointments for insurance examinations, ante-natal clinics, etc., but not for their ordinary surgeries. These are, accordingly, excluded from consideration. One other had only run an appointment system in the days before the National Health Service and is thus also excluded. Thus 15 practices had tried and withdrawn appointment systems, in our sense of the term, out of a total of 750 questioned—i.e. about 2 per cent. In this same survey 117 respondents indicated that an appointment system was currently in operation in their practices so that of those who tried running appointment systems 15/(117+15), i.e. about 11 per cent., subsequently gave up. This is likely to be an underestimate since some of the 117 mentioned above will almost certainly not be running appointment systems in the sense used in the study.

The information used in this chapter is based on the responses of the above fifteen doctors and also on those of representatives of eleven other practices (found in various informal ways) where appointment systems had proved unsuccessful. The latter were questioned personally or by post. The results quoted below, except where otherwise

indicated, relate to the total of the twenty-six practices where for reasons relating to the sampling procedures adopted the answers of the fifteen have been weighted so as to give proportions appropriate to practices (cf. discussion on weighting in Appendix I).

No claim is made that the answers of these twenty-six, even when appropriately weighted, are representative of practices with failed appointment systems, but a study of the circumstances surrounding the failure of these appointment systems seems worthwhile. All but about three or four of the practices had set out to run full appointment systems in the sense of Chapter 3.

N.B. We have computed percentages based on very small totals in this chapter and the related Appendix (III) only in order to facilitate comparison of the magnitude of the fractions discussed. Little weight should accordingly be attached to any but the most substantial differences between such percentages.

A comparison of practices where appointment systems had been withdrawn with those running appointment systems

1. *Partnership size and number of premises* (App.III.1,2)[1]

The practices with failed appointment systems were compared with those of the 117 ([suitably weighted] see Appendix I) respondents who said they were using appointment systems.

Partnership sizes were rather smaller in the case of the former (70 per cent. single-handed or partnership of two) than with the latter (54 per cent. single-handed or partnership of two). Since, however, a partnership may be split up into a number of virtually isolated components, the number of premises per practice was examined for the same two groups of respondents.

The practices with experience of unsuccessful appointment systems appeared to work from rather fewer premises than those currently using appointment systems though this probably merely reflects that the average partnership size of the former is smaller than in the case for the latter so that there is apparently no difference between the two groups when partnership size is taken into account.

2. *Areas in which practices were situated and class of patient* (App.III.3,4)

Those with unsuccessful appointment systems practised rather more

1. App.III.1,2 relates to Tables 1 and 2 in Appendix III.

often in predominantly urban areas and designated their patients rather more frequently as mainly working class than those who spoke for practices with appointment systems.

3. *List size* (App.III.5)

A comparison of average list size suggests that the list sizes of the practices where appointment systems were unsuccessful were more predominantly of average size than those using appointment systems (84 per cent. as against 64 per cent. between 1,500 and 3,000), a higher proportion of the latter had small lists *and* large lists. This is the reverse of what might have been expected, especially since we have seen that practices with appointment systems tended in turn to have 'more average' size lists than those not running such systems.

4. *Time during which appointment system was running*

Predictably, the majority of unsuccessful appointment systems ran for less than a year (about a quarter for less than three months). However, a third of them operated, at times quite satisfactorily, for much longer periods (further discussion later).

5. *Methods of giving notice of introduction of appointment system* (App.III.6)

The additional eleven practices (see p. 56) at which appointment systems had been withdrawn were asked for certain other information. Appendix III, Table 6, suggests that there was no marked difference between the methods of informing patients adopted by these eleven practices and those of the practices involved in the survey among practices using appointment systems. It will be recalled that in the latter survey a substantial difference in satisfaction with the way the appointment system operated was observed between those who circularized their patients in some way and those who used other methods.

6. *Ancillary help* (App.III.7)

Appendix III, Table 7 shows the amount of receptionist help (excluding help by wives and relatives) per doctor in the eleven practices before the introduction of their appointment systems and after they had been brought into operation. Nine practices had at least 10 hours help per doctor per week before introduction of appointment system and increases in staff meant that eight practices had more than 15 hours help per doctor per week and one only made no use of reception staff

(other than family members). In fact it appeared that in all but the one practice receptionist help was available at most surgery sessions. The staff levels after adjustment following the introduction of appointment system seemed much the same as those for the practices using full and successful appointment systems.

Reasons given for withdrawal of appointment systems

Returning now to consider all twenty-six practices in which appointment systems were unsuccessful, doctors from these were asked why they had withdrawn their appointment systems. Table 4.1 gives, where this was possible, the main reason stated.

The attitude of patients and their misuse of the system was by far the most frequently quoted single reason for withdrawal of the appointment system, but in an equal number several reasons worked together to cause withdrawal. Table 4.2 gives the frequency with which each of the listed factors was mentioned as an important reason (often one of several per practice) for withdrawing appointment systems.

Patients' misuse and attitude again were most commonly quoted. More particularly the patients were stated to be unco-operative generally in five cases, unpunctual in two, failing to keep appointments in four, and discontented when attending without appointment at those with appointments 'jumping the queue' in five cases.

Many of the factors quoted tended to go together. All six practices who found telephone usage a problem also belonged to the nineteen who had other patient troubles and likewise for all those who found surgeries overcrowded or running behind schedule. Two practices in addition to the nineteen stopped their appointment systems because they felt the appointment system was creating two classes of patient—the generally more sophisticated who used the appointment system and the others who did not.

The continued abuse of the telephone (which was said to be ringing all day) was mentioned particularly by two doctors who lived at their surgery premises.

The reception staff were explicitly mentioned as a source of worry by ten practices. In six of these this was because they were overworked, or felt they were, and in the case of the remainder because of incompetence or lack of co-operation. It is possible that the latter group was in fact larger as doctors may be reticent about discussing shortcomings of their staff with strangers.

Table 4.1. *Major reason (one per practice) quoted for discontinuing appointment system*

Patients (abused appointment system or disapproved)	16	(8)
Secretary/receptionist (unsatisfactory or against)	3	(2)
Expense	2	(1)
Partners not co-operative	1	(1)
Telephone always ringing (living on premises)	1	(1)
General reasons. Not able to give one as pre-eminent	3	(3)
Total	26	(16)

Numbers in brackets denote those in which other important reasons were given as well e.g. 8 out of 16 practices quoting patients (abuse and disapproval of system) as the major reason also specified other reasons as having considerable influence on them in reaching their decision to withdraw appointment system.

Table 4.2. *Factors quoted as important in causing appointment system to be withdrawn*

Factor	Numbers of practices giving as a reason for withdrawal
Patients (abuse and disapproval of system)	19
Feeling that 2 classes of patient were created	3
Secretary/receptionist (unsatisfactory, or against and/or overworked)	10
One or more doctor in partnership not participating or only half-heartedly	6
Surgery running behind Doctor watching clock	9
Telephone over-busy	6
Growth of list inhibited by appointment system	2
Expense of running appointment system	4
Difficult geographical conditions (transport problems, etc.)	3

NOTE. Sixteen practices gave several reasons as important in causing withdrawal, all of which are counted above.

In six partnerships one or more doctors either did not participate in the appointment system or only half-heartedly.

Finally the reasons given for the five practices in which appointment systems had been used for two years or more prior to withdrawal were considered. Four gave patients' attitudes towards, and misuse of,

appointment system as the major reasons for withdrawal and the fifth the continued ringing of the telephone. Further details of these practices are given below. All but practice three used full appointment systems.

PRACTICE 1

Single-handed; list size 2,000–2,500; urban; mostly working-class patients; practising from one set of premises. *Reasons for withdrawal*: patients not keeping appointments; full-time appointment maker required; extra expense considerable.

PRACTICE 2

Five doctors; average list size 1,800; urban; patients about equally divided between working and middle/upper classes; practising from one set of premises. *Reasons for withdrawal*: numerous complaints by patients and staff; telephone overload; at least one doctor did not participate in the appointment system.

PRACTICE 3

Two doctors in a partnership of three ran an appointment system in their premises which was quite separate from that of the third partner; average list size, 2,100; rural, mostly working-class patients; one main (at which appointment system operated) and two branch surgeries. *Reasons for withdrawal*: patients unco-operative, receptionist and telephone overworked; surgery running behind schedule. It was felt that the fact that there was a poor bus service contributed to the failure of the appointment system. Buses arrived once or twice during surgery sessions and patients used to come and wait in waiting-room regardless of time of appointment, if any.

PRACTICE 4

Two doctors in partnership (one at time of withdrawal); average list size about 2,000, probably nearer 3,000 at time of withdrawal; urban, mainly working-class patients; practised from one set of premises at which the partner who abolished it lived. *Reasons for withdrawal*: continual ringing of telephone at what was doctor's home; elderly generally seemed unable to use telephone; patients wanted appointments to suit their convenience; married women wanted to be 'fitted in', for example, when meeting children from school. Regretted abolishing appointment system, however, and would use it in group practice.

PRACTICE 5

Four doctors practising; average list size 2,500–3,000; urban; mainly middle/upper class patients; practised from one set of premises. *Reasons for withdrawal*: patients came to co-operate less and less as time went on (did not bother to make appointments); many with appointments intolerant of even small delays after their appointment time; reception staff did not appear to be willing or able to cope with organization of patients and this put a lot of extra strain on doctors; telephone regularly blocked with calls. Doctors felt great relief and easing of tension following the ending of the appointment system but patients had to wait much longer in more crowded conditions and many looked nostalgically back to the days of appointments.

We have seen, in comparing practices with unsuccessful appointment systems with those in which such systems were used, that the former tended to work on average in slightly smaller groups (or partnerships) but that the number of premises per doctor was about the same for both categories of practice. The practices with unsuccessful appointment systems were more frequently situated in essentially urban districts and more often described their patients as mainly working class. The average list size per doctor in practices where appointment systems were discontinued tended to be more in the middle range of sizes than was the case for practices using appointment systems. There was no evidence to suggest that the former practices differed from the latter in the way in which they informed their patients of their intention to start appointment systems. Two-thirds of the appointment systems were discontinued within a year.

Of the reasons given for the lack of success attending the use of appointment systems, patients' attitude towards and their use of the system were by far the most commonly cited. The majority of practices, however, felt that several factors combined to disrupt the appointment system.

Why do appointment systems fail?

The foregoing suggests that there is no simple answer. Introducing and implementing an appointment system requires the co-operation of the patients, receptionist (if any), and doctors. For the former it implies exerting some self-discipline and forethought in their approach

to the doctor and perhaps also a new element of time discipline for doctor and receptionist.

On the receptionist may fall a good deal of extra work. She is bound to become more closely involved with the patients. She will make appointments over the telephone and at the surgery, deal with patients attending without appointment or arriving late and so on. This new personal element in the receptionist's work almost inevitably results in occasional conflict with patients which may be a source of strain to some personalities. If, moreover, the ancillary staff has not been increased (i.e. the total number of paid hours of work) with the coming of the appointment system, individual members of this will have to work harder; a development which is unlikely to be well received however under-occupied they were previously. We did encounter several practices using successful appointment systems in which the receptionists felt that they were the only people for whom the system brought no benefit.

The period of up to a year following the introduction of an appointment system is sometimes said, even when it subsequently settles down to successful operation, to be difficult and at times chaotic. Different doctors naturally will have different ideas as to how much preliminary trouble they are prepared to put up with in the hope that their appointment system will ultimately benefit them and their patients. The majority of those who gave up, of the twenty-six studied, did so fairly soon after their appointment system had been introduced which suggests they may have felt the teething troubles were not worth any ultimate benefit. The inclination to finish with appointment systems which cause trouble is naturally strengthened when a practice finds itself obliged to spend substantial sums of money on extra ancillary staff to keep it in operation or to make it function in what is hoped will be a satisfactory manner.

Since among the most frequently quoted reasons for introducing an appointment system are 'to give a better service' and 'to reduce the patients' discomfort', it is hardly surprising that the unpopularity of the appointment system with patients should be a major factor leading to the discontinuation of appointment systems. Of the five appointment systems considered which lasted more than two years, all were stopped because of patients' uses and attitude to them, in one form or another.

Why were patients such a problem to practices discussed in this chapter? Among the doctors questioned in Chapter 3 who were using

appointment systems, very few seemed to encounter much trouble from patients.

The problem took two forms which often occurred together. Patients misused appointment systems by failing to make appointments, being unpunctual, or not turning up for an appointment. Or they expressed disapproval of the system.

The volume of disapproval expressed is a function of several factors associated with the practice and its environment. It may be occasioned by some shortcoming, real or imagined, which the complainant perceives in the appointment system. Failure to understand the working of the appointment system and what it is supposed to achieve can be a source of trouble even when the appointment system is organizationally satisfactory. If the practice is situated in a mainly urban area, where a fairly low esteem for persons in authority obtains, the doctor is more likely to find people suspicious of his motives and willing to criticize his arrangements to his face. The personality of the doctor is relevant here to some extent. There are some members of the profession whom very few would presume to criticize or risk displeasing—for other equally diligent and effective medical practitioners the reverse is true. Direct criticism is probably offered by a fairly small minority in even the worst situation. Even so, this can be quite damaging when the critics are people of some standing. An appointment system was stopped and three practices at least discomforted by articles of a critical and uninformed nature in the local press.

Probably, though, in most practices in which patients were a problem it was their misuse of the appointment system that caused the trouble. There is little doubt that some people are more time-conscious and generally attuned to the concept of business efficiency than others. It would appear that some of the practices discussed did have rather a high proportion of the 'others' among their patients. It is important, however, not to expect too much of an appointment system or of patients' behaviour otherwise, in the circumstances of general practice, one is almost bound to be disappointed. The results of Chapter 6 suggest that quite a number of patients, in practices running successful appointment systems, were unpunctual, though most of these arrived less than five minutes late for their appointment. Since a surgery is rarely running exactly on time and the occasional patient without an appointment will turn up, this type of unpunctuality does not seem to cause much trouble. Similarly, a minority of patients even in the best of systems will fail to attend at the appointed time or not

make appointments. Appointment systems do, however, manifestly work to the satisfaction of the doctor and most of his patients even when far from theoretical perfection.

Misuse of an appointment system can be a patient's often unconscious response to defects in the system. There is some evidence to suggest that in hospital clinics the longer patients have to wait beyond their appointment time the more unpunctual they are.

An appointment system can be placed generally behind schedule by booking patients in at a higher rate than the doctor can see them; by surgery sessions starting late or by the patients without appointments being fitted in at the expense of the scheduled attenders. It is important that an appointment system should be tailored to fit the working characteristics of the individual doctors involved.

The reception staff play a major part in controlling the booking and, in particular, dealing with those attending without appointments. There is little doubt that the receptionist's general approach to patients and the running of the appointment system is of the greatest importance to the well-being of the appointment system. If she is helpful to all concerned and controls the system in a firm but enlightened manner, much trouble can be avoided. People are likely to react strongly against an unfriendly or harassed bureaucracy especially if it is not very efficient either. The larger the practice, the more important and exacting the role of the receptionist (or at least the receptionist-in-charge). A central surgery premises serving four or more doctors with the usual complement of patients calls for quite considerable organizational skill on the part of the chief receptionist. Also, when things do run out of control in such circumstances, the chaos is at a correspondingly higher level. This partly explains why some large partnerships working from central surgeries saw their appointment systems founder, notwithstanding the fact that they were the very people who should find an appointment system a most natural and beneficial part of their organization.

It is well, especially if one is unsure of one's patients' attitude to practice innovation, to promote the appointment system with vigour from the start. If those with appointments usually form the minority of those attending, the majority without appointments will possibly resent the fact that a small *élite* is jumping the queue. Again once an appointment system has been established, many patients notice that their waiting time has decreased, often even when they have not used an appointment. If the latter is the case, there may be a falling

off in numbers making appointments because they feel that they obtain the benefits of the appointment system anyway. One of the practices in which an appointment system had been running for a long time before being withdrawn noticed this phenomenon.

In some cases disapproval of the appointment system on the part of patients was of a very mild kind, but the principals sensed it, and since they were not gaining anything from the appointment system either, the scheme was allowed to drop by mutual agreement.

Thus some appointment systems ended their existence because they came to be generally regarded as a slightly irritating and unnecessary piece of bureaucracy, while others did so as a result of much stronger feelings on the part of the protagonists.

It is fair to say that nothing in this chapter has seriously undermined the earlier conclusions that appointment systems, especially those of the full kind, function successfully in the great majority of practices, no matter where situated or of what size. For many reasons, however, some practices find an appointment system harder to introduce than others; and at the extreme end of this spectrum of difficulty are perhaps 10 per cent. or more of the practices where an appointment system proved to be more bother than it was worth. No recipe for practice organization can be expected to suit every practice's circumstances. It is suggested however, that the types of recommendation made in this report (see especially Chapter 7), though they may seem excessively elaborate to those who introduced highly successful appointment systems with minimal preparation and effort, may mean the difference between success and failure for those trying appointment systems in less favourable circumstances.

5 Surveys among Patients

THE introduction of an appointment system in a practice brings with it a new element of organization into the meeting between doctor and patient[1] in the surgery.

The patient will approach the appointment system with certain attitudes and expectations built up from past experience of appointment systems generally and what he has been told of them by other people or the press, etc. He will be faced with the choice of whether or not to use the appointment system at least for consultations initiated by himself—a choice which may often be seen as between co-operating or not co-operating with his doctor. In any event he will observe the consequences of the system to himself and others—all this at a time when some degree of ill-health affects him or those for whom he is responsible. Different people are likely to be affected and react in different ways.

No study of appointment systems in general practice could be complete without some inquiry into the attitudes and reactions of members of the public. On the other hand, no information is more difficult to obtain, if it is to be reliable, than that demanded by such an inquiry. Apart from the usual problems of framing meaningful and unbiassed questions for attitude surveys, there were here certain additional problems:

(*a*) We wished to obtain some idea of the attitudes towards appointment systems in general practice of the vast majority of people whose doctor did not run an appointment system and who might well have little idea about what such a system entailed.

(*b*) Of special interest were the reactions of certain potential non-users of appointment systems. It has been asserted that certain social

1. Included in this term where appropriate are those such as parents who accompany the persons receiving attention.

and age groups would be unable and/or unwilling to use appointment systems. If the arguments used supporting these assertions were valid, these same groups might also not be able to cope with our questions.

Two quite separate surveys were carried out to investigate attitudes of the public towards appointment systems in general practice and where relevant their use of such systems. Both aimed at obtaining substantially the same information but rather different sampling methods were used. Moreover, one inquiry was conducted by interview and the other by post.

It was hoped that a comparison of the results obtained using these rather different approaches would offer some test of their validity. The two studies will be described separately and their results compared and discussed.

The interview survey of members of the public[1]

This section is based on answers to a short series of questions which formed part of a larger questionnaire put to 2,500 members of the public by interviewers belonging to the British Market Research Bureau. The persons questioned constituted a sample drawn in a quasi-random fashion from the adult population in Great Britain. The answers of the 2,140 replies obtained were 'weighted' (see details of this and other technical aspects of the survey in Appendix IV) to make them proportionately representative of the population under investigation with respect to age, sex, and social grade. Those interviewed were asked:

(*a*) Whether they attended a doctor who used an appointment system (a short explanation of what was meant by this being given).

(*b*) The number of visits they had made to the doctor in the previous twelve months (to see him themselves or take someone else).

(*c*) Whether they would make an appointment when going to see their doctor.

(*d*) About their general feelings towards appointment systems in doctors' surgeries.

(*e*) Whether they had the use of a telephone at home.

In addition those who said their doctor ran an appointment system were asked:

1. In Appendix V, Tables 1–7 relate to this survey.

(*f*) How long their doctor's appointment system had been in operation.

(*g*) How long they had been registered with him.

(*h*) How much they had used the appointment system in the previous twelve months (asked only of those who indicated that they had visited their doctor in that period).

Those whose doctor did not use an appointment system were asked whether they had ever attended one who did. (Further details of question schedule are to be found in Appendix VII.)

In addition various other personal details—age, class, sex, marital status, size of family—were available for respondents.

1. *Proportion of the population attending general practitioners with appointment systems*

Sixteen per cent. of those questioned indicated that their doctor ran an appointment system for his ordinary surgery sessions. This figure varied a good deal from region to region being over 26 per cent. in each of the Southern, South-eastern, and Eastern regions but below 10 per cent. in Lancashire, Midlands, East Midlands, and Wales.

When answers for social grades[2] were examined, those higher up the scale tended more often to have a doctor with an appointment system though the differences were not very marked. At one extreme 19·3 per cent. of those in classes A and B (combined) had the use of an appointment system against 13·3 per cent. of those in classes D and E (combined) at the other. The regional differences were not accounted for by regional differences in the proportions of people in the various social grades, (App.V.IA gives proportions of those with appointment systems standardized by class), and wide variations between figures for the same classes from region to region were apparent. As might be expected, however, there was a general tendency towards uniformity within regions for the different classes, for example, all fairly high or fairly low.

2. *The use of appointment systems in the past by those who said their doctor operated one*

Those who had attended their doctor in the previous twelve months could be categorized broadly as:

(*a*) Always/usually attending by appointment.

1. The regions referred to here are roughly the standard regions used by the Registrar General.

2. See note at the end of this chapter for definition of these terms.

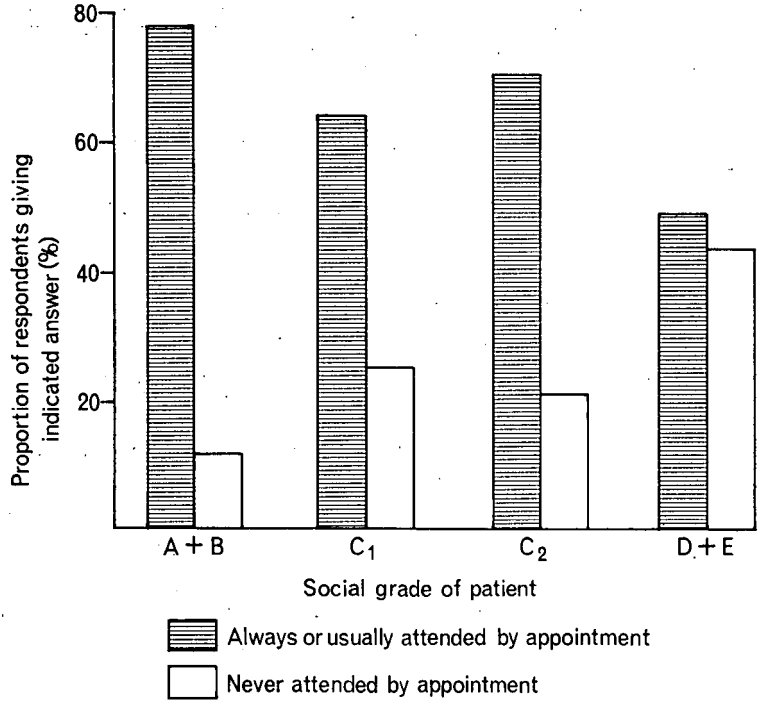


Figure 5.1. *The frequency with which patients used their doctor's appointment system in the past—Social grade*

See Table 5.7 for meaning of social grades.

(*b*) Never attending by appointment.

(*c*) The others—the occasional or rare users of the system.

Over-all about two-thirds said they always/usually attended by appointment and a quarter that they never did. A slightly higher proportion of women than men fell into the former category.

Social class

There appeared to be a definite association between a patient's social grade and the degree to which he used the appointment system. Some 78 per cent. of those in social classes A and B said they always/usually attended by appointment as against 49 per cent. for those in classes D and E, classes C_1 and C_2 being intermediate. Only 30 per cent. of the small number of people in class E fell into the regular user

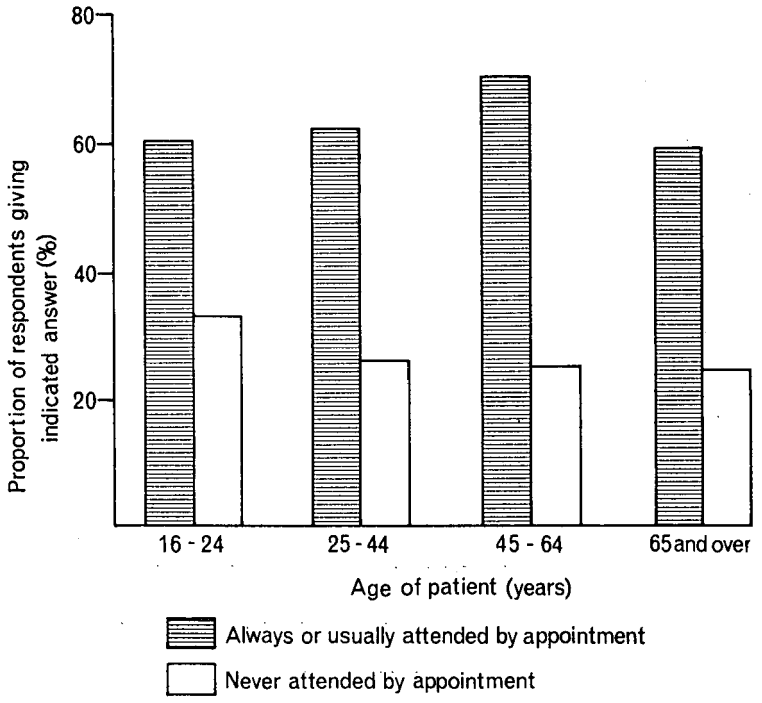


Figure 5.2. *The frequency with which patients used their doctor's appointment system in the past—Age*

group. The differences in proportions falling into these categories were paralleled by corresponding differences (in the reverse direction) in the proportions of those who said they never used appointment systems when attending their doctor—the proportions of occasional users were fairly constant over all classes at between 5 and 10 per cent.

Age

Another possible factor relating to use of appointment systems was age. For all ages except the 45–64 years age group the proportion of those who said they always/usually attended was about the same (60 per cent.). Among those aged 45–64, however, the proportion was rather higher (70 per cent.). For all but the under-25s the proportion never attending by appointment was the same, the differences above being balanced by differences in proportion of occasional appointment makers.

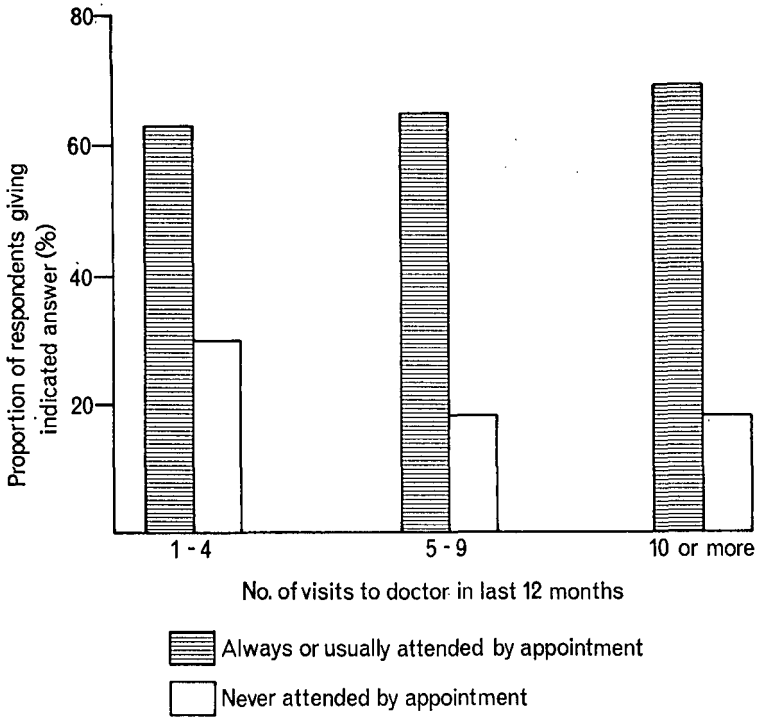


Figure 5.3. *The frequency with which patients used their doctor's appointment system in the past—Number of visits to doctor in previous twelve months*

Frequency of attendances at surgery

Jackson (see Reference 11, Chapter 2) observed that he set about encouraging his doctor to use an appointment system as a result of having to attend at the surgery very regularly over a period of months. To what extent is use of appointment system related to frequency of attendance at the surgery? There was some suggestion that the most frequent visitors to the surgery most regularly attended by appointment. The proportion of those who visited their doctor one to four times in the previous year who never attended by appointment was 30 per cent. This is much larger than that for the others questioned (18 per cent.). This is possibly partly accounted for by a number only attending once and not knowing of the appointment system or forgetting it until they arrived at the surgery. There is also the point that a high propor-

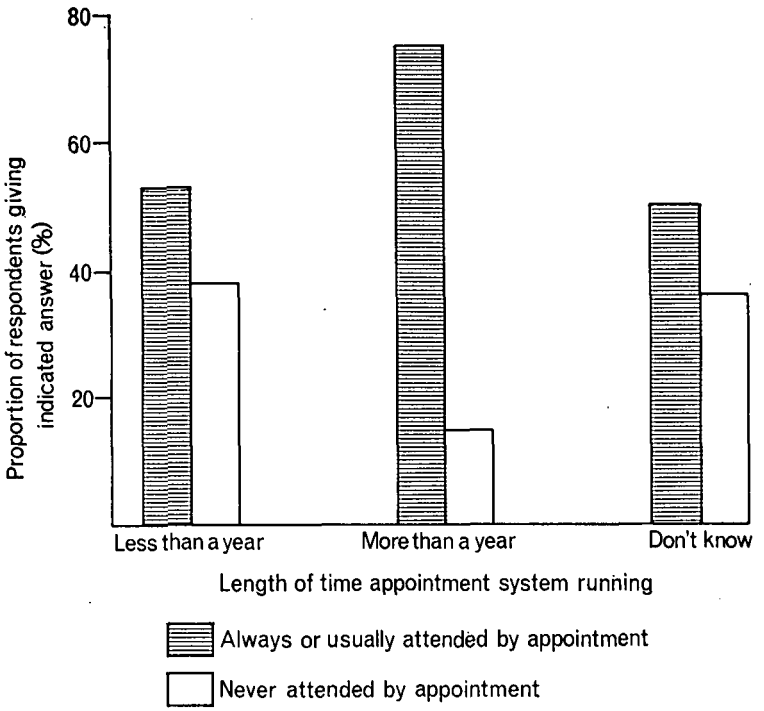


Figure 5.4. *The frequency with which patients used their doctor's appointment system in the past—Length of time appointment system running*

tion of attendances for a person attending the doctor many times in the year would probably be repeat calls and for these the doctor would arrange the appointment for the patient.[1] Also the regular attender would be more likely to obtain a balanced view of the appointment system than the person coming into contact with it very infrequently. He might notice that on average over the year his waiting time was rather short perhaps much shorter than in the days prior to the introduction of the system.

1. The question actually ran 'when you went on these occasions (i.e. in previous twelve months) did you make an appointment?' and therefore technically related to 'patient initiated' or new attendances at the surgeries. However, this may be to the respondent a somewhat academic point, so that it seems fair to assume that many people included repeat attendances by appointment among attendances for which they 'made' an appointment.

Length of time appointment system in operation

The degree to which people utilize an appointment system might reasonably be expected to be related to the length of time it has been in operation. Just over half thought their doctor's system had been running more than a year, the residue being equally divided between those who said it was less than a year and those who did not know. (We are here referring to those who visited their doctor in the previous year—the figures are similar for those whose doctor had an appointment system but who did not visit their doctor in the previous year though the 'don't knows' were more numerous.)

Seventy-five per cent. of those whose doctor's appointment system had been running for more than a year always/usually attended by appointment as compared with 53 per cent. of those where appointment systems had been running for less than a year and 50 per cent. of those who did not know how long it had been in operation. Ninety per cent. of those whose use of appointment systems has been discussed above had been registered with their doctor for more than a year—the residue being split between those who did not know and those who had been registered for less than a year. It seems fair to assume that the small minority of recently registered patients can have had little effect on the data presented above.

Telephone

Most doctors with appointment systems allow appointments to be made by telephone and undoubtedly, unless one lives very close to the surgery premises, the easiest way to obtain an appointment is by telephone. It is of interest, therefore, that 77 per cent. of those who did have the use of a telephone at home as against 59 per cent. of those who did not, always/usually attended by appointment. Possession or otherwise of a telephone is highly correlated with class membership but there was some evidence that within any class those with telephones were more likely to attend by appointment than those without. This suggests that many without telephones may prefer to save the extra journey to the surgery or to a telephone kiosk and go without an appointment.

Marital status and family composition

Where there are children in the family, especially young ones, it is normally the mother who takes them to the doctor for attention and often enough they will accompany her when she goes for treatment

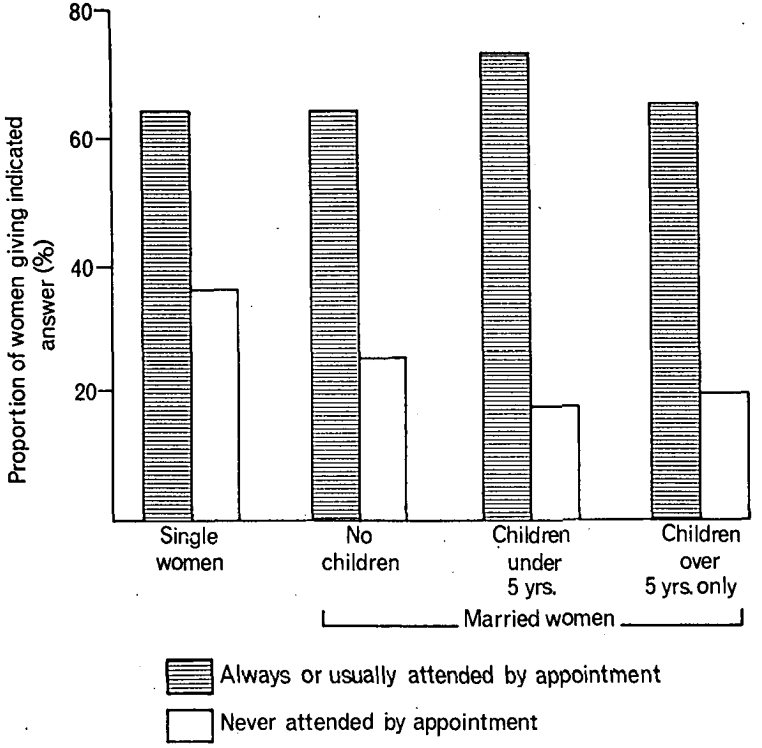


Figure 5.5. *The frequency with which patients used their doctor's appointment system in the past—Marital status and family composition*

for herself. How do a woman's marital status and the number of children in her family relate to her use of her doctor's appointment system? There was virtually no difference between the proportions (65–66 per cent.) always/usually attending by appointment among single women, married women with no children under 15, and women with children in the 5–15 age group, but not younger. However, among the relatively few mothers with children under 5, a rather higher proportion (73 per cent.) always/usually attended by appointment.

3. *Future intentions concerning the use of appointment systems*

In this section we shall examine the regularity with which those with appointment systems[1] intended to make appointments when going

1. We shall henceforth denote those persons whose doctor uses an appointment system as those 'with an appointment system' or 'having an appointment system' with an analogous convention for those whose doctor does not use an appointment system.

to see their doctor in the future. We shall also consider the extent to which those without appointment systems would attend by appointment if an appointment system were available. (This is a highly hypothetical matter. The question was framed so as to try and give the impression to the respondent that it would be entirely up to him to decide what use he made of the appointment system so that there was the minimum suggestion that the doctor wanted him to use it—though it is difficult obviously to exclude this implication altogether.)

Taken as a whole, 74 per cent. of those with appointment systems and 64 per cent. of those without said they would always/usually make appointments when going to see their doctor. The proportion of those who said they would never attend by appointment was about the same for both those with and without appointment systems, the difference in the proportion of regular users being matched by a corresponding difference in the proportion of those who said they would sometimes attend by appointment.

Looking at the response of those with appointment systems who had attended their doctor in the past twelve months, virtually all who said they had always/usually attended by appointment also said they would do so in future. The comparable proportion for those who had sometimes attended by appointment in the past was 42 per cent., the remainder saying they would do so sometimes in the future as well. Among those who had never made an appointment when attending in the past, 27 per cent. said they would always/usually do so in future; nearly 40 per cent., however, said they would continue attending without an appointment. This reveals the heterogeneity of the last group in that it was composed of those definitely against appointment systems and those who, for one reason or another, had not attended by appointment in the past but had no rooted objection to doing so in the future. No one was found among those who in the past were regular or occasional users who would not attend by appointment in the future.

Length of time appointment system running

The length of time the appointment system had been running did not seem to affect the response at all as regards future use of appointment system. It will be recalled that this was not the case as regards past use; this suggests that the fact that those attending doctors who had recently started appointment systems used them less frequently than those whose doctors' appointment systems had been going for more than a year,

was due more to their non-existence or at least to patients' initial ignorance of their existence during part of the period of twelve months in question than to disruptive teething troubles.

Those who did not know how long their doctors' appointment system had been running, however, still seemed far less likely to use appointment systems than the others—since it is not too difficult to decide whether or not an appointment system has been running for a year or more, one might postulate that these are people who are not good at figures and dates, etc. (Most of the respondents in this class—69 per cent.—had attended their doctor in the previous twelve months.)

Sex

There was not much difference between the response for men and women both for those with and without appointment systems, though among those with appointment systems a slightly higher proportion of men than women said they would always/usually attend by appointment—a reversal of the situation as regards past performance.

Social class

The same broad pattern emerged for future use, both among those with and without appointment systems as was in evidence for past use. The higher the social grade, the higher the proportion who said they would always/usually attend by appointment. For all social grades the proportion of potential regular appointment makers was higher among those with appointment systems than those without. Of interest was the fact that the biggest difference between those with and without appointment systems was to be found in social classes D and E where 69 per cent. of those with appointment systems said they would always/usually attend by appointment as against 55 per cent. of those without.

Comparing the future use of appointment systems against past use class by class for those with appointment systems, it is noticeable that, except for classes A and B, the proportion of those who said they would never attend by appointment in future was very much lower than among those who never attended by appointment in the past. This difference was most marked in social classes D and E (past 43 per cent., future 15 per cent.). The suggestion is that although people higher up the social scale (both with and without experience of appointment systems) do declare themselves more often as likely to attend always/usually by appointment, experience of appointment systems

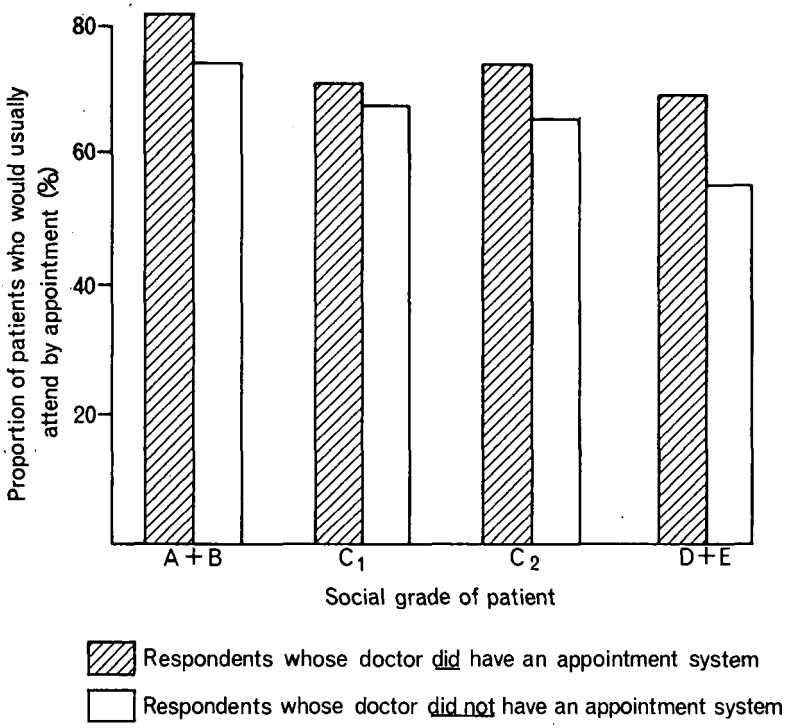


Figure 5.6. *Patients' anticipated future use of their doctor's appointment system (if one available)—Social class*

See Table 5.7 for meaning of social grades.

seems to convert quite substantial proportions of people right at the bottom of the social scale to the idea of regular use, at least in theory.

Age

When responses for different age groups are compared, in all cases a higher proportion of those with appointment systems said they would always/usually attend by appointment. For those without appointment systems for all but the over 64s the proportion was about the same (two-thirds) but the figure for the latter was definitely lower at 55 per cent. For those with appointment systems the over 64s were still the least likely to be regular users of appointment systems (64 per cent. would always/usually attend by appointment). People in the middle age-groups seemed most strongly disposed to use appointment systems, rather more than three-quarters of those aged 25–64 saying

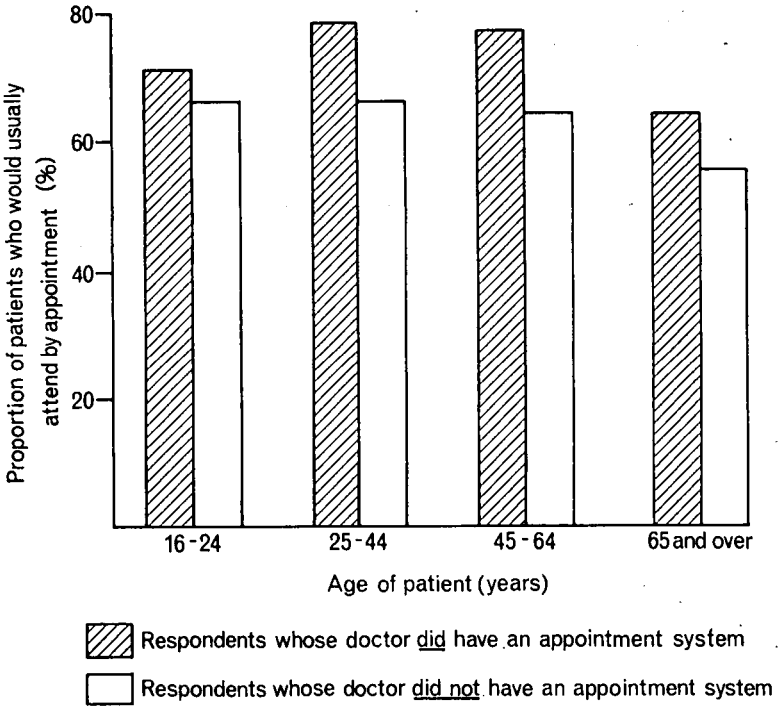


Figure 5.7. *Patients' anticipated future use of their doctor's appointment system (if one available)—Age*

they would always/usually use the appointment system. The pattern of those in their youth and old age being less likely to use an appointment than those in middle age was manifested both in the analysis of past and future use of appointment systems. But the increase in the proportion who would always/usually attend by appointment in future from the comparable figure for the past was much more marked in the younger groups (16–24s and 25–44s) than in the two older groups.

This may well reflect the fact that older patients will tend to have more contact with their doctor than younger ones and so will have become aware of the appointment system and evaluated it for themselves. This is borne out by the difference between the proportions of those in the 16–24 age-group of those never attending by appointment in the past, 33 per cent. compared with 7 per cent. for the future, which is a great deal larger than the difference for any other age-group.

Frequency of attendance at the surgery

In the past it was found that those who visited most frequently, ten times or more in the past year, tended to make appointments proportionately more often than the others. This was also the case as far as the future intentions of the respondents with appointment systems were concerned.

The fact that the group who said they visited their doctor five to nine times in the previous year seemed to be least likely to visit their doctor by appointment is curious and we have no explanation to offer for this.

Turning to the result for those without appointment systems, there was little difference between those who attended nine times or less, including those who did not attend at all in the previous twelve months,

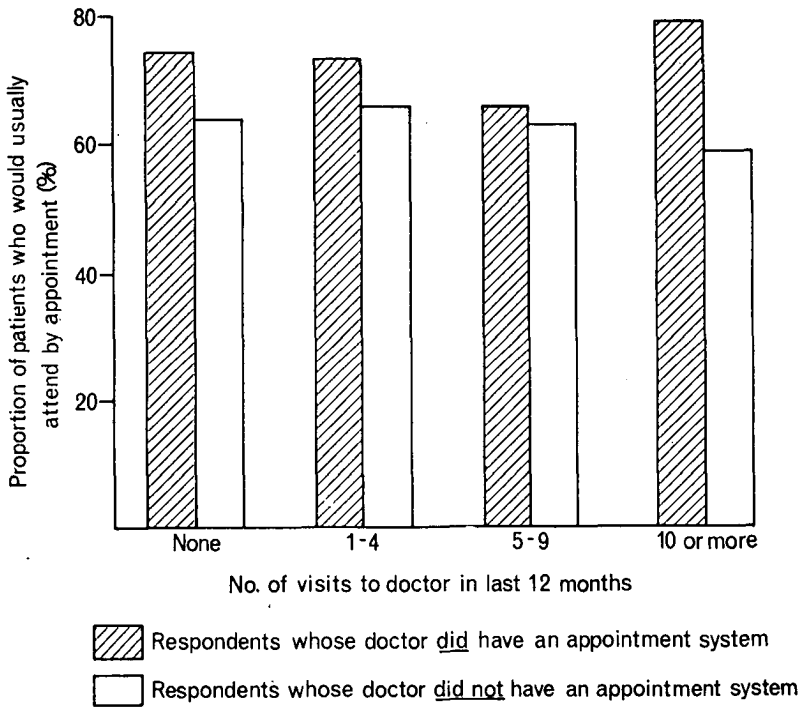


Figure 5.8. *Patients' anticipated future use of their doctor's appointment system (if one available)—Number of visits to doctor in previous twelve months*

but, by contrast with those with appointment systems, those who attended most often were least likely to use an appointment system in the future. All this suggests that because they often have their appointment—for a repeat attendance—made for them by their doctor or because it is expedient, regular attenders were converted more strongly to use of appointment systems than the other groups.

Telephone

For those without appointment systems, 75 per cent. of those with telephones as opposed to 61 per cent. of those without said they would always/usually attend by appointment. The comparable figures for those with appointment systems were 73 and 74 per cent. respectively. This result is curious since those without appointment systems seem to be reacting (for the future) in a similar way to those with appointment systems (in the past). Whereas among the latter group the telephone seems not to influence results at all, one would have expected that experience of an appointment system would have pointed to the convenience of telephoning for an appointment.[1]

Marital status and family composition

Finally the answers on possible future use of appointment systems were examined for women in the different marital/family composition groups. For those with appointment systems the proportion who would always/usually attend by appointment among the women with children under 5 (79 per cent.) was much higher than that for any other category of women (range 69–71 per cent.).

By contrast, among those without appointment systems, women with children under 5 were least likely to attend by appointment. It would seem that members of this group might be apprehensive at having to cope with additional organizational problems in the form of making appointments, etc., but having experienced an appointment system, come to appreciate the benefits which it brings; especially, no doubt, the shorter time in the waiting-room which would also be emptier.

4. *General feelings about appointment systems*

In the previous sections we have considered what people have done

1. Note that the results for the future for those with appointment systems include the people who did not attend their doctor in the previous twelve months but the proportion of these with telephones was the same as that for those who attended their doctor in the previous twelve months.

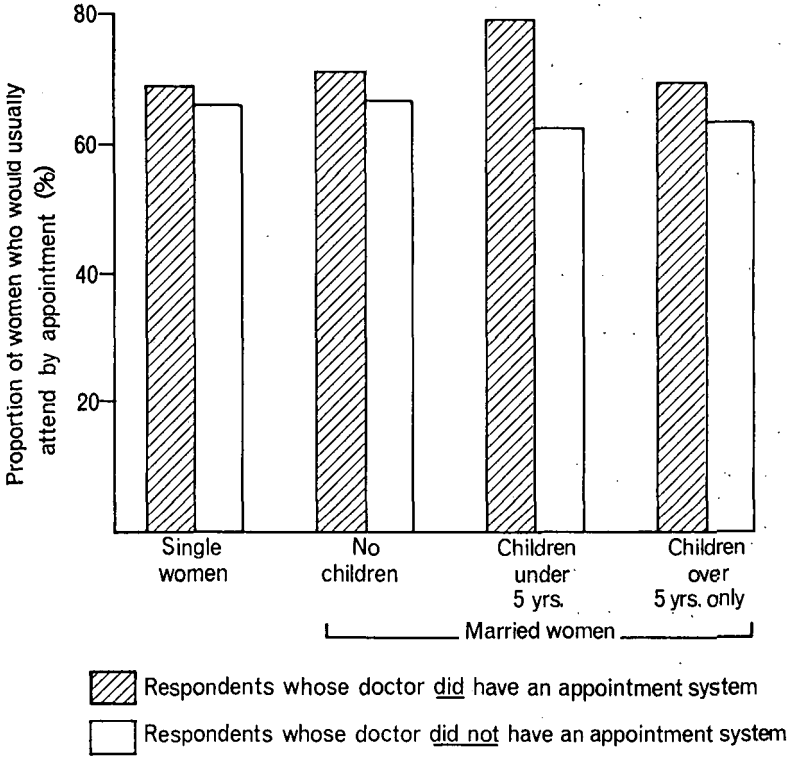


Figure 5.9. *Women's anticipated future use of their doctor's appointment system (if one available)—Marital status and family composition*

or think they would do as far as using an appointment system was concerned. Here we shall consider their reactions to the general idea of appointment systems for people going to see their doctor at the surgery. Answers were categorized as in favour, neutral, or against appointment systems.

Some 79 per cent. of those interviewed whose doctor used appointment systems were in favour. The comparable figure for those without appointment systems was 67 per cent. The figures for those in favour were the same for both sexes though among those without appointment systems, 13 per cent. of men compared with 8 per cent. of women were against appointment systems.

Social class

For those with appointment systems the social trend revealed in the

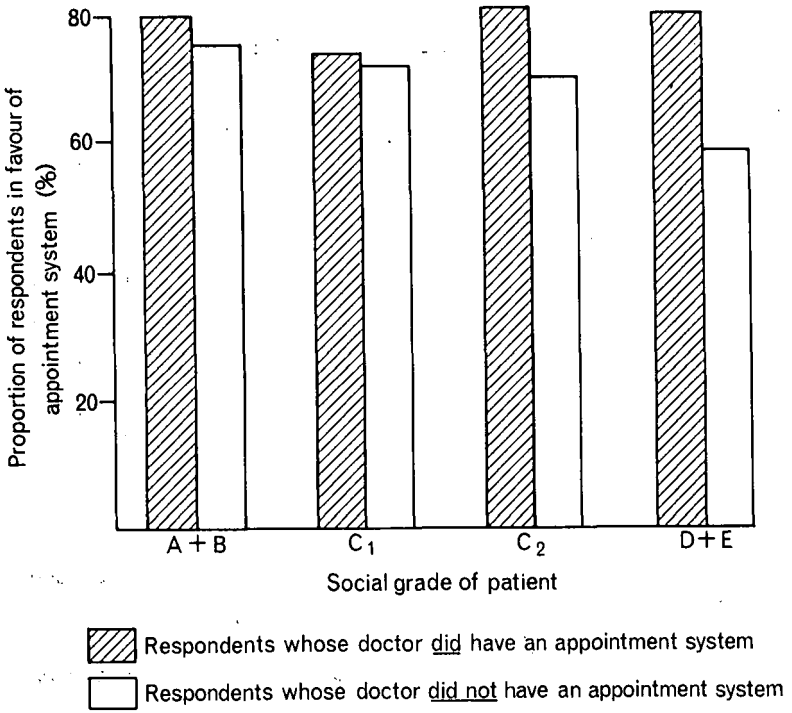


Figure 5.10. *Patients' attitude generally towards idea of appointment system at their doctor's surgery—Social class*

See Table 5.7 for meaning of social grades.

section on past and potential usage of the appointment system was not in evidence. In particular, the proportion of members of social classes D and E in favour was the same as for those in social classes A and B.

By contrast, among those without appointment systems, those higher up the social scale did seem to be more in favour of appointment systems than the remainder.

In all classes a higher proportion of those with appointment systems were in favour of such systems than was the case for those without. It is interesting that among classes A, B, and C the proportions in favour were much the same for those with and without appointment systems, whereas the comparable differences were much more marked for those in classes C, D, and E. It would suggest that the general impression of an appointment system in action was favourable, and even if many of those in the lower social classes were not too sure about making

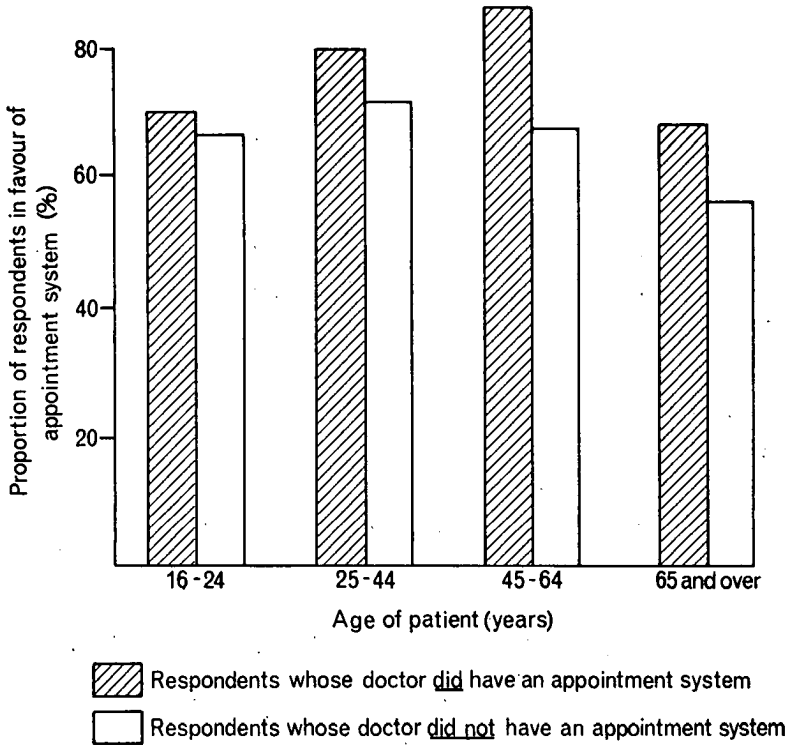


Figure 5.11. *Patients' attitude generally towards idea of appointment system at their doctor's surgery—Age*

appointments, they were still quite definitely agreeable to the general idea.

Needless to say, it is very easy to say one is in favour of something—especially to an interviewer—though the fact that a third of those without appointment systems refused to commit themselves thus far about appointment systems does suggest that the answers are more than a favourable reaction to a pleasant and usually young (female) interviewer.

Age

Among those without appointment systems the proportions in favour were 66–71 per cent. for those under 65. The 65s and over lagged behind somewhat—only 56 per cent. being in favour. For those with appointment systems, of those in the middle age-group, 83–84 per

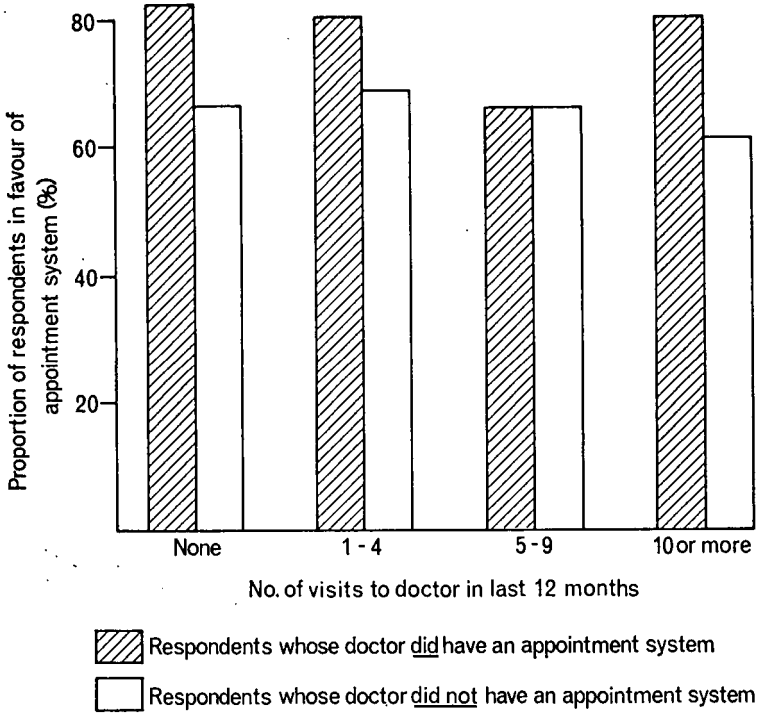


Figure 5.12. *Patients' attitude generally towards the idea of appointment system at their doctor's surgery—Number of visits to doctor in previous twelve months*

cent. were in favour of appointment systems as compared with about 70 per cent. for the under 25s and the over 65s. In these latter two groups the proportion of those against appointment systems had also increased so that it was the neutral class which had been decreased by the 'movements' of opinion in both directions. For the other age groups, the 'conversions' in favour were again predominantly from the neutrals.

It has to be borne in mind that the proportions of those who were against appointment systems never exceeded 15 per cent. for any age group, with or without appointment systems.

Frequency of attendance at surgery

We have seen that those who attended a lot seemed most likely to attend by appointment but it was not clear as to whether this was

because they had to. In fact, of those with appointment systems, who had visited their doctor ten times or more, 80 per cent. were in favour —about the same as those who had visited their doctor four times or less. The least enthusiastic group was again comprised of those who attended between five and nine times in the year—only two-thirds being in favour. This difference was 'accounted' for by the correspondingly greater number of neutrals in the 'five to nine visits' group, the proportion who were against being the smallest among all the number of visits categories.

Among those without appointment systems there was very little difference in the response for those visiting nine times or less—about two-thirds being in favour. The most regular visitors to the doctor (ten times or more) were least often in favour. The proportion of those who were neutrals was in all cases about the same.

Telephone

Possessing a telephone did appear to make some difference to the attitude of those without appointment systems, 75 per cent. of those with use of telephone being in favour as against 64 per cent. of those without. The difference was less marked for those with appointment systems, 83 per cent. for those with use of a telephone as against 77 per cent. for those without.

Marital and family status

Attitudes among women in the different marital/family groups were examined. For those without appointment systems the proportion in favour ranged from 64 per cent. (women with children under 5) to 71 per cent. (women with children in 5–15 age group, but not under 5). By contrast, for those with appointment systems the women with children under 5 were virtually all in favour of appointment systems (93 per cent. being in favour), the proportion in favour for other categories ranging from 66 to 79 per cent.

Attitudes towards, and past and prospective use of, appointment system

As might be expected, the vast majority of those who used an appointment system always/usually when going to see their doctor were in favour of the system, less than 2 per cent. being against. Among those who had seldom or never used the appointment system when attending, some 60 per cent. were none the less in favour and less than one-fifth

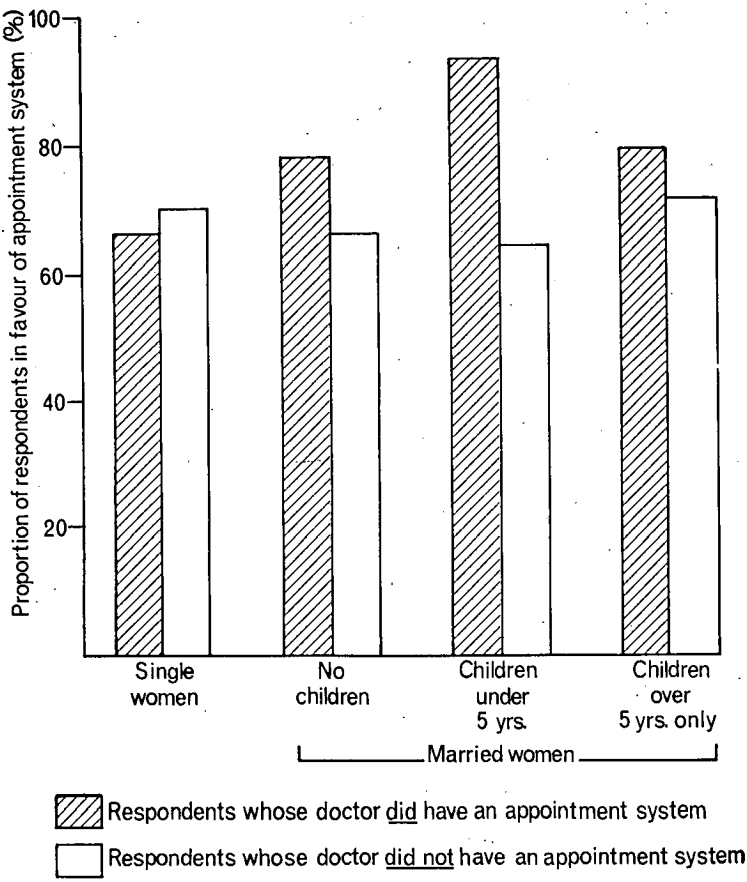


Figure 5.13. *Patient's attitude generally towards the idea of appointment system at their doctor's surgery—Marital status and family*

were against (virtually all these latter were to be found among those who never attended by appointment).

It would seem that experience of an appointment system left a generally favourable impression among patients regardless of whether they used it or not—possibly because the lack of use was owing to such factors as its recent introduction.

Nearly 40 per cent. of those who were neutral towards appointment systems always/usually attended by appointment and a third of those who were against did likewise. These would appear to be the

people who for one reason or another were prepared to use an appointment system and perhaps oblige their doctor even though they were not very keen on the idea.

Comparing the future intentions on use of appointment systems for those with appointment systems with their attitudes concerning such systems, virtually all of those who would always/usually attend by appointment were in favour and so were 71 per cent. of the occasional prospective users of the appointment system. Those who said they would never use appointment systems when attending in future were, however, much more strongly against the idea—only 23 per cent. being in favour of appointment systems and 39 per cent. being definitely against (compared with 59 per cent. in favour and 23 per cent. against for those who never attended by appointment when visiting their doctor in the past). Those who never attended by appointment in the past for reasons other than general attitude towards appointment systems have presumably 'moved' to other categories as far as the future is concerned. This is reflected in the fact that 82 per cent. of those in favour of appointment systems planned to attend always/usually by appointment (as compared with 72 per cent. who actually did in the past). However, 44 per cent. of those who were against would still always/usually go by appointment in the future.

For those without appointment systems their attitude appeared more closely related to their 'future intentions' regarding use of such a system. Thus only 13 per cent. who were against appointment systems say they would always/usually attend by appointment (compared with 44 per cent. of those with appointment systems). This seems reasonable. The questions relate to a hypothetical situation so that a person's attitudes and prospective actions might be expected to be closely related. No external pressure such as doctors' wishes in the matter intervenes in this case (except possibly a general wish to please the interviewer).

A small minority (9 per cent.) of those attending a doctor without an appointment system had previously attended a doctor using such a system. In previous tabulations these have been treated simply as being without an appointment system. When asked whether they would use an appointment system were one available more than 80 per cent. said they would always/usually attend by appointment and only about 6 per cent. said that they would never do so, i.e. their answer corresponded much more closely with those people with appointment

systems. Likewise, 80 per cent. declared themselves in favour of appointment systems and 9 per cent. against.

The postal survey of patients in nine practices—Four with appointment systems and five without[1]

This survey was carried out directly from the Unit of Biometry. The sampling methods involved are described in full in Appendix IV. Basically, from each practice a sample of 45 patients was chosen at random in such a way that 30 (according to their doctor's classification) belonged to the working class and 15 to the middle classes.[2]

Different questionnaires were naturally used for patients from practices with and without appointment systems and the same was true for the accompanying letters. In each case three types of letters were used (Appendix VII). These differed from one another only in that one emphasized the inquiry's relation to the Unit of Biometry, the second the patient's own doctor's interest in the survey, and the third the Ministry of Health's interest in the survey. The object of this diversity of letters was to see whether the different apparent origins of the survey would affect the answers. The differing letters generally appeared to have little or no effect and will not be otherwise considered.

Three hundred and fifteen effective replies to the survey were received, 138 from practices with appointment systems and 177 from practices without. That is, in both cases, the effective response was over 75 per cent. In fact, since the total number of patients approached included people who had left the area—died, etc.—by the time they were approached, the ratio of respondents to the total able to respond was rather higher.

The questionnaire (Appendix VII), it will be observed, asked for rather more information than was obtainable from the interview survey. In this section we shall first briefly examine the results which are comparable with those presented in the interview survey. Thereafter we shall examine in rather more detail topics which were only dealt with in the postal questionnaires.

1. In Appendix V, Tables 8 and onwards relate to this survey.

2. Upper class is included in this category. In one case the doctor concerned said that his whole practice was working class, and all forty-five were accordingly designated thus. The doctors' assessments of their patients' classes were checked as far as possible against the occupations given by respondents and found to agree surprisingly well.

Because of the way in which the samples relating to the present survey were drawn, results in general were examined separately for each class and combined only where a factor appeared not to affect answers in the opposite way in one class as compared with the other. In fact, this was rarely observed. Where results for the two classes were combined, this was done simply by adding. Such results tend to give too much weight to working-class respondents among those with appointment systems and the converse among those without.

1. *Past usage of appointment systems by respondents from practices where they were in operation*

Over-all, about three-quarters of the middle-class and just over half of the working-class respondents said they always/usually attended by appointment. The results were the same for both sexes. It was found that those with telephones were more likely to say they would always/usually attend by appointment, as were those who had attended often at the surgery (ten times or more in previous year). Among women it is noticeable that 73 per cent. of women with children under 5 said

Table 5.1. *For those whose doctor used an appointment system. Future frequency of appointment making—Use of telephone at home—separately for middle and working classes*

(*a*) *Middle class*

	Use of telephone at home		
Appointments would be made	Yes	No	All
Usually	86%	All	90%
Not usually	14%	None	10%
Totals[1]	22 (100%)	9	31 (100%)

(*b*) *Working class*

	Use of telephone at home		
Appointments would be made	Yes	No	All
Usually	91%	67%	72%
Not usually	9%	33%	28%
Totals[1]	22 (100%)	76 (100%)	98 (100%)

1. Totals on which percentages in corresponding columns based.

Table 5.2. *For those whose doctor did* not *use an appointment system. Future frequency of appointment making—Use of telephone at home—separately for middle and working classes*

(*a*) *Middle class*

	Use of telephone at home		
Appointments would be made	Yes	No	All
Usually	58%	0	47%
Not usually	42%	100%	53%
Totals[1]	48 (100%)	11 (100%)	59(100%)

(*b*) *Working class*

	Use of telephone at home		
Appointments would be made	Yes	No	All
Usually	58%	27%	42%
Not usually	42%	73%	58%
Totals[1]	50 (100%)	56 (100%)	106 (100%)

1. Totals on which percentages in corresponding columns based.

they would always/usually attend by appointment as opposed to 60 per cent. or less for all other marital/family categories examined. The results presented so far agree with those of the interview survey.

The postal survey did appear to provide rather different results for past usage of appointment systems by people in differing age-groups, at least for working-class respondents. Three-quarters of the over 64s said they always/usually attended by appointment as opposed to about half among the younger respondents. The middle-class respondents, of whom there were very few in each age-group, answered rather differently. Among these, the elderly were the least likely to have used the appointment system always/usually when calling on their doctor, and the youngest most likely.

2. *'Future' intentions concerning the use of appointment systems*

For those with appointment systems, as in the interview survey, the proportion of those who said they would usually attend by appointment in future was substantially higher, both for middle and working

class, than the corresponding figure relating to past attendance by appointment.

Below half, both of those in the middle and in the working classes, said they would attend by appointment in future among those without appointment systems. These proportions were a good deal lower, especially for middle-class respondents, than the corresponding figures in the interview survey.

Both among those with appointment systems and those without, the over 65s were among the least likely to say that they would always/usually attend by appointment which, unlike the result for past attendance, corresponds with the findings of the interview survey. However, the group most disposed to make appointments was that composed of the under 25s.

Of those from practices with appointment systems, patients who had visited their doctor most in the previous twelve months most frequently said they would usually attend by appointment in future. Among this type of respondent from practices without appointment systems, the highest proportion of regular potential users of appointment systems was found; this was not the case in the interview survey. Those who attended rarely or not at all in the previous twelve months were, in both cases, the next most likely category of patients to attend by appointment, both for those with and without appointment systems.

Both among those with and without appointment systems, having the use of a telephone greatly increased the likelihood of a respondent saying he would always/usually attend by appointment: (89 per cent. versus 71 per cent. for those with appointment systems, 58 per cent. versus 22 per cent. for those without appointment systems). People within the same social class (with and without an appointment system) were much more likely to say they would usually attend by appointment in future if they had the use of a telephone than those who did not. (Only for middle-class people with appointment systems was no effect of this sort noted.) It is of interest that it seems to be having a telephone itself, rather than its relation to class membership which accounts for the wide difference in appointment system usage among those with and without easy access to these instruments.

The results for women in different marital/family groups were similar to those for the interview survey, except that, even among those without appointment systems, mothers with children under 5 were still the group most likely to say they would attend by appointment.

Looking at future usage as compared with past usage, results were very similar to those of the interview survey.

3. *General attitude towards appointment systems at doctors' surgeries*

As in the interview survey, the great majority of patients from practices with appointment systems were in favour of such systems compared with about half of those without appointment systems. The now familiar differential between the middle and working classes was noticeable in each case.

The under 25s were most in favour of appointment systems both among those with and without appointment systems in their doctor's practice. However, whereas only 35 per cent. of those aged 65 years and over without appointment systems were in favour of appointment systems, more than 80 per cent. of this age-group in the practices with appointment systems were in favour.

Table 5.3. (*a*) *For those whose doctor used an appointment system. Future frequency of appointment making—Length of time usually spent waiting at surgery before seeing doctor*

	Waiting-times			
Appointments would be made	5 min. or less	6–15 min.	16–30 min.	Over 30 min.
Usually	95%	88%	55%	50%
Not usually	5%	13%	45%	50%
Totals[1]	22 (100%)	56 (100%)	31 (100%)	16 (100%)

(*b*) *For those whose doctor did* not *use an appointment system. Future frequency of appointment making—Length of time usually spent waiting at surgery before seeing doctor*

	Waiting-times		
Appointments would be made	Less than 15 min.	16–30 min.	Over 30 min.
Usually	23%	50%	65%
Not usually	77%	50%	35%
Totals[1]	64 (100%)	62 (100%)	31 (100%)

[1] Totals on which percentages in corresponding columns based.

Both among those with appointment systems and those without, those who visited their doctor most—ten times or more—in previous year and those who had not done so at all were most in favour of appointment systems. People with telephones were much more favourably disposed to appointment systems. The results for the female respondents in the different marital/family composition groups were similar to those in the interview survey.

4. *Topics not treated in the interview survey*

Answers which respondents gave about their past and possible future use of appointment systems were examined in relation to the distance from their home to their doctor's surgery measured by the amount of time the journey took using their normal form of transport. According to these criteria, those living at intermediate distances from the surgery appeared most regularly to have more appointments in the past, both among working- and middle-class respondents. As far as future intentions about use of appointment systems were concerned,

Table 5.4. (*a*) *For those whose doctor used an appointment system. Future frequency of appointment making—Whether or not usual waiting time at surgery is reasonable*

Appointments would be made	Waiting-time is	
	Too long	Reasonable
Usually	39%	85%
Not usually	61%	15%
Totals[1]	23 (100%)	97 (100%)

(*b*) *For those whose doctor did* not *use an appointment system. Future frequency of appointment making—Whether or not usual waiting time at surgery is reasonable*

Appointments would be made	Waiting-time is	
	Too long	Reasonable
Usually	90%	30%
Not usually	10%	70%
Totals[1]	33 (100%)	129 (100%)

1. Totals on which percentages in corresponding columns based.

Table 5.5. (*a*) *For those whose doctor used an appointment system. Usual waiting time at surgery—Opinion of usual waiting time*

Opinion	Waiting-time			
	5 min. or less	6–15 min.	16–30 min.	Over 30 min.
Too long	0	4%	28%	75%
Reasonable	100%	96%	72%	25%
Totals[1]	19 (100%)	57 (100%)	32 (100%)	17 (100%)

(*b*) *For those whose doctor did* not *use an appointment system. Usual waiting time at surgery—Opinion of usual waiting time*

Opinion	Waiting-time		
	15 min. or less	16–30 min.	Over 30 min.
Too long	3%	17%	61%
Reasonable	97%	83%	39%
Totals[1]	68 (100%)	63 (100%)	33 (100%)

1. Totals on which percentages in corresponding columns based.

the answers of those without appointment systems followed the same pattern as that found for past use of appointment systems. However, for those with appointment systems, it was among those who lived nearest to the surgery that the highest proportion said they would usually attend by appointment.

The amount of time patients usually had to wait at the surgery in the past was strongly related to their opinion of appointment systems and intentions about using them in the future. Among those with appointment systems, the longer they had had to wait in the past, the less likely they were to say they would make appointments in the future. Reasonably enough, the exact converse was true among those whose doctor did not run an appointment system.

Similarly, for respondents from practices with appointment systems, among those who thought they had waited too long, a much lower proportion said they would attend by appointment in the future than those who thought they waited a reasonable time. The reverse was very much the case for those without appointment systems.

Both among those with and without appointment systems, the majority of respondents considered half an hour to be reasonable. Table 5.5 does suggest however that there was a tendency for patients whose doctor used such a system to be less tolerant of waiting times over fifteen minutes. This was more particularly so among those whom the doctor described as middle class. Note incidentally that these results suggest that most patients would agree with what the doctors without an appointment system thought was a reasonable time for patients to wait (this averaged 25 minutes—Chapter 3).

Virtually no one indicated (in response to a specific question on the matter) that they had ever called a doctor to the house because of the time they would have to wait in the doctor's surgery.

Conclusions and discussion

People whose doctors ran appointment systems reacted in both surveys much more favourably towards the idea of such systems than those whose doctors did not. We have seen that this holds true whether we looked at answers separately for different classes, age groups, or past frequency of visits to doctor, etc. It is worth recalling that mothers of young children and those who had occasion to attend the doctor most regularly were amongst the most firm supporters of existing appointment systems. The majority of the elderly from practices with appointment systems, were in favour of appointment systems and said they would usually attend by appointment. There is strong evidence that having the use of a telephone is associated with favouring an appointment system. Nor does this appear to be merely a matter of social class. The actual availability of a convenient instrument seems to be relevant. Equally in evidence are differences due to effect of social class of respondents, but it would appear from both surveys that even among those at the lower end of the social scale 70 per cent. of those in practices with appointment systems say they will usually attend by appointment in the future, and an even higher proportion expressed general favour with the idea of appointment systems at their doctor's surgery.

In short, substantial majorities, even among what might be regarded as possible 'problem' groups of patients, appeared to regard their doctors' existing appointment systems with favour and to be prepared to use them.

No doubt for those with and without the use of appointment systems at their doctors' surgery their answers were to some extent

Table 5.6. *Social class classification*

Social grades are as used in the I.P.A. National Readership Survey. The following table broadly defines the six social grades used. It should be noted, however, that the income ranges quoted are given only as indications and are not used in determining the social grade. The income figures relate to 1964.

Social grade	Social status	Head of household's	
		Occupation	Income likely to be
A	Upper middle class	Higher managerial, administrative or professional	£1,750 or over per annum
B	Middle class	Intermediate managerial, administrative or professional	£950–1,750 per annum
C1	Lower middle class	Supervisory or clerical, and junior managerial, administrative or professional	Under £950 per annum
C2	Skilled working class	Skilled manual workers	Between £12 and £20 per week
D	Working class	Semi- and unskilled manual workers	£6. 10s.–£12 per week
E	Those at lowest levels of Subsistence	State pensioners or widows (no other earner), casual or lowest-grade workers	Under £6. 10s. per week

expressions of contentment with the *status quo* and reactions against change respectively. One would expect this, especially in the case of the elderly. But it is not just this. Both Cartwright[1] and ourselves found that most people who were seen reasonably near their appointment time liked and used their doctors' appointment system whereas the converse was very much the case for people who usually waited a long time after this. Moreover, of the respondents without appointment systems (in the interview survey) those who had in the past attended a doctor with an appointment system were much more in favour of this scheme of organization. In this respect they closely resembled the people whose doctor did run an appointment system.

1. See Chapter 2, Reference 20.

Accordingly, it seems that an effective appointment system will cause patients to become favourably disposed towards it over and above any desire they may have to conform with their doctor's wishes in this respect.

The general impression among doctors using appointment systems in Chapter 3 that most of their patients like this method of organizing attendance at the surgery is certainly supported by the results of this chapter. It would seem fair to assume from these results that those contemplating introducing an appointment system may safely assume that the great majority of their patients will support an appointment system if it is efficiently run.

NOTE

1. The definitions of the social grades used in the interview survey are given in Table 5.6 (income ranges relate to 1964).

6 The Experimental Studies

Objectives

THE objects of this part of the study were to test various theories about appointment systems and to obtain detailed quantitative information on the effects of introducing one into a practice. For instance, it has been asserted in favour of appointment systems that the ratio of surgery consultations to home visits increases, (since people are more willing to come to the surgery rather than call the doctor), that a more even distribution of work becomes possible, that a smaller waiting-room is required and that patients wait a shorter time. It is virtually self-evident that some of these advantages ensue, and all that is needed is to measure the magnitude of the changes; others may or may not occur.

We were also concerned to investigate some suggested disadvantages of appointment systems, for example, that patients will not make or will not keep appointments and that they will be unpunctual. These matters and a number of others have been examined using the results of a number of 'experimental studies' described in this chapter. These studies do not cover the attitudes and opinions of doctors and patients, which have been dealt with in the three previous chapters.

Several practices participated in this part of the study, and in each records were collected relating to periods both with and without an appointment system. This procedure was designed to enable inferences to be drawn about the effect of the appointment system *per se*. Admittedly if other changes in practice organization took place simultaneously it could be argued that effects attributed to the appointment system were really due to these changes. This is obviously possible but where a particular effect was observed in all or most of these practices it seems reasonable to infer that the appointment system was responsible.

In theory an alternative approach would have been to make comparisons, using a similar system of recording, between practices with and without appointment systems. However, even with practices very carefully matched for size, type of area, etc., comparisons might very well have been vitiated by differences in the general methods of working between the two sets of practices.

The practices taking part

Various records, the scope and content of which are described in detail below, were collected by a small number of practices of varying types. Ideally one would have chosen a random sample of practices, persuaded the doctors to introduce an appointment system, and collected records both before and after this had been done. For obvious reasons this seemed impracticable, and the procedure adopted was to approach doctors who were planning to start an appointment system and ask if they would be prepared to collect the necessary records. These doctors came to our notice either through personal contacts or by means of a letter from us published in the *British Medical Journal* and the *Lancet*. In this we asked if doctors who would be willing to collect records or who already had them would get in touch with us.

Eventually we were able to collect records from eleven practices who were in process of introducing an appointment system; these records covered periods both before and after the appointment system was introduced. From a number of other practices we obtained less complete records relating to various aspects of the appointment system.

The practices collecting records showed a wide range of variation as regards partnership size, geographical location and various other characteristics. Details are set out in Table 6.1. In spite of the varied nature of these practices it may reasonably be questioned whether the data obtained from such a highly non-random, and to some extent self-selected, group of practices are relevant to general practice as a whole. There are really two points to be considered here: first, practices running an appointment system may well be atypical in other ways also, so that even if data were available from a random sample of such practices or even from all of them, the conclusions drawn would still not necessarily be a reliable guide as to what would happen if *all* practices were to adopt an appointment system; secondly, our group of practices may be thought to be not even typical of practices running

an appointment system, the only safeguard here being the variety of types of practice covered. It seems reasonable to suggest that, while a certain degree of caution is necessary in interpreting the results, in matters where all or nearly all the practices involved point to the same conclusion there is good reason to accept it.

Types of records collected

In eleven practices detailed information was obtained, before and after the appointment system was introduced, on the times at which patients arrived at the surgery and the times that each consultation started and finished. These times were recorded using a 'Chronostamp'. This consists of a rubber stamp in the form of a clock face together with hands geared to a clock mechanism. When stamped the current time is recorded. Each doctor and receptionist was provided with one of these. For periods during which these data were being collected each patient seen in the surgery was given a 'time slip' on which the times of arrival and start and finish of consultation were recorded. For periods during which these data were collected after the appointment system had started the appointment time, if any, of each patient was also recorded.

The eleven practices taking part in these studies, together with a few others, also collected information on the numbers of the patients seen in the surgery and at home and the length of each surgery session.

Each doctor participating recorded, both before and after the appointment system, the scheduled and actual length of each surgery session, numbers of patients seen with and without appointments, and numbers of patients seen at home. Full details of the data collected are given in Appendix VII. Both for the patients seen in the surgery and for those seen at home consultations were divided into those which were 'new' or patient-requested and those which were 'repeat' or doctor requested. This distinction, used frequently in the present study, is one which we believe is often relevant in studies of general practice since the number of patient requested consultations reflects the incidence of morbidity and patient attitudes whereas the number of doctor requested consultations is to some extent affected by the personal characteristics of the doctor.

Some care is needed in defining such terms as 'patient requested' and 'doctor requested'; the definitions we wished to adopt were set out on the reverse side of the forms on which the records were collected, and are reproduced in Appendix VI. In general the first con-

sultation for each spell of illness would be recorded as 'new' and all subsequent ones as 'repeat'.

The scheme of record collection

In practices which carried out the record collection in full each doctor collected the following information relating to patients seen at the surgery where the appointment system was introduced. (This was usually the main surgery of the practice.)

(*a*) Details of numbers of patients seen at home and in the surgery and length of surgery sessions were recorded before the start of the appointment system for a number of weeks, sometimes for one week in four rather than every week.

(*b*) Similar records were collected after the appointment system had been started, usually for one week in four over a period of some months.

(*c*) For one week just before the start of the appointment system times of arrival and the beginning and end of the consultation were recorded for each patient attending the surgery.

(*d*) This was repeated just after the appointment system had started, the appointment time, if any, also being recorded.

(*e*) A further week's collection of similar records was carried out some months later when the operation of the appointment system had had time to settle down.

The reasons for this method of study were two-fold; first, to obtain records at times as close to each other as possible but relating to periods with and without an appointment system and, secondly, to obtain similar records some months afterwards in order to assess changes over a longer period. Not all practices completed the whole of this scheme of record collection. In one case the practice was completely reorganized some months after the introduction of the appointment system so that records obtained after this would not have been comparable. In others not all of the partners were interested, or only part of the scheme of record collection was carried out. For these reasons the number of practices contributing to the statistics in the tables in this chapter and Appendix VI varies according to the data being considered.

Results

The results obtained from the practices participating in these studies are discussed and various summary tables presented in this chapter. Certain items of information are available from practices not included in the main study, and where appropriate these have been included in the tables. Certain more detailed or less central results will be found in Appendix VI which also explains the definitions employed in these studies, and problems in the interpretation of the data.

One particular problem which should be borne in mind in considering the results presented in this chapter is that of interpreting the changes observed to occur after the introduction of the appointment system. It is important to notice that very large variations in, for instance, the number of patients seen or the average length of a consultation occur both before and after the appointment system. Such variations are partly seasonal in nature but partly due simply to random variations. Thus unless a change occurs more or less consistently in every practice, or is too great to be attributed to the inherent variation, it is quite possible that it would have occurred in the ordinary course of events.

1. *Background information*

Table 6.1 gives information concerning the size, location, and type of each practice. These practices are identified throughout this report by means of letters, and in describing them we have tried to give as much useful information as we can without making it possible to identify them.

It should be noted that all the information in Table 6.1 relates to that part of the practice for which records were kept. In the case of a practice with one main surgery and a number of branch surgeries this would normally be the main surgery only. Practices B1 and B2 were parts of the same partnership but were virtually non-overlapping.

2. *General information on work-load*

Table 1 of Appendix VI shows, for each practice and for various periods before and after the start of the appointment system the number of patients seen each week in the surgery and at home. The omissions in this table are due to the fact that practices collected information for different lengths of time. In particular we were not usually able to obtain records for many weeks before the start of the appointment system since nearly all the practices concerned were within a short

Table 6.1 *Characteristics of practices in the experimental studies*

Practice	Number of doctors participating	Size of list[1]	Type of area	Estimated percentage of working class patients	Other changes introduced
A	3	8,400	Midlands city	50	Further part-time secretary
B1	5	?	Small town, Devon	?	None
B2	1	?	Branch of B1	?	None
C	1	2,050	Northern city	?60–70	Receptionist
D	2	3,500	Small town, Glos. (mainly rural)	50	None
E	3	5,200	Small town, Scotland (rural/urban)	?80	Nurse/Receptionist; rota system
F	1	2,100	Large village, Oxon. (urban)	50	None
G	3	8,500	Northern cathedral city	?40	Extra ancillary help
H	4	4,100	Industrial town, Kent	40	None
I	4	3,100	Midlands city	80+	None
J	4	?	Small town, Wilts.	?	None

1. This relates only to patients who would attend the premises at which the appointment system was being studied, and is not always the full list size for the practice.

time of starting one, or had already done so, when the record collection commenced.

It is not intended that any inferences about the effect of the appointment system should be drawn from Appendix VI, Table 1; the figures are merely intended to give some indication of the range in size of the practices covered, and of the extent to which changes, if any, following the appointment system can be attributed to seasonal or other fluctuations in the numbers of patients seen.

In this table and in Table 2 of Appendix VI it is particularly important to note the meaning of the term 'normal weeks' and the effect that this has on the interpretation of the figures. This is discussed in detail at the beginning of Appendix VI. Roughly speaking, 'normal' weeks were ones in which the number of surgery sessions was about the usual number for the practice at that time and for which no doctor did an abnormally large or small number. The fact that some figures are based on these weeks alone almost certainly results in an overestimate of the *average* work-load for the practice; thus for most of the

practices concerned the figures quoted in this report are not, and are not intended to be, a true indication of the work-load.

Table 1 of Appendix VI suggests that for some of the practices concerned there was a considerable decrease in the number of patients seen at the surgery following the introduction of the appointment system.

There are three possible explanations of this:

(*a*) That it was due simply to random fluctuations.

(*b*) That it was a seasonal effect.

(*c*) That it was in fact caused by the appointment system.

A detailed examination of the data suggests that (*a*) is often the explanation, since there is a good deal of week to week variation in these figures, and in some cases the results are based on only one or two weeks' records. In particular this is the case for pre-appointment system data from practices E and I, in both of which the results seem somewhat freakish. Most of the other apparent changes can be accounted for by the fact that a variation of 10 per cent. or more in the number of surgery attendances in successive weeks is quite common. It is, of course, still possible that the appointment system is having some effect on the number of attendances but, in view of these random fluctuations and the fact that sometimes an increase is observed and sometimes a decrease, it is not possible to establish a causal relationship from these data.

Table 2 of Appendix VI gives, for each practice, the average number of surgery hours worked per week, (for 'normal' weeks) and the ratio of actual to scheduled surgery hours, for periods before and after the introduction of the appointment system. It will be seen that no general picture emerges from these figues, and that very often the appointment system results in little change in either the number of hours worked or the ratio of actual to scheduled hours. This suggests (*a*) that the appointment system causes little, if any, change in actual work-load at the surgery and (*b*) that surgery sessions will still tend, on average, to overrun by the same amount. It is nevertheless possible that particular sessions can be made to end at the scheduled time when the doctor requires it.

3. *Surgery attendances and home visits*

A frequently used figure in statistics from general practice is the 'A/V ratio', or ratio of surgery attendances to home visits. This is of obvious

relevance to the present study, in that one might expect that an appointment system would encourage people to go to the surgery rather than asking the doctor to come to their home, and if this happened the ratio would increase. However, the A/V ratio probably means little in the present context unless attendances and visits are both divided

Table 6.2. *Ratio of patient-requested surgery attendances to patient-requested home visits*

		Before appointment system		After appointment system		
Practice	Doctor	5–16 weeks before	0–4 weeks before	0–4 weeks after	5–16 weeks after	17 or more weeks after
A	1	4·5	5·1	—	4·2	3·9
	2	2·2	2·4	—	2·6	2·1
	3	1·7	3·7	—	4·2	2·6
B1	4	—	1·9	1·3	1·7	1·4
	5	—	3·3	1·3	1·8	1·3
	6	—	1·1	1·1	1·0	1·1
	7	—	1·4	1·7	1·6	1·6
	8	—	0·8	0·9	1·2	2·7
B2	9	—	2·2	1·7	2·1	2·3
C	10	5·8	8·9	—	8·5	4·1
D	11	3·9	6·1	7·3	3·7	4·0
	12	5·5	5·8	11·4	4·2	5·8
E	13	—	3·2	3·9	3·6	4·0
	14	—	4·1	1·8	4·1	4·1
	15	—	3·6	2·7	4·2	3·2
F	16	2·3	3·4	—	2·8	—
G	17	—	2·0	—	1·7	—
	18	—	2·4	—	2·8	—
	19	—	2·1	—	1·8	—
H	20	—	1·2	1·3	1·6	4·8
	21	—	2·2	2·4	2·5	7·6
	22	—	1·5	1·7	1·2	5·7
	23	—	1·9	1·0	1·9	4·5
I[1]	24	—	3·8	10·4	—	7·6
	25	—	11·6	19·7	—	9·4
	26	—	2·6	1·6	—	2·5
	27	—	—	39·0	—	41·0

1. In practice I a large proportion of the home visiting was done by one doctor.

into 'new' and 'repeat'. The ratio of *new* attendances to *new* visits might then be expected to increase after the introduction of the appointment system if it is in fact true that patients are then more likely to come to the surgery rather than to ask for a home visit.

The numbers of consultations and home visits per week, the percentage of these which were new, and the surgery attendance/home visit ratios were computed for each doctor taking part in the experimental studies.

In Table 6.2 the A/V ratio for new consultations, i.e. the ratio of patient-requested surgery consultations to patient-requested home visits, is given for each doctor and for various periods before and after the introduction of the appointment system. No general pattern emerges from this table; thus from our results it does not appear to be true that patients will tend to come to the surgery rather than ask for a home visit as a result of the appointment system. In some cases the A/V ratio increased and in others it decreased; in any case, such changes differed very little, if at all, from those which occurred from month to month before the appointment system started or while it was running.

Practice H appears to be a special case, since, for each doctor, there is a substantial increase in the A/V ratio about nine months after the appointment system had started. This suggests that there was in this practice an increased willingness on the part of the patients to come to the surgery rather than ask for a home visit. However, as can be seen from Table 1 of Appendix VI these figures relate to September whereas the others relate to November, December, and January. The total number of surgery consultations remained relatively constant while the number of home visits dropped considerably. The detailed figures also show that while the percentage of patient-requested home visits decreased the percentage of patient-requested surgery consultations remained relatively constant. Thus it may well be that the true explanation of the increase in the A/V ratio for practice H is that it is simply due to seasonal variations in morbidity.

In measuring the degree of success of an appointment system and assessing patient co-operation the two most obvious quantitative measures are the proportion of patients actually making appointments and the proportion of 'defaulters', i.e. patients with appointments who fail to keep them.

4. *The proportion of patients making appointments*

There are two reasons for advocating a degree of caution in calculating and interpreting this figure. First, a substantial proportion of surgery attendances are in fact 'repeat consultations' i.e. are made at the request of the doctor; these consultations are arranged by the doctor himself and should therefore, in general, always be by appointment. In Table 4 of Appendix VI the percentage of attendances which are 'doctor requested' is given for doctors taking part in the experimental studies. It will be seen that this figure tends most often to lie between 40 and 50 per cent.; thus this proportion of attendances could be by appointment without any effort on the part of the patients.

In order to arrive at a better measure of patient co-operation the proportion of 'new' attendances which are by appointment has been computed. In considering this figure one encounters a second difficulty, namely the problem of determining whether a 'new' patient has in fact come by appointment in any real sense. For instance a patient

Table 6.3. *Percentage of surgery consultations by appointment (latest period for which figures were available for each practice)*

Practice	Months after start of appointment system	Percentage of consultations by appointment	Percentage of 'new' consultations by appointment
A	9	95	91
B1	4	76	60[1]
B2	4	60	45[1]
C	8	86	80
D	7	89	86
E	4	89	81[1]
F	1	77	69
G	2	98	96
H	9	75	62[1]
I	12	82	68
J	3	95	92
L	10	68	47
N	20	87	78

1. Denotes practices in which appointments made during a surgery session for that same session were *not* counted as coming by appointment. (In the case of practice E patients who *telephoned* during the session were counted as having made an appointment.) In practices which are not marked with a superscript figure one either all such patients were counted as having come by appointment or it is not known what was done.

arriving half-way through a surgery session and given an appointment for a later time during that session should, arguably, not be counted as having made an appointment (for the purposes of this study). In collecting the records the definition we wished to adopt was as follows: 'Appointments made during a surgery session for that same surgery session should not be counted as appointments for the purposes of this study.' It appears, however, that not all practices adhered to this. Practices B1, B2, E, and H claim to have followed the above definition. A, C, D, F, I, and J did not, while for the remainder we do not know.

Table 6.3 shows, for the latest period available for each practice the percentage of surgery consultations which are by appointment, (*a*) for all patients, (*b*) for new patients only. This table gives good evidence of patient co-operation in the appointment system; the proportion of 'new' patients recorded as coming by appointment seems to depend to a considerable extent on whether or not patients making an appointment for a particular surgery session during that same session are included or not. This would suggest that a substantial proportion of patients who were regarded as coming by appointment did in fact make appointments during the session at which they wished to be seen. However, provided that appointment times are in fact available for such patients this will not cause any disruption of the system.

Table 6.4. *Percentage of appointments for which patients failed to arrive*

Practice	0–4 weeks after appointment system	5–16 weeks after appointment system	17 or more weeks after appointment system
A	—	3	4
B1	4	3	4
B2	1	5	2
C	—	7	6
E	2	1	2
F	—	0	—
G	—	4	—
H	5	4	5
I	5	—	0
L	3	3	6
N	6	7	6

5. Appointments not kept

A further measure of patient co-operation is the proportion of patients who fail to keep their appointments. Table 6.4 shows that this figure usually varies between about 0 and 7 per cent. with an average of about 4 per cent.[1] For any one practice it does not change much with the length of time the appointment system has been in operation. Again, the results are very encouraging, though it seems possible that in one or two practices the way in which the figures were collected leads to an underestimate of the number of appointments which were not kept.

6. Patient punctuality

Table 6.5 gives, for each practice and for each week that data on appointment and arrival times were collected, the percentage of patients who were (*a*) late, (*b*) 5 minutes or more late.

It should be noted that the amount of unpunctuality will tend to be overestimated in this table, first because patients arriving exactly on time are counted among the late-comers, and secondly because the

Table 6.5. *Patient punctuality*

Practice	Percentage of latecomers (including those exactly on time)		Percentage coming 5 min. late or more	
	Just after appointment system started	Several months after appointment system started	Just after appointment system started	Several months after appointment system started
A	29	28	10	8
B1	38	—	13	—
B2	39	—	10	—
C	32	45	13	21
D	39	42	10	9
E	35	38	7	8
F	—	49	—	16
G	24	22	8	6
H	38	34	15	10
I	—	34	—	11
J	39	—	17	—

1. One practice with very much worse results and a second where the data were unreliable have been excluded from these figures.

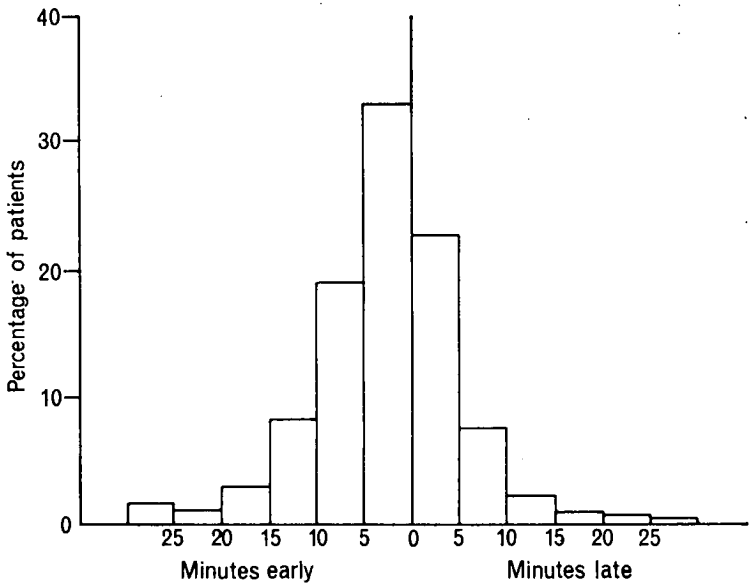


Figure 6.1. *Patient punctuality for all practices combined*

time of arrival recorded was in fact the time the patient was seen by the receptionist which might be several minutes after the true arrival time. The percentage of patients five minutes late or more is possibly more relevant as a measure of unpunctuality, since those who were less late than this could reasonably be expected not to upset the appointment system very much, if at all. Detailed results are given in Appendix VI, Table 5. The last line of this table gives the results for all practices and all weeks combined, but this is not in any real sense an 'average' result since the data were not collected from a representative sample of practices. The over-all results for patient punctuality are presented in graphical form in Fig. 6.1. This summarizes the results from eleven practices, in six of which the data were obtained for all patients seen during two separate periods of a week each, one just after the appointment system was introduced and one several months afterwards. (In each of the remaining five data were available for only one of these weeks.) It will be seen that 56 per cent. are between 5 minutes early and 4 minutes late while 34 per cent. were more than 5 minutes early and 10 per cent. 5 or more minutes late.

The figures in Table 6.5 may be summarized by saying that the proportion of patients who were late varied a good deal from practice

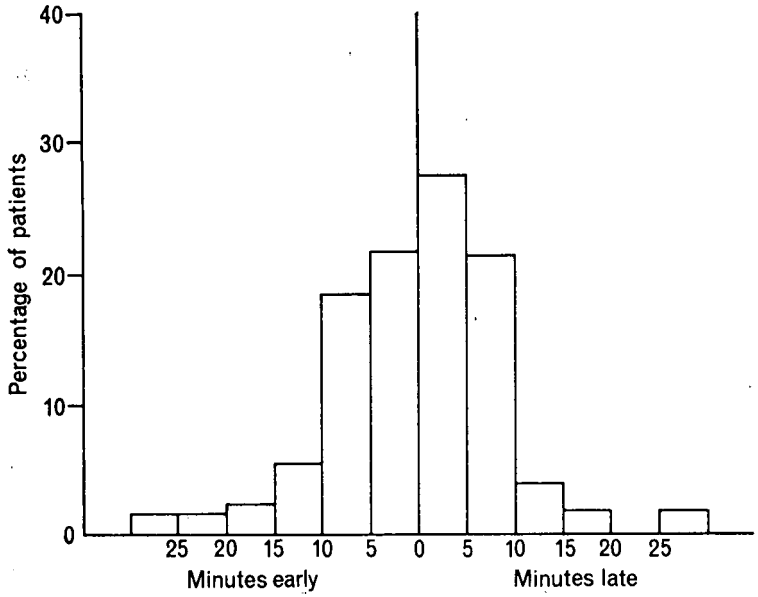


Figure 6.2. *Patient punctuality, practice C, 34 weeks after start of appointment system. (Worst results obtained in study)*

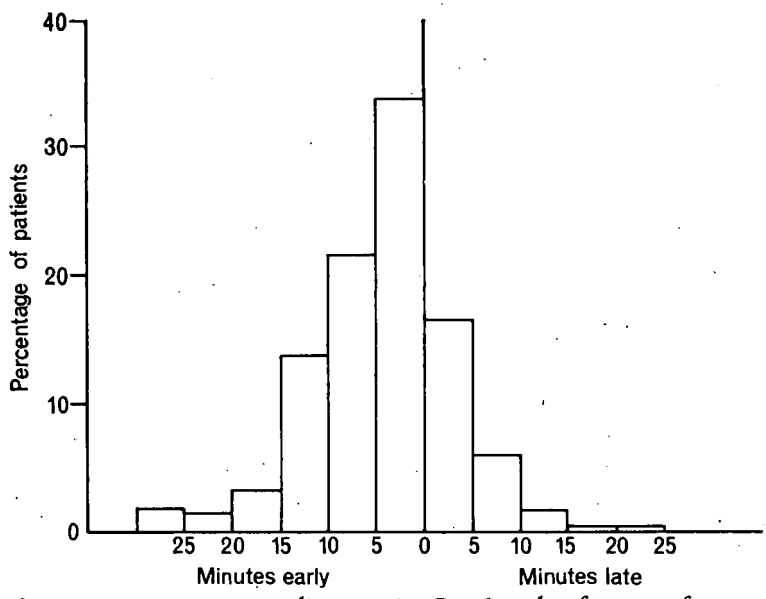


Figure 6.3. *Patient punctuality, practice G, 46 weeks after start of appointment system. (Best results obtained in study)*

to practice but that in all cases only about a third of the late-comers were as much as 5 minutes late. Further, if those who are exactly on time are excluded from the count of unpunctual patients the proportion who are late turns out to vary between about one-fifth and one-third.

Figs. 6.2 and 6.3 give detailed punctuality figures for 1 week from two individual practices. These are respectively the best and worst of the results obtained. It will be noticed that in each case considerably less than half of the unpunctual patients were as much as 5 minutes late.

The remaining sections of this chapter are devoted to a discussion of waiting-times, numbers of patients in the waiting-room and length of consultations. These results are largely based on data collected from each practice for two or three periods of a week each. These weeks were usually just before, just after and some months after the appointment system started. In attempting to determine whether any changes occurring between these periods can be attributed to the appointment system it is necessary to ask whether there was any large increase or decrease in the number of patients seen. As can be seen from Appendix VI, Table 3 there is no consistent increase or decrease, and only in practices D and E was there a substantial decrease. It is therefore reasonable to infer that changes in waiting-times, etc., are a result of the appointment system.

It is worth remarking also that in general the figures in Table 3 of Appendix VI (which relate to the single weeks when detailed information was collected on times of arrival, etc.) follow fairly closely the corresponding figures in Table 1 of Appendix VI which relate to average attendances over longer periods.

7. *Patient waiting-times*

Perhaps the most obvious and general consequence of an appointment system is the reduction in the length of time patients have to wait. Fig. 6.4 shows, for eleven practices, the average waiting-time just before and just after the appointment system was introduced. In every case there was a striking decrease in waiting-times; the average was approximately halved in most practices. This cannot be accounted for by a reduction in the number of patients coming to the surgery, since, as has already been explained, such a reduction did not in general occur.

An alternative, and equally informative, way of looking at waiting-times is to consider the proportion of patients waiting longer than a given time, say 10 minutes or half an hour. Table 6 of Appendix VI gives, for each practice, both before and during the appointment system the percentages of patients waiting longer than 15, 30, and 60 minutes. In all practices the appointment system leads to a reduction in each of these percentages; in most cases this reduction is very substantial.

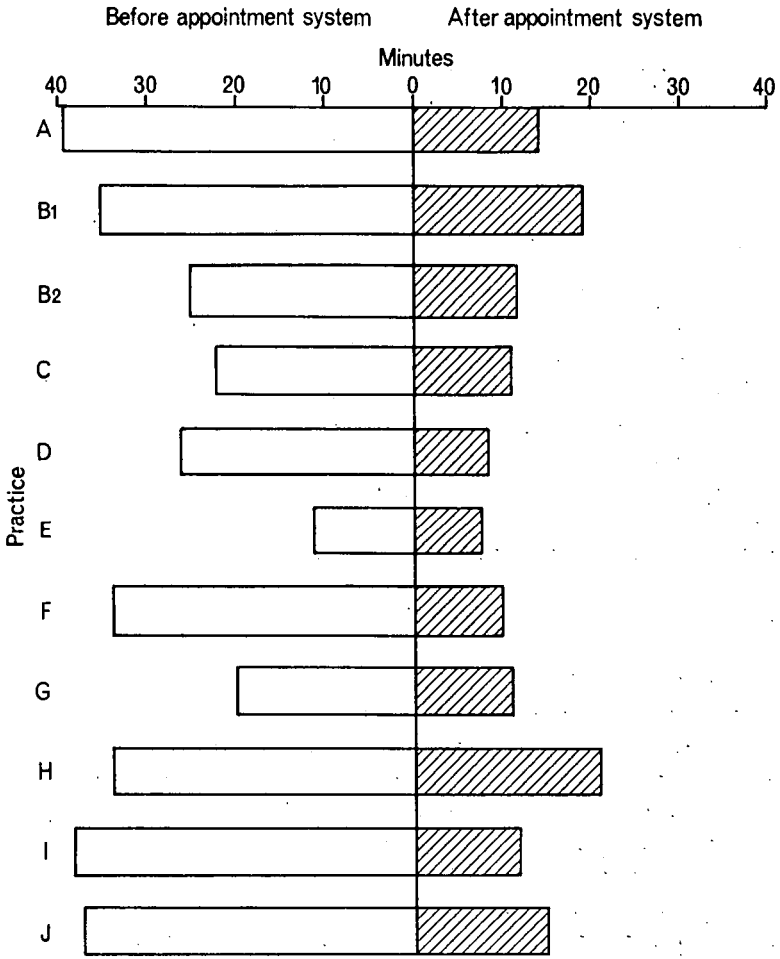


Figure 6.4. *Average waiting times in eleven practices*

The percentage of patients waiting longer than half an hour, before and after the appointment system, is shown for each practice separately in Fig. 6.5. The results here are very impressive. Originally (in every practice except one), at least a quarter of the patients, and often many more, waited longer than half an hour; after the introduction of the appointment system the proportion waiting as long as this often became virtually negligible and in only one practice was it as high as 25 minutes.

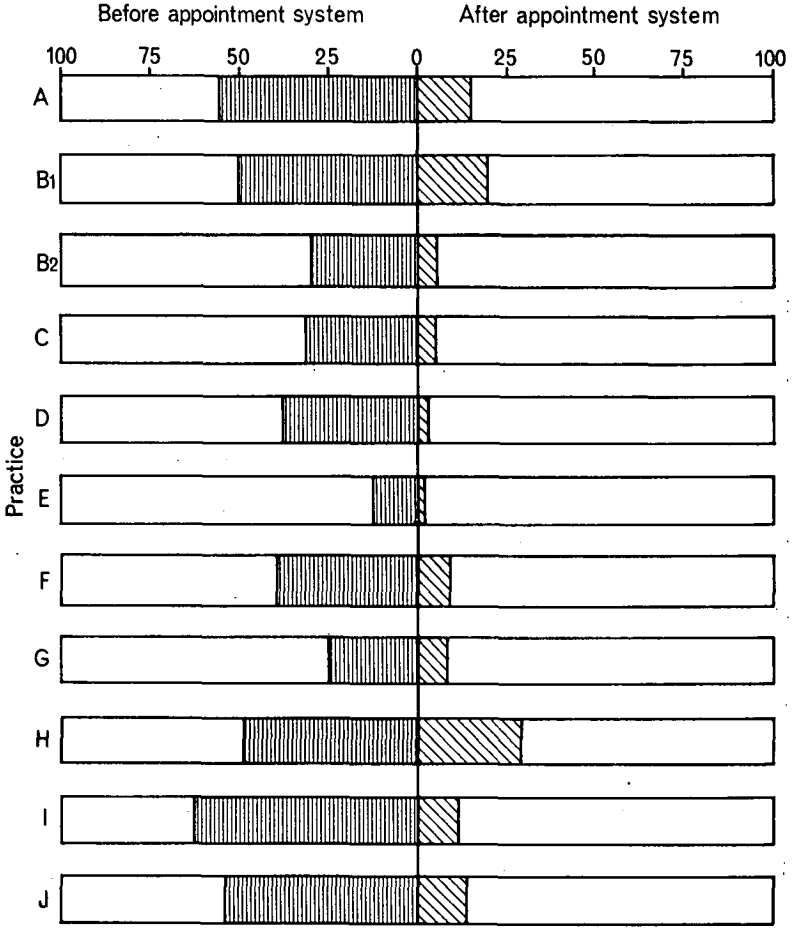


Figure 6.5. *Percentage of patients waiting 30 minutes or more*

8. *Number of patients in waiting-room*

Another aspect of the reduction in waiting-times due to an appointment system is the decrease in the number of patients in the waiting-room.

Using the data collected in the experimental studies it is possible to calculate the numbers of patients waiting at any time during each surgery session in the weeks for which details of arrival and consultation times were collected. This has been done for each practice and some of the results are summarized in Table 6.6. This gives, for each practice just before and just after the start of the appointment system, the maximum and average number waiting 30 minutes after the start of a session. (In order to make these figures meaningful it is necessary of course to consider for any particular practice only those sessions during which some fixed number of doctors was consulting.)

Table 7 of Appendix VI gives for the same period similar calculations for various times during the surgery sessions.

Fig. 6.6A and B show for one practice, sessions with three doctors consulting simultaneously, the maximum and average number of patients present at five-minute intervals after the start of the session.

Table 6.6 *Number of patients in waiting-room*

Practice	No. of doctors consulting	Max. observed		Av. 30 min. after start of surgery	
		Pre-appnt. system	Post-appnt. system[1]	Pre-appnt. system	Post-appnt. system[1]
A	2	24	13	11·8	4·4
B1	3	21	14	9·6	5·6
B2	1	8	6	3·4	1·9
C	1	11	4	3·4	1·2
D	2	9	4	5·3	2·2
E	2	17	7	5·2	2·3
F	1	14	4	3·9	1·1
G	2	19	10	7·1	2·8
H	2	14	7	5·3	4·8
	1	10	6	4·2	2·4
I	2	15	12	5·0	2·6
J	3	16	10	13·0	5·3

1. This refers to the *first* week in which time-slips were collected during the operation of the appointment system, usually a few weeks after it was started.

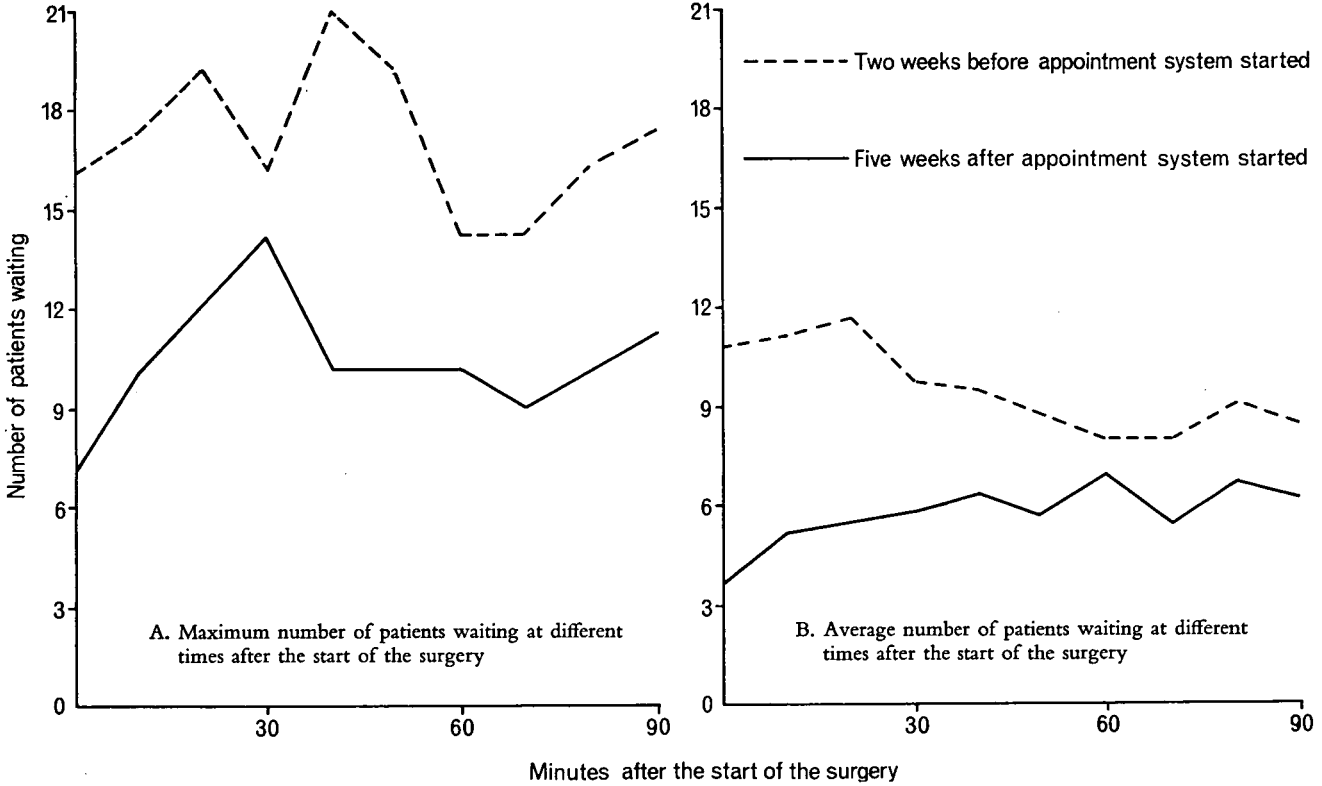


Figure 6.6. *Number of patients in waiting-room for consulting sessions during periods of a week shortly before and shortly after the introduction of an appointment system. (Results for Practice B1, three doctors consulting simultaneously)*

It is important to note that in these tables and figures the data refer to actual patients only; the total number of people in the waiting-room will also include relatives and friends.

The tables and figures show that one can always expect a substantial decrease in the numbers of people waiting at any given time. These results cannot be attributed to a decrease in the number of patients attending the surgery. It is perhaps worth remarking that the maximum number to be expected will, in general, be very different from the average and that it is the former which has to be taken into account when planning waiting accommodation.

However, it is not desirable, even if it were possible, to provide waiting accommodation which will *always* be sufficient; in assessing the waiting-space and the number of chairs needed a possible formulation of the requirements would be to ask how many chairs would be adequate for say 95 per cent. (or 90, or 98 per cent.) of the time. Here the assumption is that we are prepared to accept that one or more patients will be standing for 5 per cent. (or 10, or 2 per cent.) of the time. It is not possible to solve this problem with the data presented here, and in any case the answer would depend on the size of the practice list, the level of morbidity, the doctors' consulting times, and the efficiency of the system of booking appointments. However, an adequate rule of thumb seems to be that for each doctor consulting *five* chairs should be allowed for patients. Additional chairs will be necessary for relatives and friends and some estimate will need to be made of the number likely to be required.

In calculating the number of chairs required by patients it is necessary to ascertain first the maximum number of doctors who will ever be consulting simultaneously. This number multiplied by five is the required number. In fact it is likely that if the maximum number of doctors consulting simultaneously is greater than two this rule will result in too many chairs being provided; this question is discussed in more detail in Chapter 7.

9. *Consulting time per patient*

In this section we consider the question of whether the appointment system has any effect on the length of a consultation. Two alternative methods of estimating the average consulting time per patient were used.

The first method consisted in timing, for each doctor participating in the experimental studies, the length of each individual surgery

consultation during a period of a week and then calculating the average. This was done for one week just before the appointment system and (usually) one week just after it started and a further one several months later.

The second estimate was obtained by measuring, for each doctor, the total length of all surgery sessions for one or more weeks at various stages before and after the introduction of the appointment system and dividing this by the number of patients seen.

The latter method will usually give an overestimate of the average length of a consultation since no account is taken of gaps in the surgery session during which no patients are with the doctor. On the other hand, the first method takes into account only the time when each patient was actually with the doctor, whereas it is arguable that time taken in completing notes and writing letters should also be included as part of the consultation time.

The results based on these two methods are set out in Appendix VI, Tables 8 and 9 respectively. The average consulting times from Table 8 are set out in graphical form in Fig. 6.7.

Examination of this figure or Table 8 of Appendix VI suggests that there is no general tendency for the length of a consultation either to increase or to decrease as a result of the appointment system, though an increase occurs rather more often than a decrease. (Most of the standard errors for these estimates are of the order of half a minute or less.)

On the other hand Table 9 of Appendix VI suggests quite strongly that there tends to be an increase in the average length of a consultation. However, it seems very possible that this arises from the different method of obtaining the data for this table. As was seen in connexion with Table 1 of Appendix VI there tended, in several practices, to be fewer patients coming to the surgery after the appointment system started, though this is probably attributable to random fluctuations and seasonal effects. A doctor will to some extent tend to remain at his surgery for a fixed length of time irrespective of the number of patients to be seen (cf. App.VI.2). These two factors are sufficient to explain the apparent increases in the average length of consultation in Table 9 of Appendix VI. In some practices there may indeed have been real increases as a result of the appointment system, but Table 8 of Appendix VI suggests that this is not usually the case.

One possible effect of an appointment system is that, whatever happens to the *average* consultation time, the individual consultations

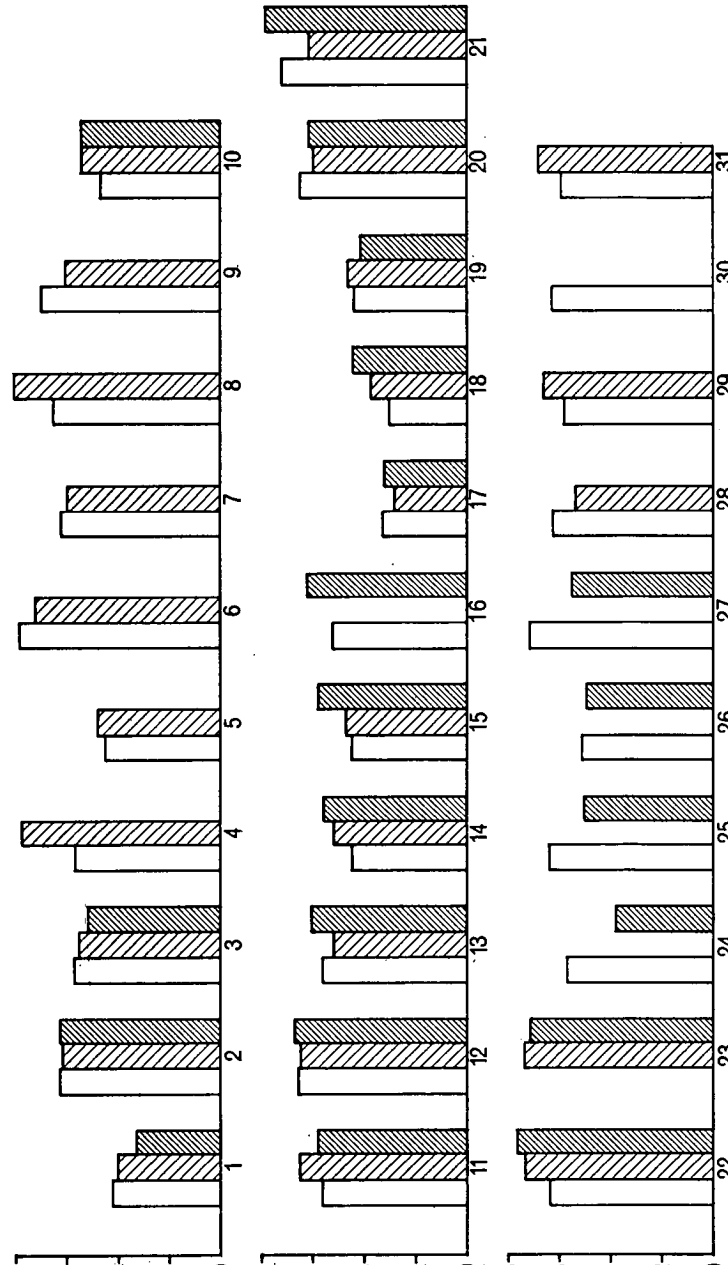


Figure 6.7. *Average length of consultation for thirty-one doctors before and after the introduction of an appointment system*

may become more standardized in length since the doctor will be attempting to keep to a schedule and will tend to make each of his consultations equal in length to the interval between appointments, i.e. the variability in lengths of consultation may decrease. In order to investigate this possibility it is necessary to have some method of measuring such variability. The most commonly used statistical measure of variation is the *standard deviation*; this has been computed for each doctor and for each week that the necessary data are available. The results are given in Table 8 of Appendix VI. As can be seen from this table, there is no general tendency for the standard deviation to decrease (or to increase) when consultations are by appointment. The conclusion to be drawn from this is that, as one would have hoped, the appointment system does not impose on the doctor a standardized and inflexible method of working.

It is, of course, possible to some extent to schedule appointments at variable intervals to take into account the varying needs of patients, but it is worth emphasizing that even without this the consultation time can be varied in accordance with what is clinically necessary without upsetting the appointment system. Methods of allowing for variability in the length of consultations when designing an appointment system are discussed in the next chapter.

7 Conclusions and Recommendations

In previous chapters we have considered the various phases of the study in turn. In the first part of this chapter the results are summarized under three headings:

The doctor's viewpoint.

The patient's viewpoint.

Effect on various aspects of work-load.

The second part consists of a number of recommendations based mainly on our own results but partly on other work.

The doctor's viewpoint

The advantages and disadvantages from the point of view of the doctor were investigated partly by means of the questionnaire surveys and partly through the experimental studies. The latter were concerned with quantitative measurements and are discussed later in this chapter. Paragraphs 1–4 summarize the results set out in Chapters 3 and 4.

1. *General attitude*

Nearly all doctors running full appointment systems were pleased with them. This was not quite so true of doctors running partial or optional systems. For details see Chapter 3. It is important to remember that all these percentages are based on the numbers of doctors actually running appointment systems. If those who have started and then ceased to run an appointment system are taken into account (and these may amount to more than 10 per cent. of the total), the proportion of doctors who start and continue to run a satisfactory appointment system is correspondingly reduced. A similar remark applies to some of the other figures quoted in this chapter.

2. *Difficulties in introducing and running an appointment system*

The costs arising from an appointment system are dealt with below; here we are concerned largely with questions of patient co-operation.

Eighty-five per cent. of practices said that the introduction of the appointment system was easy; surprisingly it appeared that there was more likely to be difficulty in middle-class practices than in working-class ones.

It seems that, even though patients may misunderstand the system initially and perhaps be unco-operative, these problems often tend to disappear with the passage of time. The survey results suggest that there is very little unpunctuality on the part of patients. However, the results from the experimental studies are in conflict with this, though the degree of unpunctuality would not usually be sufficient to cause serious disruption to the functioning of the appointment system. The apparent discrepancy between the two sources of information possibly arises from the fact that the doctor only notices unpunctuality in cases where it *does* disrupt the appointment schedule, again suggesting that this does not often happen.

In view of the above remarks it is of interest that in two-thirds of nineteen unsuccessful appointment systems from which the relevant information was available the system had been withdrawn within a year of starting. Also, a large proportion of all the unsuccessful appointment systems gave patient attitudes as a reason (often the main one) for the withdrawal.

It was also found that when doctors without appointment systems were questioned there was a tendency to expect greater difficulty than is actually encountered in practice.

3. *Effect on the quality of work and doctor–patient relationships*

Hardly any of the doctors questioned thought that the appointment system had led to a deterioration in the quality of work in their practice; in those running full appointment systems as many as 70 per cent. thought there had been an improvement. Although a few doctors thought that the strain had increased, a very much larger number thought the opposite.

About half the doctors questioned thought that doctor–patient relationships had improved as a result of the appointment system; nearly all the remainder thought there had been no change, only a negligible proportion thought they had deteriorated. The likelihood of improvement in doctor–patient relationships appeared to be

associated with the length of time the appointment system had been running.

Doctors with full appointment systems were questioned as to whether they thought a barrier had been created or removed as a result. Rather more doctors (20 per cent.) thought that from the patient's point of view a barrier had been removed than thought that one had been created (15 per cent.). Few doctors thought that a barrier had been created as far as the doctor was concerned and an appreciable number that one had been removed.

It is worth reiterating that the advantages gained often depend very much on whether a full appointment system is in operation; some of the questions are, of course, scarcely relevant where this is not the case.

4. *Staff and costs*

Difficulties associated with ancillary staff or costs were among the most important, after patient attitudes, of the reasons given for discontinuing appointment systems. The possibility of staff being overworked was the most frequent of the reasons given for not introducing an appointment system by those of the sample of doctors who had considered and decided against it.

The actual experience, as regards staff, and the estimated costs, for doctors running appointment systems have been set out in detail in Chapter 3.

As regards costs, very rough average estimates, for a full appointment system, and without taking tax relief into account, are as follows:

(*a*) *Initial costs*

Circularizing patients—£20–25 per doctor.[1]

Installing additional telephone equipment (perhaps between a quarter and a third of practices do this)—about £30–45.

(*b*) *Running costs per year*

Staff: single-handed practice about £200–300, others about £120 per doctor.

Stationery and postage: £8–10 per doctor for those in partnerships, £20 or more for single-handed practice.

Telephone:[2] £40–60 per year for practices stating any cost; more for large practices.

1. Executive Councils will now meet this expense.

2. It seems possible that some practices included in the figure the cost of staff manning the telephone. This would tend to inflate the over-all average.

The question of staff costs is obviously an important one and is a major factor in determining whether an appointment system is introduced. Doctors without an appointment system were asked whether their decision on whether or not to have one would be influenced by the possibility, which was at that time under consideration, of the Ministry of Health reimbursing part of the cost of ancillary staff. Although a considerable number, 40 per cent., of the doctors who thought appointment systems generally desirable said they would be likely to start one in these circumstances there is still a large number of this group who would not. An even larger number of those not generally in favour would not be swayed by financial considerations alone.

The patient's viewpoint

The views of patients were assessed both directly, by means of the two surveys described in Chapter 5, and indirectly by asking doctors in the survey to assess patients' reactions. Each of these methods suggested that a considerable majority of patients was in favour of appointment systems. The main results are summarized below.

1. *The surveys among patients*

In general a large majority of patients was in favour, this seemed to be true for all or almost all types of patient. Perhaps the most notable results were, first, that patients who have experienced an appointment system are more likely to be in favour and, secondly, that mothers with young children are very strongly in favour.

These results are in striking contrast to the predictions of doctors who had considered and rejected an appointment system, 49 per cent. of whom feared that patients would dislike having to make appointments.

Other points which emerged from the patient surveys were that some patients misunderstood the system, i.e. thought that they would have to know in advance when they were going to be ill and also that at least a few feared that general practice would be similar to hospitals as regards the length of time patients had to wait.

2. *Patient reactions as assessed by the doctor*

The extent to which the doctor is able accurately to assess patient reactions is, of course, difficult to judge. It has often been remarked that he is to some extent protected from any less favourable effects of

the appointment system by the receptionist, and it may well be that she is in a better position to gauge patients' views than he is. Thus it may be argued that little reliance should be placed on the doctor's views on the patients' attitudes and opinions. However we did ask doctors about this. About 90 per cent. of those running a full appointment system thought that most of their patients liked it. The figures for other types of appointment system and for doctors in rural areas were rather lower.

3. *Patient waiting-times*

From the patient's point of view the most obviously attractive feature of an appointment system is the reduction in waiting-times. The quantitative effects have been set out in Chapter 6 where it was shown that average waiting-time was reduced by about 50 per cent. at each of eleven practices studied. The second notable feature of this reduction in waiting-time was that the number of patients waiting more than half an hour was greatly reduced in all cases and in several became very small indeed.

The survey results showed that virtually all doctors running full appointment systems thought that there had been a reduction in patient waiting-times. In this connexion it is of interest that about a quarter of the doctors who had considered introducing an appointment system thought that most of their patients waited for a longer time than the doctor himself considered was reasonable (the definition of 'a reasonable time' varied for these doctors between 10 and 30 minutes). Several of these doctors were in fact about to start an appointment system.

Effects on various aspects of work-load

The quantitative effect of an appointment system on the work of a practice has been described in detail in Chapter 6; the postal surveys among doctors also contained questions on this.

The components of the work-load which one might expect to be affected by an appointment system are the number of surgery consultations, particularly trivial ones, the number of home visits, the length and variability of consulting times, and the length of surgery sessions. The proportion of patients making and keeping appointments may also have some effect on the work-load, particularly for the receptionist.

These possibilities are considered in paragraphs 1–5 below. After this some aspects of the effect on a single day's work are discussed.

1. *The number of surgery consultations*

The records kept by the practices in our experimental studies included a count of the number of surgery consultations over a period before and after the appointment system. These figures are affected by considerable random fluctuations as well as seasonal influences, and detailed data together with a fairly sophisticated analysis would be necessary to detect any effect of the appointment system unless it were a very large one. Examination of Table 1 of Appendix VI does not suggest that there is any consistent change in the number of surgery consultations.

We also tried to obtain some information on this problem by asking doctors whether there had been any change in the frequency of seeking medical care (*a*) by patients with trivial complaints and (*b*) by patients with non-trivial complaints. In the case of (*a*) about two-thirds of the doctors with full appointment systems thought there had been no effect while about a quarter thought there had been a decrease in the number of such patients. For (*b*) most doctors with full appointment systems thought there had been little effect, though about a quarter thought that such patients sought treatment *more* readily.

2. *Home visits*

As explained in Chapter 6 the best method of studying any possible change in the number of home visits seems to be to examine the ratio of 'new' surgery consultations to 'new' home visits. Evidence from the experimental studies suggests that in most cases the appointment system does not lead to any change in the proportion of patients asking for a home visit rather than a surgery consultation. Nor, as far as can be ascertained, is there any change in the actual number of home visits, though our data is not really adequate for an investigation of this point.

A question about this was also put to the sample of doctors running appointment systems. In the case of practices where most new attendances were by appointment over a third of the doctors thought that the number of home visits requested by patients had decreased; for other practices only half as many thought this, i.e. the majority of these thought that the appointment system had had no effect on home visits.

3. *Length and variability of consulting times*

As indicated in Chapter 6 the appointment system appears to have no general effect on the average length of a consultation, though there is some suggestion that there may sometimes be a slight increase. Nor does there seem to be any change in the amount of variability in length of consultation for a given doctor. This implies that the appointment system is not so restrictive as one might have thought and that doctors do not tend to work according to the clock in order to keep to schedule.

4. *Length of surgery sessions*

Somewhat surprisingly the surgery sessions appear to be of the same length and, on average, to overrun to the same extent whether or not an appointment system is in existence (though the data are perhaps inadequate). This is not inconsistent with the possibility that more control is obtained over *individual* surgery sessions where the doctor has some special reason for wishing to finish on time.

5. *Numbers of patients coming by appointment*

Evidence on the numbers of patients making and keeping appointments is available both from the experimental studies and from the questionnaire surveys.

The experimental studies suggest that it will usually be possible to get 80–95 per cent. of all patients coming by appointment, and 65–90 per cent. of 'new' patients doing so (though these figures become rather lower if patients making an appointment at a given surgery session to be seen *during* that same session are excluded from the category of those coming by appointment).

The survey results (for full appointment systems, which are the only ones where the question is relevant) are largely in agreement with this. Nearly three-quarters of the practices said that most (more than 60 per cent.) attendances were by appointment and slightly less said that most new attendances were.

The effects of the appointment system on one day's work

In this section we give very briefly an indication of the *average* effect of an appointment system on a typical day's work for a single doctor.

It would appear that generally there will be little or no effect on the number of surgery consultations, though there *may* be a drop in home visits. Suppose that on average about 30 patients are seen in the surgery

per day. (There are of course immense variations in this and all subsequent figures (*a*) as between doctors, (*b*) from one day to the next, and (*c*) seasonally.) Of these 30 patients about 18 will be new consultations and 12 repeats. Of the 18 new consultations perhaps about 70 per cent. will make appointments—say 13. About 9 will do so by telephone. All of the 12 repeats should, of course, be by appointment. Thus there will be a total of 25 appointments made. In addition perhaps 1 or 2 patients will make appointments and fail to keep them. About 5 other patients will arrive without an appointment. Twelve patients will need to see the receptionist to make an appointment as they leave.

Summarizing these figures from the point of view of patient contacts (*a*) with the doctor and (*b*) with the receptionist the picture is as follows:

(*a*) Each day the doctor sees 18 new patients and 12 repeats. In all 25 of these have appointments.

(*b*) Ten patients telephone the receptionist each day to make appointments and sixteen call at the desk. One or two fail to keep their appointments.

The figures given above will, of course, be subject to very wide variation. The object in giving them is not to make predictions with any degree of exactitude but to give some idea of the amount of work falling on the receptionist and the pressure on the telephone.

Recommendations

Although it may be obvious from this report that the authors are, in general, in favour of appointment systems our object has been not so much to lay down specific recommendations as to set out the facts necessary to enable doctors to take the best decision for their own practices. In the remaining paragraphs we set out some of the factors to be borne in mind, and make a number of suggestions as to how an appointment system may be instituted and organized once it has been decided to have one.

1. *Size and type of practice*

It appears to be possible to run appointment systems in virtually any type of practice. It is difficult to lay down any general rules as to the size of practice for which they are worth while. But with an average

level of morbidity there is little to be gained where the practice size is less than 1,500. On the other hand, it is not to be inferred from this that the same is true in partnership practices where the *average list per doctor* is less than 1,500; in such cases we would say that an appointment system may well be worth having.

2. *Designing the appointment system*

The main problem in designing the appointment system is to ensure that the rate at which patients arrive to see the doctor is approximately equal to the rate at which the doctor works. (In a partnership practice this requirement has to be met separately for each doctor, allowing for the fact that their individual rates of working may differ.) In order to schedule appointments at the correct rate it is necessary before instituting the appointment system to obtain estimates for the average length of a consultation for each doctor in the practice. This should be done by measuring the length of each surgery consultation for a *minimum* of one complete week and preferably for two or more complete weeks. (It is not necessary that this should be during the same weeks for all doctors.) At least 100 consultations should be timed for each doctor.

Various factors may influence the rate at which a doctor works; in particular variations in the work-load may lead to increases or decreases in this rate. The appointment system may cease to function satisfactorily if there is a change in the average length of a consultation; methods of dealing with this situation are discussed in paragraph 7 on assessing the appointment system.

In computing the average consulting time all patients who would be expected to see the doctor by appointment should be included. Thus one might exclude patients who visit the surgery simply for a standard repeat prescription which could be made out by the receptionist and signed by the doctor.

In setting up the appointment system the average time allowed for each patient will be this average consulting time, but one possible modification is to set aside a different amount of time for patients in certain special categories, for example, perhaps, those coming for ear-syringeing. For this one could either make a special estimate for such categories of patient or simply guess that they require say twice the average time. This, and other relevant matters are discussed in the *Medical World* handbook on appointment systems.[1]

1. Cf. p. 12.

Leaving aside such modifications the obvious method of scheduling appointments is to arrange for the first patient to arrive at the same time as the doctor and for subsequent appointments to be booked at intervals corresponding to the average consulting time (though patients should be asked to come at times such as 9.05, 9.10, 9.20, etc., rather than, say, 9.07, 9.14, 9.21, etc.). This method has the disadvantage that the doctor may have to wait for patients when a particular consultation is short or when a patient is late. Thus it is probably better to use other methods which overcome this difficulty while still preserving the essential requirement that the average arrival rate of patients corresponds to the doctor's average rate of working.

There are two possible methods of scheduling appointments so as to keep down patient waiting-time without an undue increase in the amount of time the doctor waits for patients. The first of these is to have *small* block bookings such that the average arrival rate of patients for each doctor is equal to the doctor's average rate of working. If, for instance, the average length of a consultation is 7 minutes, giving a rate of working of about 9 patients per hour, then it would be reasonable to book 3 patients at the beginning of the surgery, 3 20 minutes later, and so on. The second method consists in booking a small number of appointments, say 3, for the time the surgery is due to start and arranging for subsequent patients to arrive at a rate equal to the doctor's rate of work. In the example quoted above, with an average consulting time of 7 minutes, a surgery starting at 9.00 a.m. might have bookings for 3 patients at 9.00 a.m., then 1 each at 9.05, 9.15, 9.20, 9.30, and so on.

Each of these methods goes some way towards ensuring that the doctor does not have to wait for patients to arrive; this is achieved by creating a small 'pool' of patients and leads to a slight increase in patient waiting-time as compared with the first method suggested. The first method will be acceptable to those who do not mind filling in the 'idle' time with letter-writing, etc.

One further point is that some allowance should be made for patients arriving without an appointment. Whichever system of scheduling appointments is used this can be done in two ways. Either patients can be booked to come at a rate slightly less than the doctor's rate of working (e.g., seven per hour instead of eight per hour) or, perhaps better, occasional gaps can be left in the appointment book. This is discussed at greater length in paragraph 5.

Table 7.1 gives examples, based on the above suggestions, of possible

methods of booking appointments. Further examples will be found in the *Medical World* handbook.

It is worth repeating that if block bookings are used only a small number of patients should be booked for any one doctor at any time. Three is perhaps the best number. Similarly a pool of patients at the start of the surgery should not consist of more than three patients. If two or more doctors are consulting simultaneously the block bookings should be staggered so as to smooth out the work-load for the receptionist.

Finally it should be emphasized that these remarks on the design of the appointment system are based on the assumption that the doctor

Table 7.1. *Examples of bookings for appointment systems*

(i) Average consulting time 5 minutes; 90-minute surgery; assuming 15 patients with appointments, 3 without.

A. Appointments booked at intervals approximately equal to average consulting time.
B. Small block bookings.
C. Same as A but small 'pool' of patients at start of surgery.

A			B			C		
9.00	1 patient		9.00	3 patients		9.00	3 patients	
05	,,		15	,,	*	05	1 patient	
10	,,		30	,,		10	,,	
15	,,	*	45	,,	*	15	,,	*
20	,,		10.00	,,		20	,,	
25	,,		15	,,	*	25	,,	
30	,,					30	,,	
35	,,					35	,,	
40	,,					40	,,	
45	,,	*				45	,,	*
50	,,					50	,,	
55	,,					55	,,	
10.00	,,					10.00	,,	
05	,,					05	,,	
10	,,					10	,,	
15	,,	*				15	,,	*
20	,,							
25	,,							

* At each of the times marked one possible appointment should be left unbooked so as to allow for patients coming without appointments. Experience in each practice will show what allowance is necessary.

Table 7.1. (*cont.*)

(ii) Average consulting time 7 minutes; 90-minute surgery; 11 patients with appointments, 2 without.

A. Appointments booked at intervals approximately equal to average consulting time.
B. Small block bookings.
C. Same as A but small 'pool' of patients at start of surgery.

A			B				C		
9.00	1 patient		9.00	3 patients			9.00	3 patients	
05	,,		20	3	,,		05	1 patient	
10	,,		40	3	,,	*	10	,,	
20	,,		10.00	2	,,		20	,,	
25	,,		15	2	,,	*	25	,,	*
35	,,						35	,,	
40	,,	*					40	,,	
45	,,						45	,,	
55	,,						55	,,	
10.00	,,						10.00	,,	
10	,,						10	,,	*
15	,,								
20	,,	*							

* At each of the times marked one possible appointment should be left unbooked so as to allow for patients coming without appointments. Experience in each practice will show what allowance is necessary.

will himself be punctual, i.e. that he will commence the surgery at the time for which the first appointment is arranged. If he is late the whole appointment schedule is likely to be disrupted with consequent increases in waiting-times and disillusion on the part of the patients.

3. *Instituting the appointment system*

We would strongly suggest if possible that a *full* appointment system should be introduced rather than a partial or optional system, i.e. all sessions should be by appointment and all patients encouraged to make appointments; the reasons for this have been set out in Chapters 3 and 4.

One possible exception is the case where the practice contains a large proportion of old people. In view of their particular difficulties there is much to be said for instituting special non-appointment sessions for them, though this has evident drawbacks, for example, such segregation might be thought distasteful by the old people themselves.

Before the appointment system starts patients should be notified of the change certainly by word of mouth and by a notice in the waiting-room, and preferably by circularizing all households. This can now be done, free of charge, by the Executive Council.

The following points seem particularly important in explaining the scheme to patients:

(*a*) When necessary a patient can always be seen without appointment and in any case appointments do not need to be made a long time in advance and can often be made at the beginning of a session for later in the session.

(*b*) Although the appointment system will greatly reduce waiting-time it will not necessarily be possible to see the patient exactly at the appointed time.

4. *Organizational requirements*

The exact arrangements by which appointments can be made will obviously vary from one practice to another and will depend in particular on the number of staff employed. We would suggest that the minimum requirements are:

(*a*) That ancillary staff should be available at all times during which surgery sessions are actually in progress. (The appointment system will certainly increase the work-load for the ancillary staff, particularly in regard to telephone calls.)

(*b*) That patients should be able to telephone for appointments at *specified* times during the day, and that these specified times should cover at least 5 hours a day. By 'specified' we mean that patients should be given times such as, say, '9 a.m. to 12.30 p.m. and 5 p.m. to 6.30 p.m.' and *not* simply told that they can telephone 'during surgery hours'.

As regards the telephone facilities which should be available the best indication seems to be that the extra load on the telephone will amount to about one call for every three surgery consultations. (Only one in seven of the practices in our survey had a special telephone number for making appointments.)

The increased number of telephone calls, together with other additional work associated with the appointment system will certainly increase the work for the practice ancillary staff. This may necessitate an increase in the amount of staff time of 10–12 hours per week, or more, for each doctor, though the actual figure will depend on how fully the present staff time is utilized. For practices without ancillary

staff it will usually be necessary to employ someone, though some single-handed doctors, usually with relatively small lists, run successful appointment systems without any such help.

5. *Size of waiting-room*

If surgery premises are to be planned or replanned it is worth remembering that with an appointment system a far smaller waiting-room is required than without one. (Conversely, if waiting-rooms are planned on the assumption that an appointment system will be used they will be quite inadequate if the appointment system is withdrawn at a later stage.)

A simple rule is that with a properly designed appointment system it is unlikely that more than 5 patients will be waiting at the same time for any one doctor (though it may happen occasionally). This means that, *considering patients only*, 5 chairs per doctor will be sufficient if several doctors are consulting simultaneously, and for 3 or more doctors this provision is probably rather more than is necessary, for example, for 3 doctors 13 or 14 chairs, and for 4 doctors 16 or 17, should suffice. But it is important to notice that before deciding how many chairs to provide some estimate should be obtained of the numbers of relatives and friends accompanying patients. This could be done by observing the waiting-room on a number of occasions before the start of the appointment system and finding out the proportion of relatives and friends among those waiting. The number of chairs to be provided can then be adjusted to allow for this.

In considering these recommendations two points should be noted. First, provision has to be made in regard to the *maximum* number of doctors who will ever be consulting simultaneously. Secondly, estimates based on the above figures may be too low for practices with large numbers of patients per doctor, or in areas of high morbidity, or during certain times of the year.

6. *Patients who do not make appointments*

In booking appointments for each surgery session some allowance should be made for a proportion of patients arriving without an appointment. At first this proportion may be high but after a few weeks it should reduce considerably. Possibly one in six of all scheduled appointment times should be left free to allow for these patients; experience will show whether this figure should be increased or decreased.

There is a certain advantage in allocating these patients a specific appointment time, preferably the first free time after they appear, since this will acquaint them with the way in which the system works. If no such free time is available it will usually be possible simply to fit the patient in without an appointment.

7. *Assessing the operation of the appointment system*

Several months should be allowed before assessing the appointment system. Initially it is to be expected that some or many patients will misunderstand the system and that some will be unco-operative. Improvements in each of these respects may be expected as time goes on.

The assessment should perhaps be primarily in terms of whether doctor–patient relationship and the general operation of the practice are satisfactory. If, however, quantitative measurements are required the following questions might be asked:

(*a*) Are *all* doctor-requested consultations by appointment?

(*b*) Are at least 60 per cent. of patient-requested consultations by appointment? (This figure should include appointments made *during* a surgery session.)

(*c*) Are more than 15 per cent. of patients 5 minutes late or more?

(*d*) Do more than one in twelve patients fail to keep their appointment?

(*e*) Is average waiting-time in excess of 20 minutes?

(*f*) Does any appreciable proportion of patients (say more than one in five) wait more than half an hour?

(The figures suggested as reasonable in the above questions are based on the results discussed in Chapter 6.)

Question (*a*) should always be answered affirmatively since this aspect is under the control of the doctor. Satisfactory answers to (*b*), (*c*), and (*d*) depend largely on co-operation on the part of the patients, though this in turn may depend on whether the appointment system is seen to be functioning well. Questions (*e*) and (*f*) may serve to indicate whether appointments are being scheduled correctly; as already remarked another crucial factor is that the doctors should not be unpunctual.

In some respects the process of assessment might be repeated periodically. In particular, information on waiting-times might be obtained

very simply as follows: For a period of a week, note the difference between the time of appointment and time seen by doctor for the fifth, tenth, etc., patient at each surgery session.

In this chapter we have attempted to bring together the main results of our various inquiries. Here, as elsewhere, it has not been our intention to preach the virtues of introducing an appointment system, but rather to present data and make recommendations which will enable practices considering this to make an informed decision with some idea of the possible consequences.

Appendix I *Sampling methods used in general practitioner surveys*

In Chapter 3 the results of two surveys of general practitioners have been described. A brief description of the method of drawing the samples for these surveys is given in this appendix; some of the complications are omitted.

Two samples were required; first a sample of *partnerships*[1] where appointment systems were in use and, secondly, a sample of *doctors* not using an appointment system, whose views on the subject were to be ascertained.

The starting point was a sample of Executive Councils, followed by a sample of partnerships from them, the sample being taken so as to be representative of partnerships in Great Britain.

In Section 1 below the method of obtaining the sample of Executive Councils and in Section 2 the method of obtaining from it the sample of partnerships are described. Finally, in Section 3, the way in which this was used to produce the required samples is explained.

1. Sample of Executive Councils

The procedures for England and Wales and for Scotland were different and are described separately.

1. *England and Wales*

The Executive Councils were divided into twelve groups or strata. Executive Councils corresponding to County Boroughs were placed in one of five groups according to the proportion of their population falling into the Registrar-General's Social Classes IV and V. Those corresponding to counties (except London and Middlesex) were also

1. Here, as often in this report, the word 'partnership' is intended to include also single-handed practitioners, these being regarded as partnerships of size one.

split into five groups but this time according to population density. London and Middlesex formed the remaining two strata.

The sample consisted of London and Middlesex and about half the Executive Councils from each of the other ten strata, these Executive Councils being chosen at random. Thus the sample included County Boroughs with a wide range of social class composition and counties with a wide range of population densities. This seemed to be desirable on the grounds that areas of different social class might react differently to appointment systems and also that, in the case of rural areas, one would expect such things as transport and communications to vary with population density and that these would also have an effect on appointment systems. London and Middlesex seemed to be of such a special nature, and presumably with problems of their own, that it was felt that they should automatically be represented in the sample for this reason.

The English and Welsh Executive Councils included in the sample were:

(*a*) *Counties—chosen to be representative as regards population density*

Bedfordshire	London
Caernarvonshire	Merionethshire
Cambridgeshire	Middlesex
Cardiganshire	Montgomeryshire
Cheshire	Norfolk
Devon (and Exeter)	Northamptonshire
Dorset	Northumberland
Glamorgan	Oxfordshire (and Oxford)
Gloucestershire	Soke of Peterborough
(and Gloucester)	Staffordshire
Herefordshire	West Suffolk
Hertfordshire	East Sussex
Isle of Wight	West Sussex
Kent (and Canterbury)	Yorks (N. Riding)
Lincolnshire (Lindsey)	Westmorland

(*b*) *County Boroughs—chosen to be representative as regards social class*

Barrow in Furness	Bournemouth
Bath	Bradford
Birkenhead	Brighton
Blackpool	Bristol
Bootle	Bury

Chester
Coventry
Darlington
Derby
Doncaster
Dudley
Eastbourne
Gateshead
Great Yarmouth
Halifax
Hull
Ipswich
Leicester
Manchester
Newcastle upon Tyne
Northampton
Norwich
Oldham
Portsmouth
Preston
St. Helens
Salford
Sunderland
Walsall
West Ham
West Hartlepool
Wigan

2. *Scotland*

The rationale was similar in the case of the sample of Scottish Executive Councils. Glasgow was automatically included. The Highlands and Isles were excluded since the problem of appointment systems was thought not to be relevant in this area.

The remaining Executive Councils were divided into two groups, 'urban' and 'rural', and about half of each randomly chosen to be in the sample.

The Executive Councils included were:

Aberdeen and Kincardine
Aberdeen
Angus[1]
Banff, Moray, and Nairn
Edinburgh
Fife
Galloway
Glasgow
Lanark
Lothian and Peebles
Stirling and Clackmannan[1]

2. Samples of partnerships and doctors required

1. *Practices using appointment systems*

From each of the Executive Councils listed in the previous section a random sample of one in two partnerships was required, except in the case of London, Middlesex, and Glasgow, where the sampling fraction was one in four. Thus, allowing for the two stages of sampling, every partnership in Great Britain had approximately a one in four chance of being included (except the Highlands and Isles). The reasons

1. Only used for appointment system questionnaire.

for the very large sample will be clear from Chapter 3 and Section 3 below.

2. *Practices not using appointment systems*

From the same list of Executive Councils a sample of one in fifteen doctors not using appointment systems was required (one in thirty in the case of London, Middlesex, and Glasgow). Thus, allowing for the two stages in sampling, every doctor in Great Britain had a one in thirty chance of being included in this sample.

3. Production of required samples

A master sample of partnerships was drawn from each Executive Council and randomly divided into two sections. The larger section was to be used for the survey on practices where an appointment system was already in use, the remainder for practices where there was no appointment system. For the latter there was a further stage of sampling which consisted in randomly choosing one doctor from those in the partnership.

In order to achieve the desired probabilities in drawing the sample the procedure described in this paragraph was carried out separately for each partnership size, using varying sampling fractions.

1. *Sample of partnerships using an appointment system*

The explanation of the very large sample needed for the survey of appointment system practices is that there is no complete list of practices running appointment systems. We thought that about 10 per cent. of all practices were using them at the time the survey was carried out; thus in order to obtain the required sample of about 200 such practices, and allowing for the fact that not all would reply to the questionnaire, it was necessary to send out rather more than ten times this number of short preliminary questionnaires (Appendix VII, Section 1.1) simply asking whether or not an appointment system was in use at any of the premises from which the partnership operated. These questionnaires were sent to senior partners of a sample of partnerships chosen in such a way that all partnerships had an equal chance of being included. 342 practices indicated that an appointment system was in operation and to each of these a detailed questionnaire (Appendix VII, Section 1.2) was sent. Replies were received, either by post or by personal interview, from 229 of those who were running

appointment systems according to our definition. The remainder either failed to reply or turned out not to be running an appointment system of the sort in which we were interested. In some of the tables relating to this survey the 229 have been weighted (giving a hypothetical sample of 246) so as to reduce the bias due to non-response.

2. *Sample of doctors not using an appointment system*

The second sample consisted of a sample of *doctors* (not partnerships) chosen so that all doctors had an equal chance of being included. These were assumed not to be running an appointment system and were each sent a questionnaire asking for their views on the subject (Appendix VII, Section 2). (Doctors in this sample who were in fact running an appointment system were asked simply to return the questionnaire, stating that this was so and giving certain basic details about the practice.) The sample was randomly divided into two parts, the doctors in each part being sent one of two different questionnaires, (referred to here as the 'Long' and 'Short' questionnaire), with some questions in common. This was to reduce the number of questions answered by any one doctor.

In all, 621 questionnaires were sent out and 516 replies received. These replies were weighted so as to represent the original 621 in terms of partnership size and area.

Appendix II *Tables from the general practitioner surveys*

The marginal totals for any one classification sometimes vary slightly from table to table because, for example, a few respondents failed to answer certain questions.

Table 1A. *Use of appointment system—Type of practice*

Type of appointment system	Partnerships of size[1] (No. of doctors)				
	1[2]	2	3	4	5 or more
Full	3·4%	6·2%	9·0%	16%	14%
Other[3]	1·8%	4·0%	5·6%	11%	8%
Total[4]	1230 (100%)	808 (100%)	378 (100%)	134 (100%)	99 (100%)

Table 1B. *Proportion of practices and principals using appointment systems*

Type of appointment system	All practices	All principals (i.e. all general practitioners effectively)
Full	6·0%	7·8%
Other	3·7%	4·9%
All types	9·7%	12·7%

Notes on 1A and 1B

1. Table 1A is based on the survey among practices with appointment systems and the preceding contact survey, except that in the case of partnerships of size five or more the entries are derived by combination of results from both surveys discussed in Chapter 3.
2. A single-handed doctor is regarded as a partnership of size one.
3. Optional+partial according to the definition of page 22.
4. Total on which percentages in the corresponding columns based.

The figures for all practices and all principals are derived, by suitable weighting, from the data in Table 1A.

Tables 2, 3, 4

These tables are based on the survey among a random sample of general practitioners. Accordingly the figures are not directly comparable with those of Tables 1A and B. In particular since the nature of a doctor's appointment system was not probed as fully in this survey certain of those who said they were using appointment systems almost certainly were not in the sense of this study.

Table 2. *Average list per doctor—Partnership size*[1]

(*a*) For practices with appointment system

	Partnership size[1]		
List size	1 or 2	3	4 or more
0–1,999	41%	19%	14%
2,000–2,999	38%	66%	65%
3,000 or more	21%	16%	20%
Totals[2]	34 (100%)	32 (100%)	49 (100%)

(*b*) For practices without appointment system

	Partnership size[1]		
List size	1 or 2	3	4 or more
0–1,999	25%	26%	24%
2,000–2,999	50%	59%	43%
3,000 or more	25%	15%	33%
Totals[2]	315 (100%)	107 (100%)	63 (100%)

1. Single-handed doctor is regarded as partnership of size 1.
2. Total number of practices on which percentages in corresponding column based.

Table 3. *Type of patient—Partnership size*[1]

(*a*) For practices with appointment system

Type of patient	Partnership size[1]		
	1 or 2	3	4 or more
Mostly working class	25%	56%	55%
Mostly middle or upper class	17%	6%	4%
About equal numbers of working and middle class	58%	38%	41%
Totals[2]	36 (100%)	32 (100%)	49 (100%)

(*b*) For practices without appointment system

Type of patient	Partnership size[1]		
	1 or 2	3	4 or more
Mostly working class	56%	49%	56%
Mostly middle or upper class	5%	3%	6%
About equal numbers of working and middle class	39%	49%	38%
Totals[2]	324 (100%)	107 (100%)	63 (100%)

1. Single-handed doctor is regarded as partnership of size 1.
2. Total number of practices on which percentages in corresponding column based.

Table 4. *Proportions of practices using appointment system*

(*a*) Urban practices

	Partnership size[1]	
	1 or 2	3 or more
Proportion using appointment system	8%	35%
Totals[2]	262 (100%)	191 (100%)

(*b*) Rural or semi-rural practices

	Partnership size[1]	
	1 or 2	3 or more
Proportion using appointment system	14%	22 %
Totals[2]	104 (100%)	55 (100%)

1. Single-handed doctor is regarded as partnership of size 1.

2. Total number of practices on which percentages in corresponding column based.

Tables 5–18

These tables are based upon the survey among practices with appointment systems.

Table 5. *Methods of informing patients of introduction of appointment system*

Method of informing	Type of appointment system	
	Full	Other
Circulating patients or heads of households		
(*a*) By Executive Council	10% } 42%	5% } 18%
(*b*) By Doctor	32% }	13% }
Printed literature (not necessarily circularized)	54%	36%
Notice in waiting-room	80%	82%
Verbal	95%	90%
Totals[1]	155 (100%)	91 (100%)

NOTE

Virtually all of those who circulated, or otherwise used, printed literature also placed a notice in waiting-room and informed patients verbally.

Virtually all those who placed a notice in waiting-room also informed patients verbally.

A small minority of respondents insisted that they introduced their appointment system giving no prior warning whatsoever.

1. Total number of practices on which percentages in corresponding column based.

Table 6. *Whether introduction of appointment system was easy or difficult—Social class of practices' patients*

Starting appointment system was:	Social class			All practices
	Less than 50% working class	50–79% working class	80% or more working class	
Easy	78%	88%	86%	85%
Difficult	18%	9%	11%	12%
Other/not stated	4%	3%	2%	3%
Totals[1]	45 (100%)	106 (100%)	89 (100%)	240 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 7. *For practices using full appointment system. Proportion of new[1] attendances by appointment—Whether patients were circulated about the introduction of the appointment system*

Proportion of new attendances by appointment	Practices where patients were		All practices
	Circulated	Not circulated	
0–30%	5%	15%	11%
31–60%	18%	18%	18%
61% and over	78%	67%	71%
Totals[2]	61 (100%)	88 (100%)	149 (100%)

1. i.e. a surgery consultation requested by patient rather than doctor.
2. Total number of practices on which percentages in corresponding column based.

Table 8. *For practices using full appointment system. Proportion of new[1] attendances by appointment—Policy concerning patients attending without appointments*

Proportion of new attendances by appointment	Practices adopting policy[2]			
	1	2	3	4
0–30%	4%	13%	9%	4%
31–60%	18%	18%	14%	15%
61% and over	79%	68%	77%	82%
Totals[3]	96 (100%)	102 (100%)	90 (100%)	55 (100%)

1. i.e. a surgery consultation requested by patient rather than doctor.
2. *Policies*
   1. Patients given first free appointment time.
   2. Patient fitted in as soon as a gap in consultations by appointment occurred.
   3. Patient seen as soon as there were no patients with appointments waiting.
   4. Patient seen at end of surgery.

NOTE. Most practices adopted more than one policy and so are counted more than once in the above table. (See p. 29 for discussion.)

3. Total number of practices on which percentages in corresponding column based.

Table 9. *Effect of appointment system—Type of appointment system*

(*a*) The doctor's capacity to plan his time

Planning of time	Type of appointment system			All practices
	Full	Partial	Optional	
Improved	82%	85%	47%	80%
Deteriorated	3%	0	5%	3%
Unaffected	15%	15%	47%	18%
Totals[1]	151 (100%)	65 (100%)	19 (100%)	235 (100%)

(*b*) Distribution of work-load over week

Work-load distribution over week	Type of appointment system			All practices
	Full	Partial	Optional	
Improved	81%	73%	42%	76%
Deteriorated	0	0	0	0
Unaffected	19%	27%	58%	24%
Totals[1]	150 (100%)	64 (100%)	19 (100%)	233 (100%)

(*c*) Distribution of work-load between doctors in the practice (where relevant)

Distribution of work-load between doctors	Type of appointment system			All practices
	Full	Partial	Optional	
Improved	63%	51%	18%	56%
Deteriorated	2%	0	0	1%
Unaffected	35%	49%	82%	42%
Totals[1]	104 (100%)	41 (100%)	13 (100%)	158 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 9 (cont.)

(*d*) Patients' waiting-times

Patients' waiting-times	Type of appointment system			All practices
	Full	Partial	Optional	
Improved	100%	91%	68 %	95%
Deteriorated	0	0	0	0
Unaffected	0	9%	32%	5%
Totals[1]	151 (100%)	65 (100%)	19 (100%)	235 (100%)

(*e*) Amount of strain on doctors

Strain on doctors	Type of appointment system			All practices
	Full	Partial	Optional	
Improved	75%	54%	35%	66%
Deteriorated	7%	5%	10%	7%
Unaffected	18%	41%	55%	27%
Totals[1]	150 (100%)	64 (100%)	20 (100%)	234 (100%)

(*f*) Quality of doctor's work

Quality of work	Type of appointment system			All practices
	Full	Partial	Optional	
Improved	70%	55%	50%	65%
Deteriorated	1%	0	0	0
Unaffected	29%	45%	50%	35%
Totals[1]	151 (100%)	65 (100%)	18 (100%)	234 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 9 (cont.)

(*g*) Doctor/patient relationship

Doctor/patient relationship	Type of appointment system			All practices
	Full	Partial	Optional	
Improved	56%	43%	44%	51%
Deteriorated	1%	0	0	1%
Unaffected	43%	57%	56%	48%
Totals[1]	149 (100%)	63 (100%)	18 (100%)	230 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 10. *Effect of appointment system—proportion of new[1] attendances by appointment*

(*a*) The doctor's capacity to plan his time

Planning	Practices at which following proportion new[1] attendances by appointment		
	0–30%	31–60%	61% and over
Improved	68%	73%	87%
Deteriorated	5%	5%	1%
Unaffected	27%	22%	12%
Totals[2]	64 (100%)	41 (100%)	120 (100%)

(*b*) Distribution of work-load over week

Distribution of word-load over week	Practices at which following proportion new[1] attendances by appointment		
	0–30%	31–60%	61% and over
Improved	62%	70%	84%
Deteriorated	0	0	0
Unaffected	38%	30%	16%
Totals[2]	63 (100%)	40 (100%)	120 (100%)

1. i.e. a surgery consultation requested by patient rather than doctor.
2. Total number of practices on which percentages in corresponding column based.

Table 10 (cont.)

(*c*) Amount of strain on doctor

Strain	Practices at which following proportion new[1] attendances by appointment		
	0–30%	31–60%	61% and over
Improved	55%	54%	80%
Deteriorated	5%	10%	7%
Unaffected	40%	36%	14%
Totals[2]	64 (100%)	41 (100%)	119 (100%)

(*d*) Doctor/patient relationship

Doctor/patient relationship	Practices at which following proportion new[1] attendances by appointment		
	0–30%	31–60%	61% and over
Improved	43%	52%	57%
Deteriorated	0	3%	1%
Unaffected	57%	45%	42%
Totals[2]	61 (100%)	40 (100%)	119 (100%)

1. i.e. a surgery consultation requested by patient rather than doctor.
2. Total number of practices on which percentages in corresponding column based.

Table 11. *For practices using full appointment system. Effect of appointment system—Partnership size*

(*a*) The doctor's capacity to plan his time

Planning	Practices where partnership size is			
	1[1]	2	3	4 or more
Improved	90%	78%	82%	75%
Deteriorated	5%	2%	6%	0
Unaffected	5%	20%	12%	25%
Totals[2]	41 (100%)	49 (100%)	33 (100%)	28 (100%)

1. i.e. single-handed practice.
2. Total number of practices on which percentages in corresponding column based.

Table 11 (cont.)

(*b*) Distribution of work-load over week

Distribution of work-load over week	Practices where partnership size is			
	1[1]	2	3	4 or more
Improved	85%	78%	79%	81%
Deteriorated	0	0	0	0
Unaffected	15%	22%	21%	19%
Totals[2]	41 (100%)	49 (100%)	33 (100%)	27 (100%)

(*c*) Distribution of work-load between doctors in the practice (where relevant)

Distribution between doctors	Practices where partnership size is		
	2	3	4 or more
Improved	60%	55%	79%
Deteriorated	4%	0	0
Unaffected	36%	45%	21%
Totals[2]	45 (100%)	31 (100%)	28 (100%)

(*d*) Amount of strain on doctor

Strain	Practices where partnership size is			
	1[1]	2	3	4 or more
Improved	68%	73%	84%	75%
Deteriorated	7%	14%	0	4%
Unaffected	24%	12%	16%	21%
Totals[2]	41 (100%)	49 (100%)	32 (100%)	28 (100%)

1. i.e. single-handed practice.
2. Total number of practices on which percentages in corresponding column based.

Table 12. *For practices using full appointment system. Effect of appointment system on tendency for patients not needing attention to seek medical care—Proportion of working-class patients*

Tendency to seek care	Practices at which proportions of working-class patients were			All practices
	0–49%	50–79%	80–100%	
Tendency increased	15%	3%	8%	8%
Tendency decreased	33%	24%	17%	23%
Tendency unaffected	52%	73%	75%	69%
Totals[1]	33 (100%)	59 (100%)	59 (100%)	151 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 13. *For practices using a full appointment system. Proportions of practices where the appointment system was thought to have the effect of creating or removing a barrier between doctor and patient or to have no effect of the sort (a) from doctors' points of view (b) from patients' points of view (both as seen by doctor responding)—Proportion of working-class patients served by the practice*

(*a*) From doctors' points of view

Barrier	Practices at which proportions of working-class patients were			All practices
	0–49%	50–79%	80–100%	
Created by appointment system	15%	3%	8%	8%
Removed by appointment system	33%	22%	17%	23%
No effect	52%	75%	75%	70%
Totals[1]	33 (100%)	59 (100%)	59 (100%)	151 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 13. (cont.)

(*b*) From patients' points of view

Barrier	Practices at which proportions of working-class patients were			All practices
	0–49%	50–79%	80–100%	
Created by appointment system	15%	17%	14%	15%
Removed by appointment system	30%	19%	17%	21%
No effect	55%	64%	69%	64%
Totals[1]	33 (100%)	59 (100%)	58 (100%)	150 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 14. *Attitudes of patients towards appointment system—Partnership size*

Patients' attitude	Practices where partnership size is				All practices
	1[1]	2	3	4 or more	
Most like appointment system	85%	76%	81%	88%	82%
Equally divided about appointment system	14%	18%	17%	9%	15%
Most dislike appointment system	2%	6%	2%	2%	3%
Totals[2]	59 (100%)	80 (100%)	54 (100%)	43 (100%)	236 (100%)

1. i.e. single-handed practice.
2. Total number of practices on which percentages in corresponding column based.

Table 15. *Attitudes of patients towards appointment system—Number of patients per doctor usually attending premises with which inquiry was concerned*

Patients' attitude	Practices where patients per doctor usually attending premises in survey are: Less than 2,000	2,000 or more	All practices
Most like appointment system	80%	82%	81%
Equally divided about appointment system	14%	17%	16%
Most dislike appointment system	6%	2%	4%
Totals[1]	99 (100%)	126 (100%)	225 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 16. *Patients' attitudes towards appointment system—Type of area*

Patients' attitude	Type of area from which patients come: Urban	Mixed urban/rural	Rural	All practices
Most like appointment system	83%	83%	68%	82%
Equally divided about appointment system	14%	15%	20%	15%
Most dislike appointment system	2%	2%	12%	3%
Totals[1]	169 (100%)	41 (100%)	25 (100%)	235 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 17. *Patients' attitudes towards appointment system—Whether circulated about introduction of appointment system*

Patients' attitude	Practices at which		
	Patients circulated	Patients not circulated	All practices
Most like appointment system	92%	77%	82%
Equally divided about appointment system	7%	19%	15%
Most dislike appointment system	1%	4%	3%
Totals[1]	77 (100%)	159 (100%)	236 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 18. *Patients' attitudes towards appointment system—Arrangements for telephoning for appointments*

Patient's attitude	Practices at which patients could telephone for appointments at/in			
	Any time	Surgery hours only	Specified times (5 hr. or more)	Other
Most like appointment system	74%	78%	94%	95%
Equally divided about appointment system	18%	20%	6%	5%
Most dislike appointment system	8%	2%	0	0
Totals[1]	115 (100%)	42 (100%)	64 (100%)	19 (100%)

1. Total number of practices on which percentages in corresponding column based.

Table 19. *For doctors without appointment system. Doctors' attitudes towards appointment system—Social class of patients*

Doctors' attitude	Doctors whose patients were: Mostly working class	Equally working and middle class	Mostly middle class	All doctors
Desirable most cases	59%	51%	52%	55%
Desirable some cases	3%	7%	0	5%
Undesirable most cases	38%	43%	48%	40%
Totals[1]	258 (100%)	195 (100%)	23 (100%)	476 (100%)

Based on both questionnaires used in Survey 2.
1. Total number of practices on which percentages in corresponding column based.

Table 20. *For doctors without appointment system. Doctors' attitudes towards appointment system—Type of area from which patients drawn*

Doctors' attitude	Area from which patients drawn: Mainly urban	Mixed urban and rural	Mainly rural	All doctors
Desirable most cases	52%	62%	60%	54%
Desirable some cases	5%	2%	7%	5%
Undesirable most cases	43%	36%	33%	41%
Totals[1]	357 (100%)	66 (100%)	60 (100%)	483 (100%)

Based on both questionnaires used in Survey 2.
1. Total number of doctors on which percentages in corresponding column based.

Table 21. *For those who had considered introducing an appointment system but decided against doing so. If the Ministry of Health were to reimburse part of the cost of ancillary help would you be likely to introduce an appointment system in your practice?—Partnership size*

(*a*)

Likely to introduce appointment system if reimbursed	Size of partnership in which doctor works			All doctors
	Single handed	2	3 or more	
Yes	36%	13%	13%	17%
No	64%	87%	87%	83%
Totals[1]	22 (100%)	47 (100%)	46 (100%)	115 (100%)

Based on answers to Questionnaire 1 used in Survey 2.
1. Total number of doctors on which percentages in corresponding column based.

(*b*)

NOTE. The proportion of respondents sent Questionnaire 2 who said they had considered starting an appointment system and would be likely to do so if the Ministry of Health reimbursed them as above were as in the following table.

	Partnership size		
	Single handed	2	3 or more
Likely to start an appointment system	47%	27%	45%
Based on totals of	30	55	71

These proportions are not strictly comparable with those in (*a*) since they include presumably a number of doctors who had decided to start an appointment system anyway. (The question which identified these was not asked in Questionnaire 2.)

Table 21 (cont.)

(*c*)

If, however, we make the (bold) assumption that the proportion of doctors for each size of practice who had already decided to start appointment systems and so ought to be excluded was the same for respondents to Questionnaire 2 as for Questionnaire 1 we would obtain the following proportions for those who had decided against an appointment system but would be likely to introduce one if reimbursement as above were provided:

	Partnership size		
	Single handed	2	3 or more
Likely to start appointment system if reimbursed	42%	22%	30%
Based on notional total of	28	51	56

Fig. 3.9 in text is based on combination of results from Tables 21 (*a*) and (*c*).

Table 22. *For doctors who had considered starting an appointment system but decided against doing so. If the Ministry of Health were to reimburse part of the cost of ancillary help would you be likely to introduce an appointment system?—Number of surgery sessions tending to be overcrowded*

Likely to start appointment system if reimbursed	Number of surgery sessions overcrowded		
	None or a few	Many or most	All doctors
Yes	13%	18%	16%
No	88%	82%	84%
Totals[1]	48 (100%)	61 (100%)	109 (100%)

Based on answers to Questionnaire 1, Survey 2.

1. Total number of doctors on which percentages in corresponding column based.

Table 23. *For doctors who had considered starting an appointment system. If the Ministry of Health were to reimburse part of the cost of ancillary help, would you be likely to introduce an appointment system?—Feeling generally about appointment systems*

	Doctors' feelings about appointment system	
Likely to introduce appointment system if reimbursed	Appointment system desirable in most cases	Appointment system undesirable in most cases
Yes	53%	11%
No	47%	89%
Totals[1]	106 (100%)	38 (100%)

Based on answers to Questionnaire 2 of Survey 2.

1. Total number of doctors on which percentages in corresponding column based.

Table 24. *Doctors without appointment systems*

(*a*) If an appointment system were in operation in your practice there would be less strain on doctors

	Partnership size				
Proportion who	1	2	3	4 or more	All doctors
Agreed	44%	42%	60%	69%	50%
Disagreed	56%	58%	40%	31%	50%
Totals[1]	66 (100%)	81 (100%)	48 (100%)	32 (100%)	227 (100%)

Based on answers to Questionnaire 2 or Survey 2.

1. Total number of doctors on which percentages in corresponding column based.

Table 24 (cont.)

(*b*) If an appointment system were in operation in your practice, it would be easier for doctor(s) concerned to plan their time.

Proportion who	Partnership size 1	2	3	4 or more	All doctors
Agreed	45%	43%	55%	70%	50%
Disagreed	55%	57%	45%	30%	50%
Totals[1]	67 (100%)	81 (100%)	47 (100%)	33 (100%)	228 (100%)

(*c*) If an appointment system were in operation in your practice surgery work would be more evenly distributed over week.

Proportion who	Partnership size 1	2	3	4 or more	All doctors
Agreed	49%	45%	54%	70%	52%
Disagreed	51%	55%	46%	30%	48%
Totals[1]	67 (100%)	78 (100%)	48 (100%)	33 (100%)	226 (100%)

Based on answers to Questionnaire 2 of Survey 2.

1. Total number of doctors on which percentage in corresponding column based.

Appendix III *Tables relating to unsuccessful appointment systems*

NOTES

1. The percentages relating to unsuccessful appointment systems are based on very small numbers and should be treated with due caution.

2. Because of the weighting process adopted percentages calculated for practices with unsuccessful appointment systems do not necessarily differ by amounts corresponding to integer differences between numbers of practices in the relevant categories.

Table 1

	Nature of practice			
	Total no. of 'partners' (including assistants)			
Practices	1	2	3 or more	Totals[1]
With unsuccessful appointment systems	35%	35%	31%	26 (100%)
Using appointment system	30%	24%	47%	117 (100%)

1. Total on which percentages in the corresponding column based.

Table 2

Practices	Practice with: Main surgery and at most 1 branch	Practice with: 1 main surgery and 2 or more branches	Practice with: 2 or more main surgeries	Totals[1]
With unsuccessful appointment system	70%	11%	19%	26 (100%)
Using appointment system	61%	8%	31%	117 (100 %)

1. Total on which percentages in the corresponding column based.

Table 3

Practices	Nature of area from which patients are drawn: Mainly urban	Substantially rural	Totals[1]
With unsuccessful appointment systems	87%	13%	26 (100%)
Using appointment system	71%	29%	117 (100%)

1. Total on which percentages in the corresponding column based.

Table 4

Practices	Type of patient: Mainly working class	Mainly upper and middle class	About equal working/ middle classes	Totals[1]
With unsuccessful appointment systems	56%	12%	32%	26 (100%)
Using appointment system	39%	12%	49%	117 (100%)

1. Total on which percentages in the corresponding column based.

Table 5

Practices	Average size of list per doctor (ranges inclusive) 0–1,999	2,000–2,999	3,000 and over	Totals[1]
With unsuccessful appointment system	27%	61%	12%	26 (100%)
Using appointment system	32%	46%	22%	116[2] (100%)

1. Total on which percentages in the corresponding column based.
2. One list not stated.

Table 6. *Nature of preliminary dissemination of information about appointment system to patients*

	Verbal	Verbal + notice in waiting-room	Verbal + notice in waiting-room + printed literature	Verbal + notice in waiting-room + printed literature + circularization
11 practices with unsuccessful appointment systems[1]	10%	9%	7%	3%
Practices using appointment systems[2]	93%	81%	47%	33%

1. Number of practices (unweighted) under each category given.
2. Data obtained from survey among practices using appointment system. Each percentage calculated out of a total of 246.

Table 7. *Amount of receptionist help (excluding that given by wives and family) at eleven practices at which appointment systems were found to be unsatisfactory, in hours per week/per doctor*

	Number of practices where amount of receptionist help was					
	None	1–10 hr.	11–15 hr.	16–20 hr.	21 or more hr.	Totals
Before introduction of appointment system	2[1]	0	3	5	1	11
As a result of adjustment after start of appointment system	1[1]	0	2	4	4	11

1. Wife or close relative rendered substantial help.

Appendix IV *Sampling methods used in patient surveys*

Two surveys of patients were undertaken; the first was carried out by the British Market Research Bureau in the course of a market research survey and the second was a special survey carried out from the Unit of Biometry. These are described separately in Sections 1 and 2.

1. Interview survey carried out by British Market Research Bureau

This organization runs a nation-wide continuous survey in which a quota sample of 5,000 adults is interviewed each month and asked a variety of questions for the purposes of market research. It was proposed to ask questions on appointment systems to half of one month's sample and in fact a total of 2,140 completed interviews was achieved.

As is often the case in such survey work the method of obtaining the sample was based on parliamentary constituencies and polling districts. Within each of 100 constituencies a number of polling districts were selected and within each of these a pair of streets was selected. Interviews were to be obtained in each pair of streets and not closer than five doors apart. At each stage in the sampling procedure the probability of selection was made proportionate to the size of the electorate in the unit being sampled.

The achieved sample was weighted to make it representative of the population as a whole and the percentages quoted are based on this weighting.

The rationale underlying the weighting procedure is that percentages based on an unweighted, unrepresentative sample may be biased if there is a tendency, for example, for different sexes or age-groups to give different responses. Thus if, for instance, women had been largely

in favour of appointment systems and men largely against them, and if the sample had consisted of say 80 per cent. women and 20 per cent. men the over-all percentage of the sample in favour would exaggerate the over-all percentage of the total population in favour. The weighting in this case would consist in multiplying the figures for the men by a factor of about four in order to make the weighted sample representative of the approximately 50–50 ratio of men to women in the whole population.

In the present case all the replies were weighted not only for sex but also for age and social grade so that the percentages derived from the weighted sample reduce bias which might have arisen if any of these factors affected response.

2. Postal survey carried out from Unit of Biometry

The main difference between the two surveys was that whereas the British Market Research Bureau sample was a sample of the whole population the Unit of Biometry survey used samples of patients from four practices where an appointment system was in operation and five where it was not. These practices were chosen so as to cover a variety of types of practice but were not taken at random.

For each practice the sampling procedure consisted in drawing a systematic random sample from the practice list, excluding all those under 16 years of age, using either the medical record envelopes or else an age–sex register.

The sampling was carried out in such a way as to obtain an initial sample of about 70–75 patients. The doctor was then asked to categorize these as 'middle' or 'working' class. The initial sample was then resampled in such a way as to obtain 45 names, 30 working class and 15 middle class. This was done because it seemed probable that there would be class differences in attitude to appointment systems. It was assumed that the middle-class patients would be generally in favour, and we wished to concentrate attention on the working-class patients who seemed likely to be more variable in their attitudes. In most of the tables the analysis has been carried out separately for the two classes so as to avoid weighting the results.[1] (In one case the doctor said that the whole practice was working class, so that in this case the complete sample of 45 is categorized in this way.)

1. In some tables the two classes have simply been amalgamated.

Appendix V *Patient surveys*

1. Tables from the interview survey

NOTES

1. The totals when given in Tables 2–7 are the unweighted totals of respondents. The percentages were arrived at by the weighting process discussed in Appendix IV.

2. The marginal totals for any one classification sometimes vary slightly from table to table because, for example, a few respondents failed to answer certain questions.

Table 1A. *Proportion of respondents whose doctor made use of an appointment system—Standard region*

Standard region	Proportion of respondents with appointment systems[1]
Eastern	32·3%
South-west	30·5%
Southern	26·6%
Scotland	19·6%
South-east	19·1%
London	15·0%
Northern	14·8%
East and West Ridings	10·8%
Wales	9·8%
Midlands	8·7%
North-Western (Lancs.)	8·2%
East Midlands	6·3%
Over-all	15·6%

1. Standardized for class differences between regions.

Table 1B. *Proportion of respondents whose doctor made use of an appointment system—Social grade*

Social grade[1]	Proportion of respondents with appointment systems
A+B	19·3%
C1	19·2%
C2	14·4%
D+E	13·3%
Over-all	15·6%

1. See Table 5.6 for definition of social grades.

Table 2. *Past frequency of appointment making—Use of telephone at home*

Appointments made	Respondents with use of phone	Respondents without use of phone	All respondents
Always/usually	77%	59%	64%
Sometimes/hardly ever	7%	10%	9%
Never	16%	31%	26%
Totals[1]	73 (100%)	174 (100%)	247 (100%)

1. Totals on which percentages in corresponding column based.

Table 3. *Length of time respondents registered with their present doctor—Whether or not they visited their doctor in previous twelve months*

	Visited doctor in previous twelve months			
Registered	Yes	No	Don't know (number)	All respondents
Less than one year	5%	5%	1	5%
More than one year	90%	93%	3	91%
Don't know	5%	2%	0	4%
Totals[1]	247 (100%)	74 (100%)	4	325 (100%)

[1] Totals on which percentages in corresponding columns based.

Table 4. *For those whose doctor used an appointment system. Past frequency of making appointments—Future frequency of making appointments*

In past appointments made	In future appointments would be made: Always/ usually	Sometimes/ hardly ever	Never	Totals[1]
Always/usually	97%	3%	0	161 (100%)
Sometimes/hardly ever	42%	58%	0	23 (100%)
Never	27%	34%	39%	63 (100%)

1. Totals on which percentages in corresponding rows are based.

Table 5. *For those whose doctor used an appointment system. Future frequency of making appointments—Length of time appointment system had been running*

Length of time appointment system running	In future appointments would be made: Always/ usually	Sometimes/ hardly ever	Never	Totals[1]
Less than one year	79%	12%	9%	65 (100%)
More than one year	78%	14%	8%	175 (100%)
Did not know	59%	28%	12%	77 (100%)

1. Totals on which percentages in corresponding rows are based.

Table 6. (*a*) *For those whose doctor used an appointment system. Future frequency of appointment making—Use of telephone at home*

Appointments would be made	Respondents with use of phone at home	Respondents without use of phone at home	All respondents
Always/usually	73%	74%	74%
Sometimes/hardly ever	19%	16%	17%
Never	8%	11%	10%
Totals[1]	92 (100%)	225 (100%)	317 (100%)

1. Totals on which percentage in corresponding columns based.

Table 6. (cont.)

(b) For those whose doctor did not *use an appointment system. Future frequency of appointment making—Use of telephone at home*

Appointments would be made	Respondents with use of phone at home	Respondents without use of phone at home	All respondents
Always/usually	75%	61%	64%
Sometimes/hardly ever	17%	25%	23%
Never	8%	14%	13%
Totals[1]	385 (100%)	1,364 (100%)	1,749 (100%)

1. Totals on which percentage in corresponding columns based.

Table 7. *(a) For those whose doctor used an appointment system. Attitude of respondents to appointment system—Telephone*

Attitude	Use of telephone		All respondents
	Yes	No	
In favour	83%	77%	79%
Neutral	10%	12%	11%
Against	7%	11%	10%
Totals[1]	95 (100%)	230 (100%)	325 (100%)

(b) For those whose doctor did not *use an appointment system. Attitude of respondents to appointment system—Telephone*

Attitude	Use of telephone		All respondents
	Yes	No	
In favour	75%	64%	67%
Neutral	17%	22%	21%
Against	8%	14%	13%
Totals[1]	401 (100%)	1,414 (100%)	1,815 (100%)

1. Totals on which percentages in corresponding columns based.

2. Tables from the postal survey

Table 8. *For those whose doctor used an appointment system. Past frequency of appointment making. (For those who visited their doctor in previous twelve months)*

Appointments made	Respondents' social class[1]		
	Middle	Working	All
Always/ usually	76%	54%	60%
Sometimes/ hardly ever	3%	11%%	9%
Never	21%	35%	31%
Totals[2]	29 (100%)	81 (100%)	110 (100%)

1. Doctor's assessment.
2. Totals on which percentages in corresponding columns based.

Table 9. (*a*) *For those whose doctor used an appointment system. Future frequency of appointment making*

Appointments would be made	Respondents' social class[1]		
	Middle	Working	All
Usually	90%	71%	75%
Not usually	10%	29%	25%
Totals[2]	31 (100%)	103 (100%)	134 (100%)

(*b*) *For those whose doctor did* not *use an appointment system. Future frequency of appointment making*

Appointments would be made	Respondents' social class[1]		
	Middle	Working	All
Usually	47%	41%	43%
Not usually	53%	59%	57%
Totals[2]	59 (100%)	107 (100%)	166 (100%)

1. Doctor's assessment.
2. Totals on which percentages in corresponding columns based.

Table 10. (*a*) *For those whose doctor used an appointment system. Attitude towards appointment system*

Attitude towards appointment system	Respondents' social class[1]		
	Middle	Working	All
In favour	94%	74%	79%
Neutral	0	0	0
Not in favour	6%	26%	21%
Totals[2]	31 (100%)	105 (100%)	136 (100%)

(*b*) *For those whose doctor did* not *use an appointment system. Attitude towards appointment system*

Attitude towards appointment system	Respondents' social class[1]		
	Middle	Working	All
In favour	54%	45%	48%
Neutral	3%	2%	2%
Not in favour	43%	53%	49%
Totals[2]	61 (100%)	113 (100%)	174 (100%)

1. Doctor's assessment.
2. Totals on which percentages in corresponding columns based.

Table 11. *For those with use of appointment system who had visited their doctor in previous twelve months. Past frequency of making appointments—Time taken to travel between home and surgery by usual mode of travel*

Appointments made	Time to travel		
	5 min. or less	6–15 min.	over 15 min.
Always/ usually	56%	70%	48%
Sometimes/ hardly ever	7%	8%	15%
Never	37%	23%	37%
Totals[1]	27 (100%)	53 (100%)	27 (100%)

1. Totals on which percentages in corresponding columns based.

Table 12. (*a*) *For those whose doctor used an appointment system. Future frequency of making appointments—Time taken to travel between home and surgery by usual mode of travel*

Appointments would be made	Time to travel		
	5 min. or less	6–15 min.	Over 15 min.
Usually	85%	74%	72%
Not usually	15%	26%	28%
Totals[1]	33 (100%)	65 (100%)	32 (100%)

(*b*) *For those whose doctor did* not *use an appointment system. Future frequency of making appointments—Time taken to travel between home and surgery by usual mode of travel*

Appointments would be made	Time to travel		
	5 min. or less	6–15 min.	Over 15 min.
Usually	39%	48%	35%
Not usually	61%	52%	65%
Totals[1]	61 (100%)	81 (100%)	23 (100%)

1. Totals on which percentages in corresponding columns based.

Appendix VI *The data collected in the experimental studies*

We consider here some of the more technical points arising from the data collection undertaken for the experimental studies and described in Chapter 6. Some of the detailed tables discussed in that chapter are presented at the end of this appendix.

1. Definitions

Even such apparently simple concepts as 'appointment', 'new', or 'repeat' consultation, and so on need rather careful definition in a study of this kind. It is even more important to pay attention to this problem when attempting to amalgamate or compare the results of different studies.

The definitions we adopted were as follows.

A patient-requested consultation was one in which the patient came to see the doctor without having been told to do so by the doctor or one of his partners. If any other person (e.g. factory medical personnel, school-teacher, parent, etc.) advised the patient to attend then it should nevertheless have been included in this category.

A doctor-requested consultation was one in which the patient saw the doctor at the request of the doctor or one of his partners.

Appointments made. In calculating the number of appointments made the following rules were set out:

(*a*) Appointments made during a surgery session for that same surgery session should *not* be counted as appointments for the purposes of the study.

(*b*) An appointment cancelled *before* the relevant surgery starts should be excluded from the total number of appointments made.

The definition of an *appointment system* used in the surveys is given in Chapter 6.

Normal weeks

A problem in interpreting some of the data collected was that it was sometimes incomplete, either because a doctor was ill or on holiday or because certain surgeries had been omitted from the data collection for unknown reasons. It therefore seemed advisable, in order to avoid gross anomalies in the results, to include only data relating to weeks categorized as 'normal'. This term was rather loosely defined as meaning that the total number of surgeries held during the week was about the usual number for the practice at that time and that each doctor had done roughly his usual share. One possibility arising from this procedure is that it might have led to various sorts of bias. This may have occurred but we have worked on the assumption, which is probably reasonable, that the only likely effect is that over-all work-load is over-estimated (and possibly in consequence the average length of a consultation is underestimated). It seems reasonable to suppose that, in particular, comparisons between periods before and after the appointment system are unaffected.

2. The types of record collected

As described in Chapter 6 two different types of record were collected.

1. Over a period of weeks or months, usually for about one week in four, each doctor participating kept a record of all patients seen during ordinary consulting sessions and at home, whether each consultation was requested by the doctor or the patient, and the number of appointments made and kept. Scheduled and actual time of surgeries were also recorded.

In the tables based on these data the times to which the figures relate are given as 5–16 weeks before appointment system, 0–4 weeks before, etc. For different practices these periods will relate to different months of the year; but for any one practice the same months are covered in every such table, and these are indicated in Table 1 of this Appendix.

2. The second type of data consisted of records of arrival and consultation times for every patient seen during sample periods of a week. These weeks are described in the tables as 'just before', 'just after', and 'several months after' the appointment system. Again this means different things for different practices but for all practices the following statements hold:

'Just before' means between 1 and 7 weeks before the appointment system started.

'Just after' means between 3 and 9 weeks after the appointment system started.

'Several months after' means between 17 and 51 weeks after the appointment system started.

3. Difficulties in the interpretation of the tables

1. One reason for not regarding the figures in this report as necessarily being an adequate measure of work-load has been given at the end of Section 1 of this appendix. It should also be remembered that in one or two cases not all doctors in a partnership took part in the study and that in any case the records only related to the part of the practice carried out from the premises where the appointment system was in operation (though very often this accounted for the whole practice).

2. Although we tried to standardize the definition of an 'appointment', as set out in Section 1 above, we were not entirely successful and it may be that some of the high percentages of patients coming by appointment result from 'casual' patients being given the first free appointment time and recorded as having made an appointment. This may also lead to an underestimate of the proportion of defaulters.

3. The time of arrival of a patient at the surgery may sometimes have been recorded as later than it actually was, because there may have been a delay, due to the presence of other patients, between the actual time of arrival and the time the receptionist completed his record. In some cases also, patients may have arrived before the beginning of the surgery and been recorded as arriving *at* or soon after the beginning. These eventualities would lead to an overestimate of unpunctuality. They would also give an underestimate of waiting-times, but this would be expected to affect both pre- and post-appointment system periods, not necessarily equally but perhaps approximately so.

Table 1. *Numbers of surgery attendances and home visits per week*[1] *for each practice during various periods. Each pair of figures is followed by the month to which it relates (or the middle one if several months are covered)*

Practice		Before appointment system		After appointment system		
		5–16 weeks before	0–4 weeks before	0–4 weeks after	5–16 weeks after	17 or more weeks after
A	Surgery	359	360	—	390	351
	Home	167	139	—	131	157
		(March)	(May)		(June)	(Dec.)
B1	Surgery	—	371	327	377	426
	Home	—	180	191	207	187
		—	(Nov.)	(Dec.)	(Feb.)	(April)
B2	Surgery	—	95	90	91	96
	Home	—	42	41	45	49
		—	(Nov.)	(Dec.)	(Feb.)	(April)
C	Surgery	157	158	—	145	140
	Home	35	23	—	27	38
		(March)	(May)		(Aug.)	(Dec.)
D	Surgery	183	173	131	130	128
	Home	47	38	28	33	25
		(March)	(April)	(May)	(June)	(Sept.)
E	Surgery	—	439	311	261	277
	Home	—	183	173	119	141
			(May)	(June)	(July)	(Oct.)
F	Surgery	78	84	—	83	—
	Home	53	36	—	50	—
		(Aug.)	(Sept.)		(Nov.)	
G	Surgery	—	383	—	324	—
	Home	—	237	—	212	—
			(Dec.)		(Jan.)	
H	Surgery	—	255	231	239	258
	Home	—	159	139	152	77
			(Nov.)	(Dec.)	(Jan.)	(Sept.)
I	Surgery	—	202	326	—	284
	Home	—	59	76	—	46
			(Sept.)	(Oct.)		(Sept.)

1. These figures refer to 'normal weeks'; see definition on p. 177.

Table 2. *Average number of surgery hours*[1] *per week for each practice, and ratio of this to* scheduled *surgery hours*

	Surgery hours per week					Ratio of actual to scheduled surgery hours				
	Before appointment system		After appointment system			Before appointment system		After appointment system		
Practice	5–16 weeks before	0–4 weeks before	0–4 weeks after	5–16 weeks after	17 or more weeks after	5–16 weeks before	0–4 weeks before	0–4 weeks after	5–16 weeks after	17 or more weeks after
A	36	38	—	39	36	1·6	1·7	—	1·6	1·6
B1	—	50	47	51	47	—	1·2	1·2	1·3	1·3
B2	—	13	10	10	11	—	1·3	1·0	1·0	1·1
C	14	14	—	16	16	1·4	1·4	—	1·6	1·6
D	22	—	—	—	19	1·6	—	—	—	1·0
E	—	40	32	30	34	—	1·4	1·3	1·3	1·3
F	10	10	—	12	—	1·2	1·2	—	1·1	—
G	—	30	—	34	—	—	1·2	—	1·4	—
H	—	30	29	31	32	—	1·2	1·1	1·1	1·2
I	—	20	37	—	26	—	1·3	1·4	—	1·2

1. These figures refer to 'normal weeks', see definition on p. 177.

Table 3. *Number of surgery attendances for each practice during weeks for which time-slips were collected*

Practice	Just before appointment system	Just after appointment system	Several months after appointment system
A	357 (May)	415 (June)	364 (Feb.)
B1	385 (Nov.)	373 (Jan.)	—
B2	116 (Nov.)	90 (Jan.)	—
C	144 (May)	137 (June)	147 (Jan.)
D	169 (April)	129 (June)	123 (Oct.)
E	392 (May)	330 (June)	288 (Sept.)
F	101 (Sept.)	96 (Nov.)	—
G	358 (Dec.)	386 (Jan.)	438 (Nov.)
H	211 (Nov.)	237 (Jan.)	247 (Sept.)
I	203 (Oct.)	—	297 (Oct.)
J	281 (Feb.)	261 (June)	—

Table 4. *Percentage of each doctor's surgery consultations which were requested by the doctor himself*

		Before appointment system		After appointment system		
Practice	Doctor	5–15 weeks before	0–4 weeks before	0–4 weeks after	5–16 weeks after	17 or more weeks after
A	1	39	38	—	37	42
	2	39	44	—	41	42
	3	43	36	—	35	35
B1	4	—	55	53	53	56
	5	—	54	51	49	60
	6	—	56	42	53	55
	7	—	50	44	46	49
	8	—	43	37	25	17
B2	9	—	37	41	43	28
C	10	35	37	—	40	32
D	11	16	3	6	13	26
	12	23	15	30	19	26
E	13	—	29	46	35	33
	14	—	46	61	56	56
	15	—	38	39	43	47
F	16	30	41	—	28	—
G	17	—	40	—	64	—
	18	—	39	—	41	—
	19	—	39	—	48	—
H	20	—	45	57	57	49
	21	—	35	38	37	25
	22	—	45	40	48	46
	23	—	23	40	39	24
I	24	—	44	50	—	43
	25	—	41	65	—	56
	26	—	37	49	—	42
	27	—	33	34	—	44

Table 5. *Patient punctuality for each practice taking part in the experimental studies*

Practice	No. of weeks after appointment system started	Percentage of patients who were							No. of patients coming by appointment	No. of patients coming without appointment
		More than 25 min. early	16–26 min. early	6–15 min. early	5 min. early to 4 min. late	5–14 min. late	15–24 min. late	25 or more min. late		
A	4	1·4	4·7	29·6	54·2	9·2	0·3	0·6	358	57
	37	3·2	5·4	33·2	50·4	7·4	0·3	0	349	15
B1	5	2·5	3·3	28·7	52·7	11·3	1·1	0·4	275	98
B2	5	0	4·1	26·5	59·2	10·2	0	0	49	41
C	4	0·8	5·1	24·6	56·8	11·0	0·8	0·8	118	19
	34	1·6	3·9	24·2	49·2	18·0	1·6	1·6	128	19
D	5	1·1	2·2	17·4	69·6	8·7	1·1	0	92	37
	24	1·8	1·8	18·9	68·5	9·0	0	0	111	12
E	3	0	0·7	19·3	73·1	6·9	0	0	290	40
	17	0·8	1·9	22·6	66·7	7·3	0·4	0·4	261	27
F	7	0	1·3	18·4	64·5	11·8	2·6	1·3	76	20
G	4	1·7	4·7	35·5	50·2	7·4	0·7	0	299	87
	46	3·0	9·4	37·3	44·4	5·4	0·5	0	405	33
H	5	1·0	4·0	25·4	54·7	14·4	0·5	0	201	36
	35	0·9	2·1	22·7	63·9	9·4	0·4	0·4	233	14
I	5	2·5	8·0	30·7	47·9	8·4	2·5	0	238	59
J	9	2·3	4·1	22·2	54·8	14·5	2·3	0	221	40
All practices combined		1·7	4·4	27·6	56·0	9·3	0·8	0·2	3,704	654

Table 6. *Percentages of patients waiting more than various lengths of time, before and after the appointment system*

Practice	Percentage waiting more than 15 min.			Percentage waiting more than 30 min.			Percentage waiting more than 60 min.		
	Just before appointment system	Just after appointment system	Several months after appointment system	Just before appointment system	Just after appointment system	Several months after appointment system	Just before appointment system	Just after appointment system	Several months after appointment system
A	80	40	53	58	14	16	22	0·4	0·5
B1	77	54	—	50	19	—	12	3	—
B2	77	31	—	30	3	—	0	0	—
C	64	30	35	31	3	7	3	0	0
D	72	10	17	38	2	3	7	0	0
E	31	12	12	9	0·3	0·7	0	0	0
F	76	26	—	39	7	—	18	0	—
G	61	26	23	27	5	4	0·8	0·6	0·2
H	76	67	51	49	30	17	0	0·4	0·4
I	89	—	30	61	—	9	11	—	0
J	76	48	—	53	12	—	16	0·4	—

Table 7. *Maximum and average number of patients in waiting-room at various times after the start of a surgery session, just before and just after the start of the appointment system*

Practice	No. of doctors consulting	Minutes after start of surgery	Average no. in surgery		Maximum no. in surgery	
			Just before start of appnt. system	Just after start of appnt. system	Just before start of appnt. system	Just after start of appnt. system
A	2	10	14·0	3·6	22	6
		30	11·8	4·4	21	9
		50	11·8	4·5	21	8
B1	3	10	10·9	5·0	17	10
		30	9·6	5·6	16	14
		50	8·6	5·6	19	10
B2	1	10	3·8	1·9	7	3
		30	3·4	1·9	5	5
		50	3·1	1·6	6	4
C	1	10	3·0	1·1	5	4
		30	3·4	1·2	7	2
		50	3·5	2·0	11	4
D	2	10	5·5	1·8	7	4
		30	5·3	2·2	8	3
		50	5·5	0·8	8	3
E	2	10	5·4	2·1	15	4
		30	5·2	2·3	16	7
		50	2·9	1·7	11	4
F	1	10	3·8	1·0	6	3
		30	3·9	1·1	10	4
		50	4·6	0·8	14	2
G	2	10	8·8	4·5	18	10
		30	7·1	2·8	18	5
		50	5·4	4·0	15	8
H	1	10	4·8	0·9	8	2
		30	4·2	2·4	8	4
		50	4·3	2·9	7	4
H	2	10	4·7	3·4	12	5
		30	5·3	4·8	14	7
		50	5·3	3·4	11	6
I	2	10	9·2	2·4[1]	12	5[1]
		30	8·5	2·6[1]	15	5[1]
		50	6·5	4·3[1]	13	10[1]
J	3	10	8·5	4·0	11	5
		30	13·0	5·3	15	9
		50	13·0	5·8	16	8

1. Fifty-one weeks after appointment system started.

Table 8. *Mean and standard deviation for length of surgery consultations. Results for thirty-one doctors for whom each consultation was timed for periods of a week before and after the introduction of an appointment system*

		Means			Standard deviations[1]		
Practice	Doctor	Just before appnt. system	Just after appnt. system	Several months after appnt. system	Just before appnt. system	Just after appnt. system	Several months after appnt. system
A	1	4·3	4·1	3·4	3·2	3·8	3·5
	2	6·4	6·3	6·5	4·5	3·5	2·9
	3	5·8	5·7	5·3	3·7	3·2	2·9
B1	4	5·7	7·9	—	3·4	4·7	—
	5	4·6	4·9	—	2·3	2·6	—
	6	8·0	7·4	—	5·3	3·3	—
	7	6·3	6·1	—	3·5	4·6	—
	8	6·6	8·2	—	3·6	4·8	—
B2	9	7·1	6·0	—	2·9	3·0	—
C	10	4·7	5·5	5·5	3·1	3·3	4·2
D	11	5·6	6·6	5·8	4·2	6·1	4·3
	12	6·6	6·5	6·7	5·2	3·8	4·5
E	13	5·6	5·2	6·1	4·1	4·8	4·1
	14	4·6	5·3	5·7	4·4	3·8	3·7
	15	4·6	4·8	5·9	3·2	3·3	3·9
F	16	5·3	6·3	—	4·0	3·9	—
G	17	3·3	2·9	3·3	2·0	2·0	1·7
	18	3·0	3·8	4·5	1·9	2·6	3·9
	19	4·5	4·7	4·2	2·8	2·8	2·6
H	20	6·6	6·1	6·3	3·6	3·6	3·3
	21	7·3	6·2	7·9	4·5	3·7	4·4
	22	6·5	7·4	7·7	3·5	3·9	4·1
	23	—	7·4	7·2	—	5·2	3·7
I	24	5·8	—	3·8	2·7	3·5	1·8
	25	6·5	—	5·1	2·9	5·0	4·2
	26	5·2	—	5·0	2·6	3·1	2·9
	27	7·3	—	5·6	4·4	2·6	3·1
J	28	6·3	5·5	—	4·4	3·0	—
	29	6·0	6·8	—	3·4	4·7	—
	30	6·4	—	—	3·8	—	—
	31	6·1	7·0	—	4·0	5·6	—

1. The standard deviation is a measure of the 'spread' or variability of the consultation times about their mean.

Table 9. *Average length of consultation for each doctor, computed by dividing length of surgery sessions by number of patients seen*

NOTE. These averages will tend to be overestimates since surgery sessions include periods when no patient is seeing the doctor.

		Before appointment system		After appointment system		
Practice	Doctor	5–16 weeks before	0–4 weeks before	0–4 weeks after	5–16 weeks after	17 or more weeks after
A	1	4·7	5·3	—	4·7	5·0
	2	6·6	6·8	—	6·8	6·9
	3	6·6	7·2	—	7·1	7·2
B1	4	—	7·7	8·0	8·4	7·7
	5	—	6·3	7·2	6·6	5·9
	6	—	9·2	8·9	8·8	7·0
	7	—	8·8	9·4	8·9	6·5
	8	—	12·6	10·0	9·9	6·0
B2	9	—	8·2	6·5	6·5	6·6
C	10	5·2	5·2	—	6·5	6·7
D	11	6·8	—	—	—	9·6
	12	7·6	7·5	9·0	9·9	8·2
E	13	—	6·6	6·4	7·4	7·5
	14	—	4·9	6·3	6·4	6·9
	15	—	5·4	5·8	7·1	6·8
F	16	7·3	6·9	—	8·4	—
G	17	—	4·9	—	6·1	—
	18	—	4·3	—	6·3	—
	19	—	5·2	—	6·4	—
H	20	—	6·2	6·6	6·7	6·7
	21	—	7·0	8·7	8·0	7·6
	22	—	7·4	8·4	8·4	8·3
	23	—	7·7	7·8	8·2	6·9
I	24	—	5·9	6·8	—	4·9
	25	—	7·0	6·2	—	5·6
	26	—	5·3	5·7	—	5·7
	27	—	6·7	8·8	—	6·6

Appendix VII *Questionnaires and record sheets used in the study*

IN this appendix the various questionnaires and record sheets used for the surveys and experimental studies are described briefly together with an explanation of how they were used.

1. The survey among doctors using appointment systems

(This is described in detail in Chapter 3 and Appendix II.)

1. In the first instance a short questionnaire and explanatory letter were sent to a large random sample of partnerships (including single-handed doctors) simply asking for the addresses of all practice premises, the doctors working there (and in particular the name of the senior doctor) and whether or not an appointment system was used at each. We also enclosed a sheet setting out the definition of an appointment system which was to be used in this study. This is reproduced below.

DEFINITION OF APPOINTMENT SYSTEM

The appointment systems with which this study is concerned are those which satisfy the following criteria.

(i) They are used for some or all of the 'ordinary' surgery sessions, i.e. those which apply only to 'special' surgeries such as ante-natal sessions etc. are excluded.

(ii) Appointments are made in advance by telephone, post or personal contact.

(iii) A definite time is given, patients being asked to come at more or less regular intervals.

A system in which 'block bookings' are made, say, every quarter of an hour or half hour would also be included, but not one in which patients were simply asked to attend on a particular day or for a particular surgery session.

2. A further and very much longer questionnaire was sent to the senior partner of each practice where an appointment system was in operation. This was also accompanied by an explanatory letter.

This questionnaire covered the following topics:

(*a*) *Basic information about the practice*

Address
Number of doctors
Number of patients
Percentage of working-class patients
Type of area
Ancillary staff
Details of surgery sessions.

(*b*) *Basic information about the appointment system*

Date of introduction
Proportion of surgery sessions by appointment and whether attempt is made to see as many patients as possible by appointment
Ancillary help used for appointment system
Expenses in instituting the appointment system
Running expenses for appointment system.

(*c*) *Introduction of the appointment system*

Reasons
Steps taken to inform patients
Whether easy or difficult
Specific difficulties encountered.

(*d*) *Operation of the appointment system*

Telephone arrangements for making appointments
Arrangements for patients coming without an appointment.

(*e*) *Effects of appointment system on work-load*

Effect on number of home visits requested by patients
Effect on total home visits made
Effect on total number of patients
Evenness of work-load over week
Control of work distribution between doctors
Planning of doctors' time

Effect on tendency to seek medical care by:
Patients needing attention
Patients not needing attention
Receptionist's work-load
Load on telephone.

(*f*) *Patient attitude to appointment system (as assessed by doctor)*
Like or dislike appointment system generally
Understanding of system
Co-operation generally
Ability and inclination to make and keep appointments
Unpunctuality
Appreciation of being expected by doctor
Willingness to deal with receptionist
Dislike of using telephone
Dislike of paying for telephone
Feeling of barrier between doctor and patient.

(*g*) *Doctor's attitude to appointment system*
Satisfaction generally
Opinion of effect on:
Quality of work
Doctor/patient relationship
Amount of strain on doctor
Feeling of barrier between doctor and patient.

(*h*) *Estimates of quantitative effects of appointment system*
Percentage of consultations by appointment
Percentage of patient-requested consultations by appointment
Percentage of patients making appointments by telephone
Factors affecting percentage of consultations for which appointments are made
Patients' waiting-times.

2. Surveys among doctors not using appointment systems

Questionnaires were also sent to a further random sample of doctors in which we did not know whether or not an appointment system was in operation. These were intended to elicit the opinions and attitudes of doctors in practices without appointment systems, and the covering letter explained that they should be completed only by such

practices. Because we wished to ask rather a large number of questions, two separate questionnaires were drawn up dealing with different topics; each doctor in the sample received one or the other of these. The list below covers both sets of questions.

(*a*) *Basic information about the practice*

Address
Number of doctors
Number of patients
Number of surgery premises
Type of patient
Type of area.

(*b*) *Aspects of practice organization*

Overcrowding at surgery sessions
Measures taken to alleviate this
Do patients wait for longer than is considered reasonable?

(*c*) *Knowledge of appointment systems*

Sources of information, e.g.:
- Meetings
- Articles
- Personal communication

Has appointment system ever operated in present practice?

(*d*) *Views on appointment system*

Whether desirable in general

Agreement or disagreement with the following alleged advantages and disadvantages first as regards own practice and secondly in general

- Improvement in quality of work
- Better doctor/patient relationship
- Less strain on the doctor
- Easier planning of doctor's time
- More even distribution of work-load over week
- Less waiting-time for patients
- Less waiting-space required
- Less risk of cross-infection
- Expenses disproportionate to advantages
- Extra work for doctor
- Extra work for ancillary staff
- Overloaded telephone.

(*e*) *Views expressed by patients*

(*f*) *Attitude towards introducing appointment system in present practice*

Whether considered

If considered and rejected, reasons for rejection, e.g.:

Existing arrangements satisfactory
Initial difficulties would be too great
Initial expenses
Running expenses
Staff would be overworked
Extra load on telephone
Barrier between doctor and patient
Patients likely to be unco-operative
Patients would dislike having to make appointments
Patients likely to be unpunctual.

(Doctors were asked to state which, if any, of these applied and whether there were other reasons.)

3. Questionnaires sent to doctors who had started and subsequently withdrawn an appointment system

(This part of the study is described in detail in Chapter 4 and Appendix III.)

The questionnaire used was a slightly modified version of that sent to doctors using an appointment system and described in Section 2 above. Questions relating to the reasons for withdrawal were inserted.

4. Surveys among patients

As described in Chapter 5, two surveys were carried out on the views of patients.

1. *Questionnaire used in interviewing a sample of the general population*

A few general questions were asked. These provided information on:

Address
Age
Sex
Marital status
Children
Availability of telephone
Number of visits to the doctor in the preceding year.

Respondents were also asked whether their doctor had an appointment system.

Those who said *Yes* were asked:

How long the appointment system had been running?
How long they had been registered with present doctor?
How often they had made an appointment when seeing doctor in past year?
How frequently they would expect to make appointments when seeing the doctor in future?
How they felt in general about appointment systems?

Those who said *No* when asked whether their doctor had an appointment system were asked:

If they would generally make an appointment if their doctor were to give appointments to those who wanted them.
Whether they had ever been to a doctor who used an appointment system, and if so how often they made appointments when visiting him.
How they felt in general about appointment systems.

2. *Questionnaires used in postal surveys among patients whose doctors were known to have or not to have an appointment system*

Both questionnaires contained questions on address, age, sex, occupation, marital status, children, availability of telephone at home and at work, method of travelling to surgery and length of time to get there, number of visits to the doctor in the preceding year, how long they usually had to wait, and whether they considered this too long or reasonable.

Those whose doctor had an appointment system were also asked:

Their opinion of the appointment system as it affected them personally.
How often they made an appointment when visiting the doctor.
Whether they did so by telephone, letter, calling at the surgery or asking someone else to call.
Whether they had objections to telephoning for an appointment and what these were.
Whether they intended to make an appointment next time they had to go to the doctor.

Whether they had ever asked the doctor to visit them at home because of the length of time they expected to wait at the surgery, either before or after the introduction of the appointment system.

Those whose doctor did not have an appointment system were asked:

Whether they were in favour or not in favour of having an appointment system.

Whether or not, if they had the choice, they would prefer to attend by making an appointment.

Whether they had ever been to a doctor who used an appointment system.

Whether they had ever asked the doctor to visit them at home because of the length of time they expected to wait at the surgery.

5. The experimental studies

1. *General data on surgery sessions, numbers of consultations, etc.*

This information was collected for a number of weeks both before and after the start of the appointment system, sometimes for about one week in four rather than every week. The form used for this, the 'Weekly Record Sheet' covered the work of one doctor for one week. The following information was collected.

Scheduled and actual starting and finishing times of each surgery session.

Number of patients seen at each surgery session; (*a*) patient-requested ('new') consultations; (*b*) doctor-requested ('repeat') consultations.

Number of new and repeat home visits each day.

After the introduction of the appointment system information on the number of appointments made and kept was also recorded for each session.

2. *Detailed data on patient arrival and consultation times*

This information was collected for periods of one week before and one or two weeks during the appointment system. Each patient coming

to the surgery during these weeks was given a 'time-slip' on which was recorded, using a 'Chronostamp' (see Chapter 6):

His time of arrival
The time he saw the doctor
The time he left the doctor.

For consultations during the appointment system period the time of the appointment, if any, was also recorded.