Nurse triage for house call requests in a Tyneside general practice: patients' views and effect on doctor workload

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SUMMARY

Background. Demand for consultations in primary care has risen recently, necessitating a change in working practices. As part of this process, the possible contribution of practice nurses in the telephone assessment of home visit requests merits attention.

Aims. To survey the views of our patients encountering our nurse triage system for home visit requests, set up in June 1995, and to plot its effect on the routine visiting workload of our doctors and thus their availability at the surgery.

Method. The outcome of each request was categorized as: doctor to visit (DV), surgery consultation with doctor (SC), nurse advice given and accepted (NA), or call passed to doctor for advice (DA). Frequency data from September 1995 to December 1996 were recovered. Questionnaires for self-completion were sent to all those requesting a routine weekday house call during two four-week periods in 1995 and 1996.

Results. Analysable activity data revealed 1764 house call requests, with 41% DV, 18% SC, 24% NA, and 8% DA. In the first survey, 121 questionnaires were sent out and 64 returned (59% response rate) and, in the second, the corresponding figures were 113, 85, and 75%. About 80% of respondents reported that they were satisfied with the help received from the nurse.

Conclusions. Nurse triage of house call requests has led to more efficient care for our patients, as we have increased the availability of surgery consultations by reducing the number of house calls made by our general practitioners.

Keywords: practice nurse; home visits; triage; patient beliefs; workloads.

Introduction

The introduction of the new contract for general practice in 1990 and the subsequent Patient's Charter, heralded a period when patient demand for doctor consultations in primary care has risen dramatically. In addition, as more and more aspects of health have been transferred from secondary care to general practice, methods of altering the current workload of general practitioners (GPs) have become imperative. Many changes in the traditional organization of general practice have resulted, including the widespread devolution of out-of-hours services to deputizing and co-operatives, less continuity of care with individual GPs, increased roles for practice nurses, and greater use of telephone consultations by doctors.

Nurse triage in accident and emergency units is now well established and has been reported in the literature, and the usefulness of telephone triage in out-of-hours primary care services is recognized by both users and providers. Research thus far concerning nurse triage by telephone has tended to focus on out-of-hours activity, and the potential for nurse triage of 'routine' house call requests has not been evaluated previously in United Kingdom (UK) general practice. Home visiting by GPs has been a very traditional and valued component of primary care, dating back far before the institution of the National Health Service, but this activity consumes much time that, in some cases, could be better used to improve the overall quality of service for patients. With a view to increasing our availability to patients in the surgery setting and thus raising effectiveness, we have set up a nurse triage service for 'routine' house call requests in our urban practice. This paper reviews the effect this policy has had on the number of visits conducted, the opinions expressed by our patients concerning the new service, and its consequence for the provision of good-quality care.

Method

Our fundholding practice is located in an urban area of Gateshead, with a list size of approximately 10,000 at the time of this research. Five and a half whole-time-equivalent GP principals, together with a full complement of nursing and other staff, work from recently modernized and converted premises using A4 records and an EMIS computer system. We participate in both undergraduate and postgraduate teaching, and one partner has a senior academic position at Newcastle University (KJ).

After an introductory three-month period starting in June 1995, house call requests received by telephone at the surgery between 08.30 and 10.30 were channelled through to one of our three experienced practice nurses for triage. The computerized record of the patient concerned was displayed during the telephone triage process to facilitate the consultation. In-house training, both before and during the progress of the service, was given to the nurses by the partners, and initially only the senior nurse (KW) performed the triage. Each house call request was dealt with in one of four ways: the request was accepted and a doctor visited, normally later on the same day; an appointment was given for a consultation with the doctor (again, normally later on the same day); nurse advice was given to the patient; or the caller was passed to the duty doctor for advice. Encounters were coded on the computer using these categories for later recall.

Data were analysed for the period September 1995 to December 1996 because, before then, not all house call requests triaged had been entered and coded on the computer. For comparative purposes, the average total number of home visits made by practice doctors per week was computed for the four periods January to June 1995, July to December 1995, January to June 1996, and January to June 1997.
1996, and July to December 1996. Out-of-hours calls and late calls (where the request was made after 10.30 am were not included in our triage system. Late calls were only logged separately on the computer from mid-January 1996, and so a total figure of 'routine' calls plus late calls (but not out-of-hours activity) has been used to depict trends before and after the introduction of the new service.

A structured questionnaire for self-completion was designed, using published work where possible, to address patients' views on their experiences and opinions concerning the new triage system. Required responses, were for the most part, indicated by ticking categories, but space was given for other comments where appropriate. Two surveys were conducted using the same instrument, each for four weeks: one from October to November 1995 and the second from April to May 1996. The first survey was only a few months after the new service commenced, when few people had any experience of it, whereas the second came almost a year after nurse triage began.

The questionnaire, together with a covering letter, was posted out on the same day where possible to all those who had requested, or for whom a carer had requested, a 'routine' house call, whether they were subsequently visited or not. All responses were coded and analysed using Microsoft Excel.

**Results**

From the beginning of September 1995 until the end of December 1996, a total of 1927 house call requests were logged onto our computer. Of the 1764 (92%) requests whose resolution was also recorded, 791 (41%) were allocated a visit, 345 (18%) received an appointment, 471 (24%) accepted nurse advice, and 157 (8%) were passed to the duty doctor. The trends in these categories over the 16-month period from September 1995 to June 1996 are shown in Figure 1. The average daily totals of visits performed showed important reductions after the new triage system began (Table 1). This has allowed the number of doctors performing weekday routine house calls to be reduced to two or even one instead of three to five, with approximately three extra surgery-based doctor consulting hours made available per day at a cost of two hours of nurse time.

Our first postal survey had 84 responders from the 121 questionnaires mailed (69%), and our second had 85 responders from the 113 mailed (75%). The commonest action taken by the nurse, as reported on the questionnaires from both surveys, was arranging for a doctor to visit the same day, but significant minorities reported other outcomes (Table 2). Some 68% or more of

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<tr>
<td>Arranged for a doctor to speak by telephone</td>
<td>19 (23%)</td>
<td>16 (19%)</td>
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<tr>
<td>Arranged for a doctor to visit the same day</td>
<td>37 (44%)</td>
<td>51 (60%)</td>
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<td>Arranged for a doctor to visit another day</td>
<td>6 (7%)</td>
<td>13 (15%)</td>
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<tr>
<td>Asked patient to come to surgery the same day</td>
<td>19 (23%)</td>
<td>14 (16%)</td>
</tr>
<tr>
<td>Asked the patient to come to surgery another day</td>
<td>5 (6%)</td>
<td>5 (6%)</td>
</tr>
<tr>
<td>Arranged a prescription</td>
<td>19 (23%)</td>
<td>30 (35%)</td>
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<tr>
<td>Gave advice</td>
<td>22 (26%)</td>
<td>29 (31%)</td>
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<tr>
<td>Arranged a test</td>
<td>6 (7%)</td>
<td>13 (15%)</td>
</tr>
<tr>
<td>Arranged a hospital appointment</td>
<td>3 (4%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Something else</td>
<td>2 (2%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Did not reply</td>
<td>7 (8%)</td>
<td>2 (2%)</td>
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responders in both surveys reported that they had been able to say all they wanted to the nurse, were told all they wanted, found the nurse easy to understand, and were satisfied with the help received (Table 3).

Only 6% in the first survey and 3% in the second said that they were not very happy at all with the help they got from the nurse and/or the practice. Altogether, 32% of questionnaires in the first survey and 25% in the second had additional written comments on them. Combining both surveys, a total of 14 critical responses were recorded. Six expressed some qualms about the role of the nurse, for example, ‘the nurses at your surgery do a good job, but are not always qualified to say, when a patient is asking for a doctor, that they should or should not come to the surgery’. Three reported transport problems, such as, ‘In normal circumstances, I would have made an appointment at the surgery, but I was without transport that day’. Two were not happy in principle with telephone advice, and two were nostalgic about the service they used to have: ‘I find it difficult to adjust to several doctors visiting. Having used to only Dr S as a regular visitor ... for years he understood all my complaints.’ ‘The personal touch (is) gone.’ Two reflected misunderstandings with the system, for example: ‘I was of the opinion that anyone of this age should have automatic visits’.

Discussion

It is clear from our study that many routine house calls in our practice can be dealt with perfectly adequately on the telephone by suitably trained and experienced nurses. Despite this being a very different experience for the majority of our patients, the triage system appeared to be acceptable to most of its recipients and markedly reduced the amount of expensive doctor time spent inefficiently in driving around the practice area. As a result, more surgery appointments have been made available for our patients.

Innovations in the organization and delivery of primary health care often occur in the setting of routine general practice and, as such, are frequently not amenable to evaluation by a randomized controlled trial. We have, in effect, conducted a descriptive pilot study and, thus, our results must be subject to a number of cautions. First, our activity data were recovered from routine computerized consultation records and may well not be complete. For instance, not all logged house call requests were allocated a subsequent triage category — in 8% of cases, the nurse presumably did not record the outcome of her consultation. Case definition was sometimes difficult in our study — we had to carefully define computer codes for ‘routine house call requests’, ‘late calls’, and ‘emergency calls’, but the codes were being used by busy health professionals during their normal activities.

Secondly, the responders to our questionnaires may have exhibited a bias towards those who were visited. Our activity data suggested that 44% of requests led to visits, but our surveys reported visiting rates of 51% in the first period and 75% in the second. Our time trend data do show a small rise in the visiting rate, which is rather difficult to interpret. It is possible that part of the rise was caused by the nurses’ increasing experience leading to a recognition of the need for more visits, but it may also be that, as patients became more used to the new system, their requests for calls became more appropriate.

Thirdly, many people are immensely loyal to their general practice — whatever quality of service it may offer — and so there may have been a response bias in favour of being ‘nice to the doctors’. This possible effect could have been investigated by qualitative interviewing by an independent researcher, but we did not have the resources available to fund such an approach. Analysis of the written comments on the questionnaire did, however, elucidate a small number of critical points.

We are not aware of any other published studies that examine nurse telephone triage of routine house call requests, so we have no clear benchmark against which to compare our work. However, the fact that the majority of patients seemed to be satisfied with our new system is reassuring. The proportion of patients logged in our activity data as not being visited after making a request (50%), is in line with the ‘over one third’ of requests for out-of-hours calls to two Salisbury practices being handled by nurses on the telephone.17 Our proportions of ‘dissatisfied customers’ (11% and 9%) were similar to the range of 5.1–17.2% found in Hallam’s18 survey of doctor telephone advice. Her work clearly indicated that patients’ levels of dissatisfaction rose with perceptions of barriers being placed between the caller and the doctor, such as being grilled by receptionists before getting through to medical advice. Our system allows questioning by a health professional rather than a receptionist, which should be more acceptable to callers. The level of dissatisfaction we recorded is still high and merits further attention in the future, but the written comments suggest that at least some dissatisfaction results from unfamiliarity with a novel system; with patients being comfortable with what they know. However, satisfaction assessment by questionnaires has its limitations.

After our study, we were sufficiently convinced of the effectiveness and acceptability of our experimental nurse triage system to establish it firmly as part of our routine service to patients. Delivery of care within and expectations of general practice are changing, and we see nurse triage as one part of our adaptations
to the changes we have experienced. We have reacted to comments made within the study in two ways. First, we continue to monitor the work of our nurses on the telephone closely and seek to improve its quality wherever possible. Secondly, we have tried to react to transport difficulties barring surgery attendance by selectively authorising taxis for our patients.

Our work is, however, only a pilot feasibility project and needs to be followed by a larger, randomized, controlled study across a range of different primary care settings. Such a wider study could also investigate further the cost-effectiveness of using expensive nurse practitioner time instead of receptionist time to allocate house calls and the appropriateness of the calls actually done as a result of nurse triage. Qualitative enquiry into decision-making strategies used by nurses in telephone triage, as previously performed in Canada, will also be useful in the setting of UK general practice in order to develop appropriate educational protocols.

In conclusion, by adopting this triage system, we were able to reduce the number of house calls made by the practice GPs and increased the availability of surgery-based consultations. The postal surveys have indicated that the majority of responders were completely satisfied with every aspect of requesting a house call via the nurses — such trends as there were in the results showed rising levels of satisfaction. We believe that the nurse triage system for house call requests in our practice has led to a more efficient delivery of primary health care for our patients. We are happy to recommend it to others.

References

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