

A 'telephone first' approach to demand management in English general practice: a multimethod evaluation

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Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

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Scientific summary

The Tele-First multimethod evaluation

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Background

Efforts to address the rising workload in English general practice have focused on expanding the workforce and providing alternatives to face-to-face consultation, including telephone consultations. However, none of these has had much impact on demand for care, and a recent major randomised controlled trial (RCT) of telephone triage (i.e. the ESTEEM trial) found that telephone triage increased overall general practitioner (GP) workload.

An alternative approach to telephone consulting, which offers a radically different pathway for patients seeking a GP appointment, has been developed by two commercial providers: Doctor First® (Productive Primary Care Ltd, Woodhouse Eaves, Leicestershire, UK) and GP Access (Cossington, Leicestershire, UK). The major principles of these systems are the same, and implementation of the 'telephone first' approach is preceded by a careful analysis of patterns of demand in the practice, with data collection in the practice supported by one of the commercial providers. When the new approach is introduced, all patients phoning for an appointment with a doctor are asked by the receptionist to speak to a GP on the telephone first. After phoning, patients are called back by a GP and a decision is made by the doctor whether the patient needs to come in or whether their concern can be satisfactorily dealt with on the telephone. Practices are offered management support for introducing this system by the commercial providers and literature from the companies claims major reductions in general practice workload, reduced hospital utilisation and improved patient and staff satisfaction.

Objectives

Our research addressed three main research questions in relation to the 'telephone first' approach offered by Doctor First and GP Access:

1. How does the 'telephone first' approach affect patient experience and use of primary and secondary care services?
2. What is the impact of the 'telephone first' approach on the nature of consultations for patients and staff, and how appropriate is this approach for hard-to-reach groups?
3. What are the cost consequences of the approach?

Methods: data sources, study selection, data collection, data extraction and data synthesis

The study design used a controlled before-and-after (time-series) approach using national reference data sets. It also incorporated a qualitative element, to explore the ways in which the intervention was experienced by staff and patients, and an economic element, to understand the cost consequences of the approach.

The study used the following sources of data:

- Data provided by one of the commercial providers (GP Access) on number and type of appointment, time between booking and patient getting an appointment, length of appointment, total time spent consulting and continuity of care (usual provider continuity score). The main before-and-after analysis was done on an intention-to-treat basis, including 1,926,979 appointments up to 12 months before

and 12 months after the change in all 59 practices that had used GP Access to assist with introducing the new system. However, some of these practices had stopped using the 'telephone first' approach or were using some form of hybrid system (e.g. allowing a degree of advance booking for face-to-face appointments). We therefore carried out a sensitivity analysis restricted to 997,772 appointments in 27 practices that we believed were operating consistently with the commercial company's protocols based on information provided to us by the company. These two approaches to analysis generally produced similar findings.

- A postal patient survey sent to 1873 patients who had a 'telephone first' telephone consultation with a GP in the preceding 2 days, conducted in 20 intervention practices.
- Before-and-after analysis of questions from the national GP Patient Survey on access, ability to see or speak to a preferred GP, doctor–patient communication and overall recommendation; this compared patient experience in 146 practices introducing the new system with a 10% random sample of other practices in England. As with other analyses, a sensitivity analysis was conducted that was restricted to the 27 practices that we believed were operating consistently with the commercial company's protocols.
- Interviews with 42 patients from 12 practices that were selected to include a range of list sizes, deprivation scores, patient ethnicities, rural/urban locations, commercial providers supporting the practice, and payers (Clinical Commissioning Group or self-funded). We interviewed patients who indicated in their survey responses that they preferred the new system and patients who indicated that they preferred the old system. We conducted a thematic analysis of interview transcripts.
- Interviews were conducted with 49 staff members from 12 practices (21 GPs, 14 reception/administrative staff, 10 practice managers, two nurses and one joint interview with a practice manager and an administrator). We conducted a thematic analysis of interview transcripts.
- Analysis of hospital utilisation data (Hospital Episode Statistics) comparing use of accident and emergency (A&E), emergency and elective admissions and outpatient attendance before the 'telephone first' approach with after the 'telephone first' approach. Before-and-after analysis compared trends with other practices in England. As with other analyses, a sensitivity analysis was conducted that was restricted to the 27 practices that we believed were operating consistently with the commercial company's protocols.
- A cost–consequences analysis estimated staff and non-staff costs for practices of introducing the new system. We conducted a before-and-after analysis of prescription costs, costs of A&E attendance and hospital admissions compared with trends in other practices in England.

Results

The new approach to telephone consulting had a major effect on patterns of consultation, with a 12-fold increase in telephone consultations [95% confidence interval (CI) 6.3-fold to 22.9-fold], a 38% reduction in face-to-face consultations (95% CI 29% to 45%) and an overall increase in both types of consultation of 28% (95% CI 17% to 39%). There were equally dramatic changes in time from booking to appointment time – from an average of 4 days for face-to-face appointments before the change to an average of 0.9 days after the change. Although an increased fraction of consultations conducted by telephone led to a decrease in the average length of consultations, the length was similar before and after the change for specific types of consultation (10.9 minutes before to 10.2 minutes after the change for face-to-face consultations and 7.7 minutes before to 6.2 minutes after the change for telephone appointments). Given the increase in the total number of consultations (face to face and telephone combined), we found weak evidence of an overall increase in length of surgery consulting time of 8% following the change, although there is a large amount of uncertainty in this estimate (95% CI –1% to 17%; $p = 0.0883$). Although these results were broadly similar in the sensitivity analyses that were restricted to practices operating the new system throughout the period of data collection, there was wide variation in patterns of consulting in individual practices, with some experiencing substantial decreases in overall consulting time, whereas others experienced a large increase. Practices also varied greatly in the proportion of telephone consultations that were followed by a face-to-face consultation.

A total of 873 survey responses were received from 1873 patients who had recently had a telephone consultation with a GP (response rate 44.7%, ranging from 22.8% to 58.9% in the 20 practices studied). In > 50% of cases, the telephone consultation was followed by a face-to-face consultation (43.9% with a GP and 7.3% with a nurse). When asked how convenient the patient found talking to a doctor on the telephone before making an appointment, equal numbers of survey respondents found it less convenient or not different (22% for each), but a majority (56%) reported that the new system was more convenient. Among patients who reported that it was more difficult to communicate with the GP on the telephone, the most common reason was that they found it difficult to explain the problem over the telephone (47% of those who found it more difficult to communicate over the telephone). Overall, 30.6% of respondents preferred the telephone triage system to the previous appointment system used by the practice, 32.7% would prefer to return to the old system, and 36.6% did not mind either way; however, we were concerned about bias in practices that agreed to take part in the survey: national GP Patient Survey scores were substantially higher in these practices than in those that declined to take part in our patient survey.

In the analysis of patient experience from the national GP Patient Survey comparing the intervention practices with all practices in England, following the introduction of the scheme, patients reported a small, but statistically significant, increase in convenience of appointment (0.38 percentage points more positive) but there were small, statistically significant reductions in overall experience in making an appointment (0.44 percentage points more negative), reported doctor–patient communication (0.89 percentage points more negative) and ability to see their preferred doctor (1.25 percentage points more negative), all on a scale of 0–100 points. However, the biggest difference by far was a 20-percentage-point improvement on the scale of 0–100 points in intervention practices in responses to the GP Patient Survey question on length of time to see or speak to a doctor or nurse. This was equivalent to an average improvement of nearly one full category in the four-point scale used in this national survey (how long after initially contacting the surgery did you actually see or speak to them: on the same day/next working day/a few days later/ \geq 1 week later).

Patients expressed a wide range of views in interviews. The new system clearly suited some people, allowing them to avoid the need to come into the surgery, but it was problematic for others (e.g. when it was difficult for someone working in an open-plan office to take a callback). However, a substantial proportion of negative comments were about the operation of the scheme itself rather than the principles behind it; for example, patients may not have minded being phoned back by a GP, but they complained about difficulty getting through on the telephone, restricted times when the telephone lines were open, lack of flexibility in scheduling the callback from the GP and lengthy delays before the callback was made.

Patients also described factors that made it easier for them to use the new system. These included being articulate and having the confidence to press for what they wanted, having flexibility in their schedule and having an existing trusting relationship with the GP who decided whether or not a face-to-face consultation was necessary.

Patients identified not speaking English as their first language to be a problem, but, contrary to our expectations, older people expressed generally positive views about the new system. Indeed, none of the nine patients aged > 75 years whom we interviewed stated that they would return to the old system. Patients who were at work found it less easy to manage the new system (e.g. not knowing when the GP would call back or not being able to take telephone calls at work).

A wide range of opinions was expressed in staff interviews, with strong positive and negative views being expressed by individual staff members, sometimes within the same practice.

Table a draws together the enablers of and barriers to the successful adoption of a ‘telephone first’ approach in primary care, as outlined by practice staff in interviews. Staff articulated these enablers and barriers as factors that had assisted in the successful adoption or as challenges to the adoption of the new approach.

TABLE a Enablers of and barriers to the successful adoption of a 'telephone first' approach in primary care, as described by staff

Enablers of the successful implementation of a 'telephone first' approach	Barriers to the successful implementation of a 'telephone first' approach
<ul style="list-style-type: none"> ● Reception staff were well trained and supported ● An identified member of staff was 'leading' the approach ● There was a clear understanding of patterns of demand ● Staff were enthusiastic to adopt the 'telephone first' approach ● There was an ability to make modifications to the approach to overcome local challenges ● There was agreement among GPs of how the system worked, so patients were consistently treated ● There was patient education and dissemination of information about the 'telephone first' approach 	<ul style="list-style-type: none"> ● Patient demand was in excess of the practice's capacity to meet the needs of patients ● The characteristics of the patient population could make negotiating the system a challenge ● There was a reliance on locums and registrars who were not familiar with the approach ● There was poor mobile telephone coverage in the surrounding area

Members of staff who were interviewed also described changes in the culture of practices, including greater cohesiveness, with staff being more supportive of each other; however, a wide range of views was expressed, and there were descriptions of tension within the team, especially when one GP was opposed to the new system. Overall, the majority of interviewees said that they would prefer to stay with the new system rather than revert to their old system; however, for staff in practices that had tried but not successfully implemented the 'telephone first' approach, there could be considerable negative impacts on individual staff members and the practice as a whole.

We found only minor changes in secondary care utilisation, with small (2%) initial increases in admissions following the practices' move to the 'telephone first' approach. There were no initial changes in A&E attendance but there was a small (2%) decrease in the rate of increase in A&E attendances compared with other practices in England (comparing the 2 years before the intervention with data from 1–2 years after the intervention). We found no evidence that the 'telephone first' approach would produce net reductions in secondary care costs.

Conclusions

This study evaluates a radical approach that is founded on the principle that a substantial proportion of regular general practice consultations can be conducted by telephone, and that requires all requests for a consultation to initially involve a telephone consultation.

A rigid 'telephone first' approach does not meet the needs of all patients, and the combination of telephone and face-to-face consultations was associated with an 8% increase in overall consulting time in practices adopting the new system. However, there was wide variation between practices, with some experiencing a substantial increase in demand (possibly attributable to increased availability of telephone consultations in practices with previously high levels of unmet need). Views of this new approach vary widely among both staff and patients, and strong opinions, both negative and positive, were expressed.

An approach that requires patients to be called back by the GP before any face-to-face appointment can be booked suits some patients better than others (e.g. it suits those who have flexibility in their day and can easily be called back). Some practices had, therefore, modified their original approach to allow limited advance booking of appointments; however, this only works if there is sufficient capacity to deal with both telephone and face-to-face consultations in a given day. A 'telephone first' approach is not a panacea for meeting demand for care and it is unlikely to reduce secondary care costs.

Recommendations for future research

A key question for practice, which could be addressed by future research, is how to develop systems that are flexible enough to meet the needs of all their patients. Although a rigid 'telephone first' approach for all consultations does not do this, we observed practices that were modifying this approach (often on an ongoing basis) to meet the needs of patients as closely as they could. Successful approaches are likely to be different in different practices and more work could be done to identify what works best in different circumstances.

A second issue not addressed in this study relates more generally to the approach that practices take to matching capacity to demand. More work could be done to investigate how predictable patterns of demand are, and to what extent reallocation of human resources could reduce the pressures that practices are under.

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