Access to general practice and general practitioners by telephone: the patient's view

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SUMMARY. Postal surveys were conducted among samples of patients in four practices to determine accessibility of surgeries and general practitioners by telephone. Over half of the respondents reported being unable to get through to the surgery on their first attempt. Significant differences between practices were related to the number of patients served by each incoming line. Although all of the general practitioners involved were accessible to patients by telephone, only half of the respondents knew this. Significant differences in awareness levels between practices were related to policies and methods of disseminating this information. Satisfaction with the help received from doctors by telephone was uniformly high, but patients were less satisfied with the process of contacting a doctor, particularly where receptionists questioned callers about their problem. It is suggested that practices review the adequacy of their telephone systems against a recommended standard of one incoming line per 2500 patients and consider how information about their telephone policies and services can be effectively communicated to patients. Reception staff may need additional guidance on managing telephone contacts with patients.

Keywords: telephone consultation; access to GP; patient attitude; practice information to patients.

Introduction

THE telephone, rather than the reception counter, has become the first point of contact with general practitioner services for most patients. Improved access to private telephones, now available to approximately 85% of households,[1] and the increasing use of appointment systems in particular,[2,3] have combined to increase telephone use by general practice patients. Despite the importance of the telephone in ensuring that services are accessible to patients, there has been little research in this area, and there are no guidelines to help practices plan their telephone systems. It has been suggested that many practices may be insufficiently equipped to cope with demand.[4]

While the majority of patient calls are managed solely by reception staff, one survey has shown that 97% of general practitioners are prepared to accept both emergency and non-emergency telephone calls from patients, and 20% set aside a regular period of time each day to do so.[4] Despite these high reported levels of availability, the mean number of telephone contacts with patients per doctor was found to be only four per day.[4] This contrasts sharply with many other developed countries, where telephone consultations are a routine feature of primary care.[5] They have been extensively studied and documented in North America, where mean numbers of 23 calls a day for physicians have been reported.[6–8] In Scandinavia, Swedish health centres manage about 20 million telephone consultations a year,[9,10] and Danish primary care physicians provide telephone advice under the terms of their contract (Pederson P, personal communication). In the United Kingdom, studies of the role of the telephone in general practice have largely been confined to its use outside surgery hours.[11–14]

The aim of this study was to examine patients' views and experiences of daytime telephone access to surgeries and doctors in four general practices. Patient surveys were designed to permit comparisons between patients' reported experiences of telephone access to surgeries and the provision of telephone lines; their awareness of doctor availability by telephone and different methods of disseminating information about this service in the surgery; and their satisfaction with telephone services and the practice's organizational systems.

Method

Postal surveys among patients were conducted between December 1990 and April 1991 as the final phase of a three-stage study designed to examine telephone use in British general practice. The earlier stages included a postal survey of 2000 randomly selected general practitioners,[4] and an interview survey with a sub-group of 50 general practitioners reporting extensive (nine or more) daily telephone contacts between themselves and patients.[15]

The patient surveys were conducted in the practices of four of the 50 doctors who had previously been interviewed.[15] The decision to concentrate on this group was dictated by the need to identify in a short period of time a large sample of patients who had consulted by telephone. This also restricted selection within the group to practices with at least three partners actively involved in telephone work with patients. Further practical criteria included the existence of a single telephone system and a common method of organizing and publicizing telephone access to practice partners. Practices where a high proportion of telephone contacts with a doctor were mandatory (for example, to secure a home visit) rather than patient-requested were considered unsuitable. Fifteen practices met these criteria. The four selected offered contrasts in telephone line provision, organization of telephone access to general practitioners and methods of informing patients about access. The characteristics of the four participating practices are outlined in Table 1. The social class of patients represents the doctors' subjective views.

In each of the four practices a postal survey of randomly selected patients aged 16 years or more was carried out. Patients were selected from the practices' computerized patient registers, by systematically sampling every nth individual from a random starting point. While this general survey would establish an overall picture of patients' perceptions and experiences of telephone access, it was thought unlikely that more than 20% would have had a recent telephone contact with their doctor. A second sample of patients with a recent known telephone contact with a doctor was therefore selected to provide additional data. Participating doctors logged their daytime telephone contacts with patients consecutively in order to identify this sample, retaining the right to omit callers if they felt that inclusion in the research would cause distress. Target sample sizes of 720 patients for the first survey and 300 for the second were set for each practice, based on assumed response rates of 70%.

A single postal questionnaire applicable to both samples was designed for the study. This was based on an extensive literature

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Table 1. Profile of participating practices.

Characteristics	Practice A	B	C	D
No. of partners	7	5	4	4
No. of patients	14 000	10 500	8000	7500
Predominant social class of patients	Middle	Mixed	Middle	Mixed
No. of patients per incoming telephone line	2700	3500	4000	2500
All telephone lines multipurpose	No	No	Yes	Yes
Arrangements for telephone access to GPs	Formal (bookable appointments)	Formal (specific time reserved)	Informal	Informal (preferred times)
Publicity for telephone access	Receptionist tells patients	Practice leaflet	Word of mouth	Poster
Open access surgeries	One per day	No	No	No
Repeat prescription requests by telephone	No	Yes	No	Yes
Routine screening of home visit requests	Yes	No	Yes	No

review and the results of previous surveys of telephone use among doctors. Pre-tests were carried out on two convenient samples of people: one group had contacted their surgery by telephone (but not their doctor), the other had contacted their doctor by telephone during the preceding six months. The initial mailings were followed up by two postal reminders to non-respondents.

Results from the surveys were analysed using the statistical package for the social sciences (*SPSS*). Chi square tests were used to test statistical significance.

Results

A total of 2051 of the 2887 patients (71.0%) returned usable questionnaires from the random survey. Response rates in individual practices were 511 (76.2%) in practice A, 465 (63.6%) in practice B, 524 (70.1%) in practice C and 551 (74.7%) in practice D. Response was biased towards women respondents (59.5% compared with 51.6% in the general population).[16]

Only three of the four practices were able to provide patients known to have made recent telephone contact with doctors. They contributed 916 patients, of whom 693 (75.7%) responded. An additional 259 patients among the random survey respondents had contacted a doctor by telephone during the preceding six months and were added to this database for analysis, making a total of 952 patients who had had recent telephone contact with a general practitioner. Practice B was unable to cooperate further because of the demands placed upon them by the concurrent imposition of the new contract for general practitioners. Practices A and D contributed 368 and 362, respectively and practice C contributed 222.

Access to surgeries by telephone

Of the 2033 respondents who answered the question, 1606 (79.0%) reported at least one daytime telephone contact with their surgery in the preceding 12 months. Two thirds (1371) claimed more than one contact and 20.8% reported more than five calls.

A higher proportion of women than men had telephoned (88.2% of 1210 versus 65.9% of 825, $\chi^2 = 147.1$, 1 df, $P<0.001$), particularly women caring for children or other dependent relatives (95.1% of 371 compared with 64.0% of 581 non-carer men, $\chi^2 = 164.9$, 3 df, $P<0.001$). Respondents aged 16–29 years were less likely to have telephoned than other age groups (71.5% of 376 compared with between 80% and 82% in other age groups ($\chi^2 = 17.2$, 4 df, $P<0.01$) and this was particularly marked among men aged 16–29 years, 83 (50.9%) of whom had called. Though differences between social classes were significant at the $P<0.001$ level, they were not large (82.0% of 1117 respondents in non-manual households had telephoned the surgery and 76.3% of 608 respondents in manual households). Further, only 84.1% of respondents could be classified.

In order to secure a more accurate picture of the timing and outcome of telephone calls to the surgery, only those respondents who claimed a well-remembered call in the preceding six months were asked about their most recent experience; 1378 respondents fell into this category. Of this group of respondents, 739 (53.6%) reported that their first attempt to telephone had been unsuccessful, mainly because of engaged lines. Table 2 compares the number of attempts needed to establish contact in each practice and demonstrates a clear and significant relationship between patient to telephone line ratios and accessibility. As the number of patients per line increased, the proportion of callers succeeding at their first attempt fell, and the proportion needing four or more attempts rose. Of those who could recall the time of their first attempt, between 45.7% and 54.8% of respondents reported that it was before 10.00 hours. The result of this influx of calls is illustrated in Table 2, where the relationship between patient to telephone line ratios and the result of patients' efforts to establish contact is more pronounced.

Difficulties experienced during patients' recent attempts to telephone their surgeries reflected the general perceptions of all respondents on the ease or difficulty with which telephone contact with their surgery could be established. Only 64 of the patients at practice C who responded to the question (13.8%) thought it very easy, compared with 151 (30.1%) of practice D patients. Conversely, 119 patients (25.6%) in practice C thought it generally fairly or very difficult to make contact, compared with 34 (6.8%) in practice D. Differences between practices were significant at the $P<0.001$ level.

Knowledge of doctor accessibility by telephone

Half of the total number of respondents (1025, 50.0%) knew that they could speak to a doctor by telephone, though 289 (28.2% of this group) believed it was necessary to insist in order to do so. Most of the remainder (943, 46.0%) did not know whether it was possible or not. Eighty patients (3.9%) believed it was not possible. There were differences between practices in levels of awareness: 265 out of 551 patients at practice D (48.1%) knew they could speak to a doctor by telephone without having to insist, compared with 186 out of 509 patients (36.5%) at practice A, 137 out of 465 (29.5%) at practice B, and 148 out of 523 (28.3%) at practice C. Similar numbers of patients at each practice thought that it was only possible to speak to the doctor if they insisted — 66 (12.0%) at practice D, 73 (14.3%) at practice A, 72 (15.5%) at practice B, and 78 (14.9%) at practice C.

Table 2. Number of attempts needed to establish contact in each practice overall, and to establish contact before 10.00 hours, by ratio of number of patients to number of telephone lines.

	% of patients (patient:line ratio)			
	D (2500:1)	A (2700:1)	B (3500:1)	C (4000:1)
Number of attempts [a]	(*n* = 375)	(*n* = 345)	(*n* = 266)	(*n* = 321)
1	*52.5*	*44.4*	*37.6*	*36.8*
2	*32.5*	*23.8*	*29.0*	*23.4*
3	*10.1*	*18.6*	*16.9*	*18.7*
4+	*4.8*	*13.3*	*16.5*	*21.2*
		χ^2 = 68.17, 9 df, *P*<0.001		
Number of attempts before 10.00 hrs [b]	(*n* = 199)	(*n* = 149)	(*n* = 144)	(*n* = 158)
1	*43.2*	*31.5*	*31.9*	*19.6*
2	*38.7*	*26.8*	*26.4*	*26.0*
3	*12.1*	*21.5*	*18.8*	*22.8*
4+	*6.0*	*20.1*	*22.9*	*31.7*
		χ^2 = 60.77, 9 df, *P*<0.001		

n = number of patients in group. [a]Excludes 71 missing cases. [b]Excludes 30 missing cases.

Levels of awareness and sources of knowledge were investigated. In practice A receptionists actively informed patients about doctor accessibility and offered telephone appointment slots where appropriate. One hundred and fourteen (22.5%) of their respondents indicated they had learned about doctor accessibility from receptionists. In the other practices only between 10.3% and 13.6% had learned from this source (*P*<0.001). In practice D, a poster in the waiting room had informed 89 (16.3%) of their respondents; this practice had the highest overall level of awareness. None of the other practices had a poster. Practice B's written guidance in their practice leaflet reached only nine of their respondents (1.9%). This practice, and practice C which took no steps to inform patients, had lower levels of awareness overall.

In all of the practices, there were common differences in levels of awareness regarding doctor accessibility by telephone among different groups of patients. Overall, more women than men knew (55.1% of 1210 women versus 42.4% of 825 men, χ^2 = 37.5, 3 df, *P*<0.001) and the difference between women carers and other groups was particularly marked (69.3% of 371 women carers versus 38.2% of 581 men non-carers, χ^2 = 98.2, 9 df, *P*<0.001). Respondents with a longstanding illness or disability were more likely to know about doctor accessibility by telephone than those without (65.3% of 432 versus 46.2% of 1579, χ^2 = 52.1, 3 df, *P*<0.001). While only 31.9% of 376 16–29 year olds knew about doctor accessibility, between 54% and 58% of those in other age groups were aware of it (*P*<0.001).

The 369 patients who believed it was not possible to speak to a doctor or that it was possible only if they insisted were asked why they thought this was the case. From pre-coded categories 206 respondents (55.8%) selected 'the receptionist does not let you'. The next most frequently chosen category, 'the doctor is never available', was selected by 82 respondents (22.2%). Inter-practice differences were not statistically significant.

Making use of telephone access to doctors

Four hundred respondents to the random survey (19.5%) reported having asked to speak to a doctor on the telephone during the preceding 12 months. However, there was no obvious relationship between levels of awareness and telephone calls to doctors. Although 60.1% of practice D respondents were aware of doctor accessibility, only a third of these patients (106) had telephoned the doctor. In contrast, 44.9% (209) of practice B patients were aware of doctor accessibility, but 93 of these patients (44.5%) had telephoned. Of patients who reported speaking to a doctor by telephone in the preceding year 225 (56.3%) said they had done so only once; 25 callers (6.3%) claimed to have made four or more calls.

Patients who had telephoned a doctor differed significantly from those who had not in terms of sex, age, marital status, presence of a longstanding illness/disability and their role as a carer. However, similar differences had also been found between patients who knew and patients who did not know about doctor accessibility by telephone. When knowledge of access was used as a control variable, there were no significant differences by sex, age or marital status in the extent to which aware patients telephoned the doctor. Differences between patients with and without longstanding illness/disability and between carers and non-carers remained significant. Not only were those with a longstanding illness/disability and carers more likely to know they could telephone, they were also more likely to use that knowledge (Table 3). This was the case in each of the practices surveyed.

Knowledge and use of telephone access to a doctor were also closely related to face to face consultation rates. While only 36.0% (243) of the respondents who had not seen a doctor in the

Table 3. Knowledge of and use of telephone access to general practitioners among patients with and without a longstanding illness or disability, and among men and women carers and non-carers.

		Patient knowledge of GP telephone access		
		Does not know	Knows but has not telephoned	Has telephoned
Presence of longstanding illness/disability				
Yes (*n* = 423)		*35.5*	*33.8*	*30.7*
No (*n* = 1568)		*54.2*	*28.8*	*17.0*
			χ^2 = 57.53, 2 df, *P*<0.001	
Carer of child and/or ill or disabled person				
Women:	Yes (*n* = 368)	*30.7*	*33.7*	*35.6*
	No (*n* = 812)	*51.7*	*30.7*	*17.6*
Men:	Yes (*n* = 230)	*47.0*	*33.5*	*19.6*
	No (*n* = 574)	*62.4*	*24.6*	*13.1*
			χ^2 = 115.22, 6 df, *P*<0.001	

n = number of patients in group.

preceding six months were aware that they could telephone, and only 7.3% (49) had done so, among patients with five or more face to face consultations 77.4% (89) were aware and 51.3% (59) had done so. Since only 38.8% of telephone contacts resulted in a face to face consultation this relationship is unlikely to result simply from the outcome of telephone contacts. The pattern of increasing awareness and use of telephone contact with increasing face to face consultation rates was similar and statistically significant at the $P<0.001$ level in all four practices.

Selected telephone users survey

In order to examine the process of contacting a doctor by telephone in greater detail, a sub-group of respondents to both the telephone users survey and the random survey was selected. These 712 respondents had all initiated a call to a doctor during the preceding six months in one of the three fully participating practices. Over half the patients were put through either immediately (148, 20.8%) or after being questioned by a receptionist (238, 33.4%). In a small number of cases (42, 5.9%) the patient was told the doctor would call back. Of the remainder 263 (36.9%) were asked to call again later (data for 21 patients could not be analysed).

Over half the respondents (371, 52.1%) considered their call was an emergency, and these patients were significantly more likely to be put through: 63.6% of 371 reached the doctor on their first attempt, compared with 47.2% of 303 non-emergency callers, $\chi^2 = 21.04$, 3 df, $P<0.001$ (data missing for 38 patients). Over one third of patients who considered that their call was an emergency were not connected at their first attempt, and these patients were no more likely than others to succeed on their second attempt. For emergency and non-emergency callers similar percentages had to make three or more attempts before reaching a doctor (8.2% and 9.9%, respectively).

Patients who had to make a number of attempts were considerably less satisfied than others with the way in which their request to speak to a doctor had been managed. However, it was apparent that patients who had reached a doctor on their first attempt but had been questioned by a receptionist were also less satisfied (Table 4). Despite the relatively small proportion expressing dissatisfaction, 17.6% of callers indicated it was generally fairly or very difficult to manage to talk to a doctor on the telephone during the day; a similar proportion (17.4%) said it was very easy.

Satisfaction with the help received from the doctor once contact had been made was almost universal. Only 2.4% of respondents reported any degree of dissatisfaction with the outcome of their telephone consultation.

Table 4. Patient satisfaction with outcome of requests to speak to a doctor.

	% of patients reporting being		
Outcome of request[a]	Very satisfied	Satisfied	Dissatisfied
Put through without difficulty (n = 144)	*74.3*	*25.7*	*0*
Put through after questioning (n = 221)	*45.2*	*48.0*	*6.8*
Asked to call back once (n = 183)	*50.8*	*41.5*	*7.7*
Asked to call back twice or more (n = 58)	*24.1*	*58.6*	*17.2*
Told GP would call back (n = 39)	*66.7*	*28.2*	*5.1*

n = number of patients in group. [a]Excludes 67 patients who failed to answer questions. $\chi^2 = 69.64$, 8 df, $P<0.001$.

Discussion

The practices involved in this study represent high telephone use practices. Their policy towards patient–doctor telephone contacts and their atypically high numbers of such contacts[4] suggest that their general practitioners were among the most accessible of all general practitioners to their patients by telephone. Nonetheless, they differed in their line provision, the way in which they organized telephone services and the steps taken to inform patients. The experiences and views of their patients suggest that these factors do have an impact on patients. It seems reasonable to argue that any problems they experienced are likely to be more widely prevalent, and of a greater severity in less telephone-conscious practices.

Only one of the four practices involved had a higher than average patient to telephone line ratio,[4] yet all appeared to experience difficulty in managing the high volume of morning calls. The extent of the problem clearly increased as the patient to telephone line ratio rose. In practice A, restricting appointment requests to two of the five available lines may have exacerbated the problem. It appears that an earlier recommendation that practices handling 5000 or more patients per incoming line look carefully at their service[4] must be drastically revised: findings now suggest that one line per 2500 patients will not entirely eliminate the problem of engaged lines. Support for this has been provided in a two-practice study involving British Telecom monitoring equipment.[17] Given the implications for staffing levels (more lines requiring more staff), increasing provision beyond this point may not be economically viable and strategies to spread patients' calls more evenly throughout the day may also need to be considered.

This study suggests that even in practices with a high volume of telephone contacts, knowledge of doctor accessibility was limited among patients (though awareness was more widespread among those groups of patients most likely to benefit from it). The practice which took no particular steps to inform patients had only marginally less aware patients than the practice which publicized details in a leaflet. The small proportion of patients claiming to have learned about accessibility from this source calls into question the value of practice leaflets. A more detailed study of the content, distribution and impact of practice leaflets generally is indicated. A proactive policy of verbally informing patients seemed more successful, and the additional use of a poster reached a much higher proportion of patients. Several channels of communication may be needed to achieve maximum coverage. Greater awareness apparently does not result in excessive telephone use among patients, and might reduce inappropriately timed calls.

The role of reception staff, both in providing information and in facilitating telephone access to general practitioners requires further study. Among patients who believed they could not speak to a doctor or could do so only if they insisted, a majority perceived the receptionist and not the doctor to be the barrier. Further, patients who reported being questioned about their call by a receptionist were considerably less likely to be 'very satisfied' with the way their request was managed than those who were put through without questioning. The need to convince receptionists of their need to speak to a doctor may have contributed to the high proportion of patients claiming their call represented an emergency, an assessment which was apparently not always shared by the practice.

The characteristics of callers in all practices clearly reflected known differences in the characteristics of consulters.[18] The high proportion of women respondents in this study may have slightly inflated the number of telephone contacts reported since women consulted more often by telephone. Patients who might be expected to have greater need for medical advice, for example,

those with a longstanding illness or disability and those caring for dependents, appeared to make more use of telephone access than others. There was also a clear relationship between face to face consulting behaviour and seeking telephone advice. Since fewer than 40% of telephone contacts resulted in a face to face consultation, this relationship is unlikely to be a product simply of the outcome of telephone contacts. Within each practice there was a small core of heavily-dependent patients who consulted frequently both in person and by telephone. This suggests that telephone advice often forms part of an overall care package, rather than acting as a substitute for surgery consultations or home visits.

A future paper will address the issues of the reasons for, content, and outcome of telephone contacts. However, it appears that patients in these four practices who sought their doctor's help over the telephone were almost universally satisfied with the help they received.

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