

The effect of GP telephone triage on numbers seeking same-day appointments

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SUMMARY

Telephone consultations with general practitioners (GPs) have not been shown to be an effective way to reduce the demand for face-to-face appointments during the surgery hours. This study aims to determine if GP telephone triage can effectively reduce the demand for face-to-face consultations for patients seeking same-day appointments in general practice. We report an interrupted time series, two years before and one year after introduction of GP-led telephone triage. Demand for face-to-face appointments with a GP was reduced by 39% (95% CI = 29 to 51%, $P < 0.001$). More than 92% of the telephone calls lasted less than five minutes. The telephone bill increased by 26%. For a substantial proportion of patients seeking same-day appointments telephone consultations were an acceptable alternative service.

Keywords: GP triage; telephone consultations; appointments.

Introduction

A number of studies have cast doubt on the value of telephone contact with GPs as an alternative to a surgery consultation. Stuart *et al* conclude that 20 to 30 minutes of the doctor's time was required for every surgery consultation spared.¹ There was no selection of cases and patients may have had very differing needs. Stevenson *et al* report that in only one in 20 consultations do doctor and patient agree afterwards that a consultation could have been dealt with by telephone.² On the other hand, nurse telephone consultation out of hours in general practice has been found to reduce GP workload and NHS costs generally.³

The aim of the study was to determine if telephone contact with a GP reduces the need for a face-to-face consultation where a patient initially suggests the need to see a GP on the same day.

Method

The study took place from July 1999 to June 2000 and was carried out in a group practice located in a market town, with a list size of 7200, and four GPs. Levels of deprivation were close to the national average (Jarman score = -4.26). The practice introduced a telephone consultation policy whereby all patients requesting same-day appointments were told that a GP would telephone them later. GPs were asked to log the outcome of these telephone consultations. A patient satisfaction survey was sent to all patients who had received such a telephone call over a one-month period during the intervention. Numbers attending out of hours were compared with previous years.

Statistical analysis

Numbers attending the surgery for routine and 'extra' appointments over two years (1997 and 1998) were entered onto an SPSS database. Regression analysis was performed to determine if there was a pattern to the demand for 'extra' appointments and if this pattern had a temporal basis. These data were used to assess the impact of a telephone triage intervention. To determine the impact of the telephone triage intervention, linear regression was performed on the logged counts with a harmonic term to allow for seasonality and a dummy variable which takes the value zero for pre-intervention and one for post-intervention. The analysis was performed using autoregression in SPSS to allow for serial correlation and linear regression using the Durbin-Watson statistic, to test whether serial correlation had been successfully removed.

Results

A plot of the 'extra' appointments for 1997 and 1998 suggested a seasonal pattern. A regression of the number of

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HOW THIS FITS IN*What do we know?*

Studies have cast doubt on the value of telephone consultations as an alternative to surgery consultations.

What does this paper add?

GP telephone triage reduces the demand for face-to-face appointments by 39%, and patients are satisfied with this service although the practice would have to pay more in telephone charges.



extra appointments required against time was reasonably well fitted (adjusted $R^2 = 0.40$). A reduction of 39.3% in the demand for face-to-face appointments was observed during the intervention phase as shown in Figure 1.

Patient satisfaction survey

A 74% response rate to the postal questionnaire was recorded (111 responses in total). The majority of patients were satisfied or very satisfied with the outcome of the telephone consultation (98%) and most (84%) said they would be happy to receive this service in similar circumstances in the future (95% CI = 76 to 90). Patient use of out-of-hours services showed a drop in the study period.

Use of telephone

The total number of calls in the second half of the study period from January 2000 to June 2000 was 3680, with an average duration of less than two minutes. Ninety-three per cent had a duration of less than five minutes. The telephone bills increased by £200 per quarter over the study period. The total number of telephone calls recorded during one month in the second half of the study period was 615. The outcomes as recorded by the GPs in their telephone consultation diaries over this month are shown in Table 1 (outcomes not mutually exclusive, i.e. some telephone consultations resulted in more than one outcome).

Discussion

Our study suggests that it is possible to use telephone consultations as an alternative to face-to-face consultations for patients seeking same-day appointments. More than one in five patients were offered a prescription without a clinical examination. All patients receiving a prescription who responded to the questionnaire expressed satisfaction with the outcome of their telephone consultation.

The role of nurse practitioners for patients seeking same-day appointments or in telephone triage has been endorsed recently.^{4,5} However, the management of patients seeking same-day appointments in our study was streamlined by GPs without diverting nursing staff away from other roles. It has been argued that the increasing promotion of nurse practitioners to deal with patients who need a same-day appointment might promote inequality rather than improve primary care.⁶ This paper suggests an alternative for those who might wish to retain access to GPs on a same-day

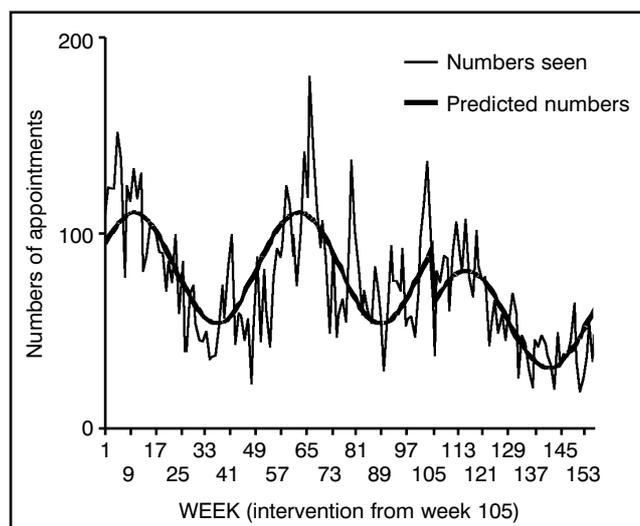


Figure 1. Effect of telephone consultations on demand for 'extras'.

Table 1. Outcome of telephone consultations.

Outcome	Numbers (percentage of total)
Same-day appointment offered	266 (43.3)
Advice only	180 (29.3)
Prescription offered without face-to-face consultation	138 (22.4)
Visit	15 (2.4)
Routine appointment offered (not same day)	25 (4.1)
Appointment with nurse	8 (0.8)
Patient not available to speak to doctor	7 (1.1)

basis. However, there is a financial cost to offering this service, as the practice would have to pay more in telephone charges.

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