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Patients' experiences and satisfaction with out-of-hours GP home visiting provided by a GP cooperative

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Background. Within the UK, patients place a fairly high value on the out-of-hours GP home visiting service. Although satisfaction with the range of out-of-hours services has been found to be high, little is known about patients' specific experiences of the home visiting services.

Objective. To investigate the satisfaction with, and experiences of, patients receiving a GP out-of-hours (OOH) home visit from a GP cooperative.

Methods. A postal questionnaire study sent to all patients receiving a home visit from a single cooperative. The questionnaire asked patients a range of questions about their experiences of the home visiting service that they received and also contained a validated satisfaction measure.

Results. The OOH home visiting services largely provide care for an older population, most of whom consider that they are either too ill to travel or have limited mobility. The majority (43%) of home visits are made during the daytime at weekends, with just 25% of visits made during the night-time. If the home visit was not available, 67% of patients stated that they would have phoned for an ambulance or gone directly to hospital. The majority of patients (87%) were satisfied with the overall home visiting service that they received; however, 32% of patients were dissatisfied with the time it took for them to see a doctor or a nurse.

Conclusions. Although the OOH services have received considerable criticism over the past 5 years, this study reveals that patients remain largely satisfied with the service and would have called 999 or gone directly to hospital if there had been no service.

Introduction

Over the past decade, there have been numerous changes to the ways in which the out-of-hours primary care services are delivered. It has been argued that these changes have been largely driven by an increasing demand for out-of-hours care, a change in GP attitude towards providing out-of-hours care and a need to reduce health care costs.¹ Many countries have opted for an increasing use of a telephone triage and telephone advice service, with the USA managing around a quarter of consultations in this way.²

Over the latter half of the 1990s, the UK experienced a rapid increase in the provision of services by general practice cooperatives,³ which were organizations owned by the GP principals working in the area. In a national postal survey of cooperatives, Jessop *et al.* found that the rising use of cooperatives had led to an increase in telephone advice and base consultations

and a reduction in home visits. A qualitative study of patients receiving telephone advice demonstrated that while patients appear to be satisfied with some aspects of telephone advice (ease of use, speed of response and reassurance received), they also expressed dissatisfaction when they expected a home visit as they felt that an accurate diagnosis could not be made, that they could not describe their symptoms over the phone and that it was more difficult to trust advice given over the phone.⁴

In Denmark, the out-of-hours services were centralized in 1992, with each county having a coordination centre that patients need to phone in order to receive either telephone advice, referral to a base unit or a home visit. This led to a decrease in the number of home visits, and although patient satisfaction of the new service was still high, there was considerable dissatisfaction about the reduction in the number of home visits.⁵ A postal questionnaire⁶ examined the

effects of the structural change on patient satisfaction in 1991, 1992 and 1995 and showed that there was a reduction in satisfaction (12.7% were dissatisfied in 1991 before the change, 27.7% immediately after and 19.1% in 1995), although this was less than the authors had expected.

While patient experiences reported in the literature suggests that they value the home visiting service, it is important to recognize that patients in different health care systems have varying views about the need for different aspects of the Primary care services. Indeed, a European survey of patients' priorities for different aspects of Primary Care revealed that patients in most countries, including Denmark, placed a low priority on the need for a GP home visit.⁷ The exception to this view was in Germany, where home visits were highly valued and the UK where home visits were rated as a medium priority.

The Dutch developed their own patient satisfaction questionnaire⁸ and showed that patients were satisfied with the home visiting arrangements out of hours but were least happy with nurse telephone advice.

In the UK, the introduction of a new GP contract in 2004 allowed GPs to opt out of providing out-of-hours (OOH) care. This led to a rapid growth of general practice cooperatives.³ Overall satisfaction with cooperative OOH services had been found to be high,⁹ with few differences in satisfaction between patients receiving the services from cooperatives compared with deputizing and practice-based arrangements.¹⁰ Little is known, however, about patients' specific experiences of receiving the home visiting service from cooperatives.

The aim of our study was to investigate patients' satisfaction with, and experiences of, receiving a GP home visit from a general practice cooperative. We present the results of a regional evaluation of the home visiting services provided by Thamesdoc.

Methods

This is a postal questionnaire study of Thamesdoc, a general practice cooperative that covers ~250 GP practices and a population of ~1 500 000 people in Surrey and North Hampshire.

Following ethical and research governance approval, all callers to Thamesdoc during the study period from 1 October to 21 December 2008 were asked by the call handlers whether they would consent to the patient being posted a questionnaire about the service, should their contact result in a home visit. Every week during the study, Thamesdoc supplied the researcher (SCB) with a list of consenting patients who received a home visit. Within 7 days of the home visit having taken place, the consenting patients were sent a questionnaire, along with a covering letter and a stamped addressed envelope. In an attempt to reduce bias from patients

not wanting to express negative views about the service to the service providers, the address on the return envelope was to an academic institution.

The postal questionnaire asked patients to answer the questions in relation to the last home visit that they had received. It contained a series of questions about their expectation and experiences of the out-of-hours services, including the reasons that they requested a home visit. It also contained a validated patient satisfaction measure developed by Salisbury *et al.*,¹¹ where the following seven questions about different aspects of the service were rated from very dissatisfied to very satisfied:

- Getting through on the telephone.
- The way the initial call was handled.
- The time waiting before seeing or speaking to a doctor or a nurse.
- The attitude of the doctor or nurse.
- The treatment advice given.
- Overall satisfaction with the service received.

If the patient was unable to complete the questionnaire, the main carer was asked to do this on their behalf. After 2 weeks, non-responders were sent a further questionnaire. We based our sample size calculation on the main outcome measure of overall satisfaction with the service. Glynn *et al.*⁹ report that 88% of patients are satisfied with the out-of-hours services provided by a cooperative service. Based on this expected level of satisfaction and a desire to have a 95% confidence interval (95% CI) of between 80% and 96%, we calculated that we would need 270 patients in our sample. We anticipated that we would get a response rate of ~55% to 60% and therefore needed to send the questionnaire to 500 patients.

The data were entered into SPSS for Windows (version 16.0) for analysis. Group comparisons for different aspects of satisfaction by gender were analysed using a chi-square test. Age was not normally distributed and therefore differences in satisfaction by age were analysed using a Mann-Whitney *U*-test. Statistical significance was accepted at 0.05 and inter-quartile ranges (IQRs) are reported for 25% and 75%. The remaining results are described using percentages and 95% CI.

Results

A total of 535 questionnaires were posted to people who had received a home visit. However, when we looked at the returned questionnaires, it was apparent that there were virtually no responses from patients residing in a nursing home (identified by the address). Therefore, we excluded all patients in nursing homes from the study. This resulted in a total of 425

questionnaires being sent to private home addresses and a total of 229 (54%) were returned completed.

Over the study period, 61% of the home visiting was undertaken for female patients ($n = 336$) and 39% for male patients ($n = 191$). There were 140 (61.1%) female respondents and 88 (38.4%) male respondents. One respondent did not state their gender. The age distribution of OOH home visiting was skewed towards the elderly, with a median age of 73 years (IQR 57–83 years).

Forty-seven patients (23.6%) contacted Thamesdoc after being advised to do so by NHSDirect, and the majority (78.7%) of these patients stated that they found the phone advice service very helpful. One hundred and fifty-seven (71%) respondents reported that they were very confident or confident about telephoning for help when their practice was closed; however, 25 (11.3%) said that they were hesitant or very hesitant to call the OOH service.

The majority of home visits were made at the weekend, between 08.00 hours and 18.00 hours ($n = 90$; 43.3%). Forty-six (22.1%) visits were made during week day evenings (20.30 hours to midnight), 30 (14.4%) during weekday night-time (midnight to 08.00 hours), 23 (11.0%) during weekend night-time (midnight to 08.00 hours) and 19 (9.1%) during the weekend evening (19.30 hours to midnight).

The main patient-reported clinical conditions requiring a home visit were lower respiratory infection (10.5%; $n = 24$), vomiting (8.7%; $n = 20$), upper respiratory infection (6.6%; $n = 15$), urinary tract infection (6.1%; $n = 14$), abdominal pain (6.1%; $n = 14$) and back pain (5.2%; $n = 11$) and a problem following a recent surgical procedure (4.7%; $n = 11$).

The home visit led to just over half (54.6%; $n = 125$) of the patients receiving some kind of treatment. Seventy-seven (33.6%) patients were provided with advice and reassurance, 30 (13.1%) were admitted to hospital and 7 (3.1%) were referred to a medical specialist. It was not possible to determine what had happened to 30 (13.1%) patients who received a home visit.

The main reasons stated for requesting a home visit were being too ill to travel (50.7% $n = 116$), being immobile or bed bound (17.0% $n = 39$) and having transport difficulties (10.0% $n = 23$). When asked what they hoped would happen as a result of their telephone call to the out-of-hours services, the large majority (72.5%; $n = 166$) stated that they wanted to receive a home visit. The remaining stated that they wanted to receive reassurance or advice (16.2%; $n = 37$), to receive treatment or a prescription (17.5% $n = 40$) or to go to hospital (4.4%; $n = 10$).

When asked what might have happened if the OOH home visiting service did not exist, 37.1% ($n = 85$) stated that they would have called 999, 29.7% ($n = 68$) would have gone directly to hospital and 25.3% ($n = 58$) would have waited for their doctor to

open. However, after receiving their home visit, only 30 patients (13.1%) were admitted to hospital.

Satisfaction surrounding the majority of the OOH home visiting service was reasonably high with 87.2% (95% CI 82.8–91.3) ($n = 197$) of respondents reporting that they were satisfied or very satisfied with the service that they received. However, only 68.4% (95% CI 62.4–74.5) ($n = 154$) of patients rated the time that they had to wait to see or speak to a doctor or nurse as something they were satisfied with. Gender and age were unrelated to all but one of the satisfaction measures (Table 1). The only area of possible age difference related to satisfaction with the attitude of the doctor, with those who were dissatisfied being younger than those who were satisfied ($P = 0.02$).

Discussion

As reported by others,¹² the OOH home consultations in our study were generally received by an older population. There were more females receiving home visits than males but this might have reflected some bias in the sample.

There has been much criticism of the OOH services since the new GP contract allowed and arguably encouraged GPs to opt out of providing this service;¹³ yet similarly to other studies investigating satisfaction with all the OOHs services,⁸ our study has demonstrated that overall patient satisfaction with the home visiting service is high.

Similarly to previous findings,^{14,15} we found that the main area of dissatisfaction concerned the time that patients had to wait to receive a home visit, although in contrast to McKinlay,¹⁵ we did not find that younger patients were more dissatisfied with this aspect of the service. Moreover, a greater proportion of patients in our study were less than satisfied (32%) with the time taken to receive the home visit than was reported by others (17%).⁹ During the busiest daytime periods (when call request volumes can be high) and overnight (when distance to travel can be >50 miles), delays sometimes exceeded the target time of <6 hours for non-urgent visits. In these situations, patients are telephoned to explain the reasons for the delay, to allow the doctor to have an update on the patient's clinical state and to reassure the patient. Importantly, the findings of our study show that in the absence of OOH home visiting services, 67% of the participants surveyed said that they would have presented to hospital and half of these would have called an ambulance. In reality, only 30 patients (13.1%) were admitted to hospital indicating that an absence of OOH services would undoubtedly lead to an increase in pressure at accident and emergency departments outside normal GP working hours.

Although earlier studies report that 95% of patients phoning the OOH services wanted to receive a home

TABLE 1 Satisfaction with out-of-hours home visiting by age and gender

	Satisfied	Dissatisfied/neutral	Mann–Whitney <i>U</i> /chi-square test ^{a,b}	<i>P</i>
Getting through on the telephone				
Median age (IQR)	73 (28)	77 (26)	<i>U</i> = 2013.00	0.68
Male <i>n</i> (%; 95% CI)	80 (90.9; 84.9–96.9)	8 (9.1; 3.1–15.1)	Chi-square = 0.007, df = 1	0.93
Female <i>n</i> (%; 95% CI)	125 (90.6; 85.7–95.4)	13 (9.4; 4.5–14.3)		
The way your initial telephone call was handled				
Median age (IQR)	73 (26)	77 (28)	<i>U</i> = 2063.50	0.84
Male <i>n</i> (%; 95% CI)	78 (90.7; 84.6–96.8)	8 (9.3; 3.2–15.4)	Chi-square = 0.000, df = 1	0.99
Female <i>n</i> (%; 95% CI)	126 (90.6; 85.8–95.5)	13 (9.4; 4.5–14.2)		
The waiting time to see or speak to a doctor or nurse				
Median age (IQR)	74 (25)	69 (33)	<i>U</i> = 4480.50	0.49
Male <i>n</i> (%; 95% CI)	60 (69.8; 60.1–79.5)	26 (30.2; 20.5–40.0)	Chi-square = 0.138, df = 1	0.71
Female <i>n</i> (%; 95% CI)	93 (67.4; 59.6–75.2)	45 (32.6; 24.8–40.3)		
The attitude of the doctor or nurse				
Median age (IQR)	74 (25)	60 (36)	<i>U</i> = 2538.00	0.02
Male <i>n</i> (%; 95% CI)	70 (83.3; 75.4–91.3)	14 (16.7; 8.7–24.6)	Chi-square = 0.002, df = 1	0.96
Female <i>n</i> (%; 95% CI)	113 (83.1; 76.8–89.4)	23 (16.9; 10.6–32.2)		
The explanation the doctor or nurse gave to you about your problem				
Median age (IQR)	73 (26)	66 (26)	<i>U</i> = 2395.00	0.29
Male <i>n</i> (%; 95% CI)	69 (83.1; 75.1–91.2)	14 (16.9; 8.8–24.9)	Chi-square = 1.529, df = 1	0.22
Female <i>n</i> (%; 95% CI)	121 (89.0; 83.7–94.2)	15 (11.0; 5.8–16.3)		
The treatment or advice you were given				
Median age (IQR)	73 (25)	69 (44)	<i>U</i> = 2211.50	0.15
Male <i>n</i> (%; 95% CI)	73 (85.9; 78.5–93.3)	12 (14.1; 6.7–21.5)	Chi-square = 0.106, df = 1	0.75
Female <i>n</i> (%; 95% CI)	118 (87.4; 81.8–93.0)	17 (12.6; 7.0–18.2)		
Overall, how satisfied were you with the service you received?				
Median age (IQR)	73 (25)	64 (33)	<i>U</i> = 2352.00	0.16
Male <i>n</i> (%; 95% CI)	74 (85.1; 77.6–92.5)	13 (14.9; 7.5–22.4)	Chi-square = 0.533, df = 1	0.47
Female <i>n</i> (%; 95% CI)	122 (88.4; 83.1–93.7)	16 (11.6; 6.3–16.9)		

Note that numbers of respondents are not the same for all areas of satisfaction. df, degrees of freedom.

^aMann–Whitney *U*-test for median age comparison.

^bChi-square tests used to compare proportion of males and females.

visit,¹⁴ we found that this was considerably less, with just three quarters stating this to be the reason for phoning. One explanation for this might be that patients are becoming more familiar with alternative methods of out-of-hours services and have come to accept that a home visit may not be the only option for providing care.

It has been shown that patients are reluctant to call the OOH services, with a study of patients who suffered a transient ischaemic attack being less likely to seek medical care if the attack occurred outside of the normal GP services opening times.¹⁶ In our study, we also found that around a third of patients reported being hesitant to call the OOH services. Clearly, our sample only represents those patients who actually phoned the OOH services but suggests that there is indeed some reluctance to utilize the OOH services.

A limitation to our study is the relatively poor response rate that was achieved, which means that we are only able to present the views and experiences of just over half of patients receiving a home visit. However, this level of response is comparable to other studies on patient satisfaction.⁹ Illnesses associated with dementia and managing the end of life process contribute significantly to the OOH workload but

appear to be under-reported in this study. It is possible that patients with these health needs make up a large proportion of the non-responders. However, our recruitment process meant that the only information that we had on non-responders was gender and home address.

We were also mindful of a potential bias in that the researcher (SCB) was himself a GP working for Thamesdoc at the time of the study. However, Thamesdoc employs several hundred GPs, each of whom contribute to the home visiting service and therefore, the researcher was only involved in perhaps two or three of the included home visits in the study. Moreover, the original request to be sent a questionnaire came from the call handlers, although this was followed up by a letter and the questionnaire sent from the researcher. The response to the questionnaire, however, was sent to the academic institution.

A further concern surrounds the use of patient satisfaction as our main outcome measure. Although we used a validated satisfaction questionnaire, we are mindful of the difficulties in capturing satisfaction of any health care provision, which as has been reported, is traditionally rated highly. In order to achieve a more sensitive measure, therefore, the satisfaction

questionnaire considered seven aspects of the service that could affect patient satisfaction. Measuring different aspects of a service, however, can also be problematic as patient evaluation of any component of a service might be affected by the importance that they ascribe to it. As home visiting is rated as a 'medium' priority by UK-based patients,⁷ it is likely that any satisfaction measure would capture negative and positive attitudes. In part, this is supported by our findings that patients reported negative experiences surrounding the time that they had to wait to receive the home visit, which is something that has also been reported by others.^{14,15} Moreover, Jung *et al.*,¹⁷ in a questionnaire-based study showed that patients were able to evaluate the services that they received without being heavily influenced by the salience of the specific aspect of the service. Of greater influence, according to Jung *et al.* was the time that elapsed between the consultation and the questionnaire. The patients in our study were sent their questionnaire within seven days of the consultation in an attempt to avoid measurement distortion through elapsed time.

Conclusions

Although the OOH services have been greatly criticized since being delivered outside of the normal GP service, the large majority of patients remain satisfied with the home visiting service that they have received. Nevertheless, there remains considerable dissatisfaction with the time taken to receive a home visit persists. Improvement in this aspect of the service, however, is likely to require increased resources. Without the OOH home visiting service, there would be an increased workload placed on the ambulance hospital accident and emergency services.

Declaration

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Ethical approval: Surrey Research Ethics Committee. (08/H1109/72).

Conflict of interest: AN and KB have no conflicting interests. SCB works for Thamesdoc as an independent contractor.

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